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REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE

PEOPLE'S REPUBLIC OF CHINA

FOR THE

WEST GUANGXI POVERTY-ALLEVIATION PROJECT



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CURRENCY EQUIVALENTS

Currency Unit	=	Yuan renminbi (CNY)
USD 1.00	=	CNY 8.26
CNY 1.00	=	USD 0.12

WEIGHTS AND MEASURES

1 kilogram (kg)	=	2.204 pounds (lb)
1 000 kg	=	1 metric tonne (t)
1 kilometre (km)	=	0.62 miles (mi)
1 metre (m)	=	1.09 yards (yd)
1 square metre (m ²)	=	10.76 square feet (ft ²)
1 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 acres
1 mu	=	0.066 ha
1 ha	=	15 mu

ABBREVIATIONS AND ACRONYMS

FD	Finance Department
FFW	Food for Work
GDP	Gross Domestic Product
PBC	People's Bank of China
PLG	Project-Leading Group
PMO	Project Management Office
PRA	Participatory Rural Appraisal
RCC	Rural Credit Cooperative
RCCU	Rural Credit Cooperative Union
SOE	State-Owned Enterprise
TVE	Township and Village Enterprise
UNOPS	United Nations Office for Project Services
VAM	Vulnerability Analysis and Mapping
VDP	Village Development Plan
VIG	Village Implementation Group
WF	Women's Federation
WFP	World Food Programme

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA

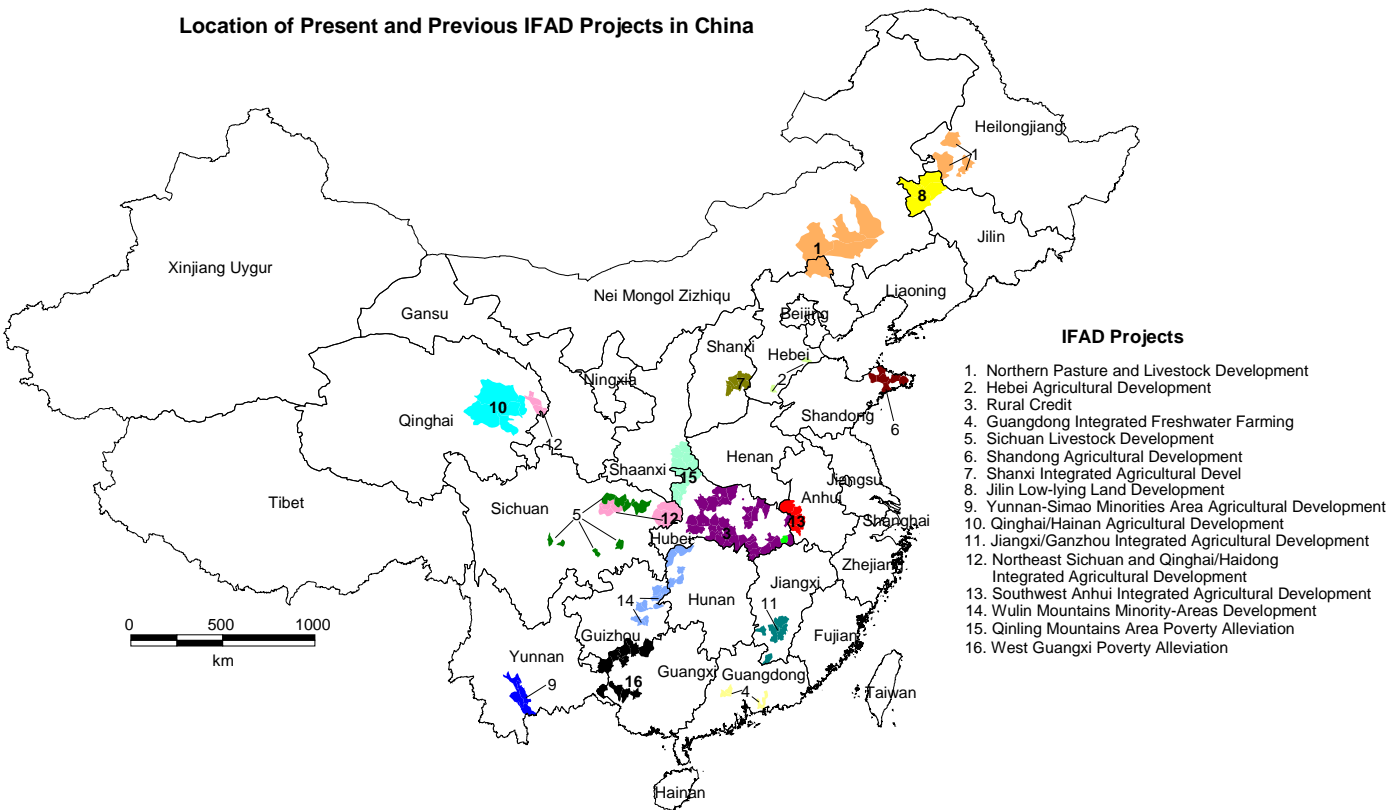
Fiscal Year

1 January - 31 December



MAP OF THE PROJECT AREA

Location of Present and Previous IFAD Projects in China



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Source: IFAD Appraisal Report

The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.



PEOPLE'S REPUBLIC OF CHINA
WEST GUANGXI POVERTY-ALLEVIATION PROJECT
LOAN SUMMARY

INITIATING INSTITUTION:	IFAD and WFP
BORROWER:	People's Republic of China
EXECUTING AGENCY:	Ministries of Agriculture and Finance
TOTAL PROJECT COST:	USD 107.3 million
AMOUNT OF IFAD LOAN:	SDR 23.8 million (equivalent to approximately USD 30.4 million)
TERMS OF IFAD LOAN:	40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum
COFINANCIER:	World Food Programme (WFP)
AMOUNT OF COFINANCING:	USD 11.2 million
TERMS OF COFINANCING:	Grant
CONTRIBUTION OF BORROWER:	USD 54.0 million
CONTRIBUTION OF BENEFICIARIES:	USD 11.7 million
APPRAISING INSTITUTION:	IFAD and WFP
COOPERATING INSTITUTION:	United Nations Office for Project Services (UNOPS)



PROJECT BRIEF

Who are the beneficiaries? The target group comprises 240 000 households in the 74 poorest townships of 10 of the poorest counties in Guangxi Zhuang Autonomous Region in south-western China. The population consists of several ethnic minorities with the Zhuang people forming a majority in most counties. At least 80% of the households are poor to very poor, with almost 10% classified as poorest, many physically unable to undertake any type of labour. Women are the most significant part of the target group, since they contribute most to farm production and household tasks. Women have less than average access to education and training and hence to income-earning opportunities. Nevertheless, they are increasingly recognized as agents of change. Average income per capita is USD 140. It is derived from an average arable area of 0.09 hectares plus off-farm income, which is a major source of income in numerous households. Many girls are dropping out of primary school for lack of resources.

Why are they poor? Most villages are in remote upland areas with lack of adequate access roads, obsolete and underperforming health and education facilities, limited, low-yielding arable land and weak extension services. Living conditions are harsh, lack of drinking water is severe in many locations and costs of education prevent many children from attending school. Chinese is the teaching language, which makes graduation to the higher grades problematic for non-Chinese-speaking children. Almost 90% of arable land is rainfed, and about 50% is on slopes. Rainfall is unreliable, with regular droughts and floods. Farmers are not able to take advantage of improved technology for lack of funds and training. This results in a food deficit for most households for two to four months per year. Farmers have developed complex cropping systems that make the most of local conditions and minimize the inherent risks. Some sloping land can be improved with simple but still substantial investments in terms of resources and family labour. Other sloping land really needs to be returned to perennial cropping, but this may only be possible if the productivity of the better land is improved. Frequent out-migration of workers, mainly for seasonal labour, brings in additional cash income without causing shortages of farm labour.

What do they expect from the project? The expressed priority needs of the households as determined by a participatory rural appraisal are the following: (a) to have more food in order to bridge the hunger season and immediate access to safe drinking water; (b) to earn more income; and (c) to improve education and health facilities. Moreover, the findings from the field visits indicate strong expectations of better and improved health, education and extension services. In general, the households consulted requested assistance for investments in production activities to raise their incomes and improve food security. They are aware of the opportunities that are available with perennial cash crops, but lack the resources to participate.

How will they participate? A participatory rural appraisal workshop was conducted to train township project management offices in the use of this methodology. Further training sessions will be held to prepare the village development plans with the participation of the target group. A vast functional literacy and training programme, mainly for women, will provide the capacity for and thus increase participation in technical skills training and related productive activities. The target group will provide labour for community-based civil works, assess project services and prepare semi-annual reports. Poor farmers will conduct demonstrations in their fields. Beneficiaries will be represented in the village implementation groups that monitor the village development plans and organize maintenance and user groups, especially for common irrigation and domestic-water-supply facilities.



**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD
TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE
PEOPLE'S REPUBLIC OF CHINA
FOR THE
WEST GUANGXI POVERTY-ALLEVIATION PROJECT**

I submit the following Report and Recommendation on a proposed loan to the People's Republic of China for SDR 23.8 million (equivalent to approximately USD 30.4 million) on highly concessional terms to help finance the West Guangxi Poverty-Alleviation Project. The loan will have a term of 40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum. It will be administered by the United Nations Office for Project Services (UNOPS) as IFAD's cooperating institution.

PART I – THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY¹

A. The Economy and Agricultural Sector

1. The People's Republic of China covers an area of 9.6 million km². It is the most populous country in the world, with an estimated 1.25 billion people, increasing by 14-17 million annually. In spite of the recent economic downturn in the region, China continues to enjoy one of the fastest economic growth rates in the world. Gross domestic product (GDP) is estimated to have increased by 7.8 and 7% in real terms in 1998 and 1999. Private consumption per capita is reported to have increased at an annual rate of well over 7% throughout the period 1993-1999. Growth has been generated more by township and village enterprises (TVEs) and by private firms, often accompanied by direct foreign investment in joint ventures, than by the state-owned enterprises. Industry remains the largest productive sector, accounting for roughly half of GDP, generating 80% of the country's exports and employing well over 100 million workers. Services accounted for about 30% of GDP. Since mid-1998 China has witnessed deflation, with consumer and retail price indexes for 1998 and 1999 having decreased by 1.3 and 2.9% respectively. A very low inflation rate is predicted for 2000. China is set for a long period of sustained growth that will be relatively inflation free. In the past, rapid overall growth has led to rapid poverty reduction, even in rural areas.

2. Over the period 1993-1997, agricultural GDP is reported to have increased at 4.3% per annum, a rate substantially above the population growth rate. Despite modest growth of 2.1% in 1998 and 1999, the contribution of agriculture to GDP remained high at about 20%. The sector continued to play a dominant role in terms of employment and constituted an important income source for some 190 million rural households. Grain production fluctuated around 495 million tonnes (t) in 1998 and 1999. Annual crops dominated the production pattern of agriculture (55%), followed by animal husbandry (30%) and fisheries (10%). Rice is the most important grain crop, but the relative share of production of other cereals has been increasing, notably wheat and maize, which are more adapted to the majority of climatic conditions. Government policies and the increasing flow of private remittances by migrant workers create lively economies, even in the more backward rural areas, that provide a mix of permanent, temporary and seasonal income-earning opportunities in the non- or peri-agricultural sectors to increasing numbers of local workers.

¹ See Appendix I for additional information.



B. Lessons Learned from Previous IFAD Experience

3. Since 1980, IFAD has financed 15 loans to China for a total of about USD 375 million. Performance of projects has been good: objectives are normally achieved ahead of time, poor households obtain effective access to project investments and support. IFAD/World Food Programme (WFP) Joint Operations started in 1996 and have created strong synergies between food-driven actions supported by WFP and production-oriented investments through IFAD resources. WFP food aid helps the subsistence farmer become almost self-sufficient in food. This allows the farmer to use credit for cash-generating activities and build up assets for further development. The joint operation thus provides a more sustainable development approach to the poorest households.

4. A number of lessons for project management and organization can be highlighted: (a) the findings of the participatory rural appraisal (PRA) confirm that poverty alleviation requires a multisectoral approach; (b) progress reports show that in China this approach really works and that coordination among the different sectoral agencies is effectively and efficiently ensured with the assistance of project management offices (PMOs) and project-leading groups (PLGs) at provincial, prefecture, county and township levels; (c) village development plans (VDPs) are the main tool for effective target-group participation using PRA methodologies; (d) vulnerability analysis and mapping (VAM) has provided a more analytical approach to food security for project-area selection; (e) monitoring systems gather large amounts of statistical data, making their analysis rather cumbersome, and they are presently being revised with a view towards more effective use and impact monitoring; and (f) PMOs have been very effective in project implementation, but restructuring of local government services and the need for more sustainable approaches now require lighter PMO structures, with only a coordinating and facilitating role for the implementing agencies.

5. Further improvement of targeting, beneficiary participation and gender mainstreaming will require the following measures: (a) credit packages should be flexible to meet the requirements of the poorer farmers, especially women, credit ceilings and an interest rate above the market rate allow better targeting; (b) functional literacy and skills training should be tailored to women's interests and potential; (c) the assistance of the Women's Federation (WF) has been instrumental in the achievement of goals, and collaboration with the federation should be strengthened strategically; (d) organization of beneficiaries in user groups under guidance and support from the village committees is needed to maintain irrigation systems satisfactorily, but beneficiaries should maintain terraces and other dryland structures entirely on their own; (e) projects should specifically identify women as major beneficiaries and decision-makers and set specific targets accordingly; and (f) more self-targeting activities should be developed to increase project impact for women, such as those related to their health status and education level, using food-for-training and awareness-building.

C. IFAD's Strategy for Collaboration with China

6. **China's policy for poverty eradication.** Absolute poverty in China is defined by four criteria: (a) income of about USD 0.66 per day in 1999 values; (b) food deficit for at least three months each year; (c) lack of drinking water within 2 km horizontal or 100 m vertical distance of the home; and (d) lack of irrigation water for at least six months annually. As a result of the overall economic growth and the strong commitment of the Government to improve standards of living for the entire population, the number of absolute rural poor declined by about 210 million since the late 1970s. In 1998 the Government estimated that 50 million people were still living in absolute poverty, compared to more than 100 million on the basis of the poverty line of USD 1 per day advocated by the World Bank. Poverty is increasingly concentrated in the resource-poor, densely-populated mountain and loess plateau areas of the western provinces, where most minorities live as well. Recent economic reform of the public sector and the resulting lay-offs may cause many former workers and their families to backslide into poverty. This underscores the need for sustainability in any poverty-eradication strategy and a continuous effort over the long term.



7. **Poverty alleviation and donors.** The Leading Group for Poverty Reduction, established by the State Council, presented a poverty-reduction strategy, with the assistance of the donor community, during the international conference “Poverty Reduction Strategies in the Early 21st Century” in May 2000. The updated strategy emphasizes a number of action-orientations promoted in joint IFAD/WFP projects since 1996. The new strategy rests on two major thrusts: (a) improved efficiency of interventions directed towards the poor through: better targeting mechanisms at the township level combined with a village- and household-based approach; a set of multisectoral and complementary interventions, including support to human capital (education, health and nutrition), rural infrastructure at farm and community level, appropriate technologies, and access to microcredit and off-farm employment; strengthening institutional and coordination arrangements, making maximum use of local technical agencies for implementation and increasing the involvement of the poor in planning and monitoring; and (b) a long-term strategy and related funding for remote mountainous regions with a high concentration of the absolute poor, including: emphasis on karst areas development; improved technology, extension and training for farmers; market development; environmental protection; minimum standards for education and health services; introduction of village development plans. The World Bank, Asian Development Bank and United Nations Development Programme (UNDP) have been the major sponsors, with IFAD participating actively. Moreover, UNDP has coordinated the process of the common country assessment (CCA) and the United Nations Development Assistance Framework (UNDAF), which is being finalized with IFAD’s involvement.

8. **IFAD’s strategy in China.** The basic strategy combines geographic targeting of poverty-stricken areas with a multisectoral programme of activities that are interrelated and supplementary. They include: (a) strengthening infrastructure for agriculture production in order to expand productivity and thus potentially increase food security, create cash-generating activities in livestock and other cash crops and promote off-farm income-generating activities; (b) providing technical support and training to build productive capacity and to improve the creditworthiness of the beneficiaries; (c) enabling better access to credit for viable productive activities; and (d) improving access to health and education facilities in order to increase labour productivity and heighten the learning capacity of the population. Four major thrusts guide the implementation: combination of WFP food aid, IFAD loans and government counterpart funds to enable integrated rural development in remote and marginal mountainous areas; targeting of poorest townships using VAM; beneficiary participation in planning and implementation at all levels using VDPs; and development of sustainable as well as poverty and gender-sensitive microfinance institutions using rural credit cooperatives (RCCs).

9. **Project rationale.** Limited natural resources, low productivity of labour and land, and limited access to social services are among the root causes of the high poverty levels. These factors are exacerbated by the isolation of many villages in the project area, which results in a lack of government services, especially in health and education, and limited infrastructure. The main technical support institutions demonstrate insufficient poverty and gender awareness and focus, from which women particularly suffer. To overcome these constraints, the project will carry out multisectoral activities to improve the functioning of social support services and enhance agricultural production potential and the income-earning capabilities of the target group. The project aims to harmoniously unite three basic factors that are needed for sustainable development: the beneficiaries, technology and institutions. Human and economic development will be combined and the project will undertake to: (a) directly invest in rural production infrastructure, such as irrigation and terracing, to create the basis for economic production, and in socio-economic infrastructure, such as roads, drinking water and health facilities, to improve productive capacity and living conditions; (b) facilitate access to financial services, especially credit, thus allowing farmers to obtain the necessary capital inputs for productive activities; and (c) promote human development and a more equitable society through functional literacy training, grass-roots organizations and specific targeting of the poor, particularly women.



PART II - THE PROJECT

A. Project Area and Target Group

10. **The project area** covers about 15 400 km², comprising 74 townships in 10 counties of the western part of Guangxi Zhuang Autonomous Region in south-western China. Using VAM techniques, the most vulnerable counties were identified and subsequently the most vulnerable townships were selected after consultation and reality-checks with local authorities. The total population of the 74 selected townships is about 1.3 million in 260 000 households, and resides in 684 administrative villages covering 10 590 natural villages. The vast majority belong to the Zhuang ethnic minority, with substantial elements of other minorities, such as Yao, Maonan, Miao, Yi and Dong. The climate is characterized by the subtropical monsoon with yearly average temperatures of 17-20°C and mean rainfall of 1 300-1 500 mm. More than 80% of the annual rainfall is concentrated from May through September. Spring and autumn droughts and summer floods occur frequently. Hailstorms and the early onset of low temperatures or the dry season in autumn may occasionally cause damage to crops. The karst mountain topography consists of discontinuous ridges of dense but very uneven patterns of sharp peaks. The skirt-like foothills are rocky and have little soil. Average altitude above sea level ranges from 300 to more than 900 m. Cultivated, flat land is typically restricted to small patches located in the sink-holes between peaks and in a few river valleys. Other, sloping land is officially considered as forest. The average holding of permanently cultivated land in the project area is about 0.9 mu per capita, with perhaps as much as 0.3 mu in shifting cultivation. Most of the latter is technically in breach of the land-use codes.

11. **The farming system** depends on water availability, with paddy rice and maize as the dominant cereal crops. Sugarcane is an important cash crop, mainly on the slopes of hilly regions. Soybean, peanut and sweet potato are mostly grown as intercrops, and vegetables are common in the winter season if sufficient water can be applied. Large parts of paddy fields are fallow in the winter because of the lack of irrigation and low temperatures. Overall, the cropping intensity index is below 2. At lower altitudes two paddy crops are harvested with irrigation, otherwise one rainfed maize and one rainfed paddy crop. Two maize crops are usually harvested from dry land on slopes. At higher altitudes mainly a mid-year paddy crop is harvested, plus vegetables or rape and maize intercropped with soybean or sweet potato. Low fertilization rates, intrinsically poor soil and lack of water result in low overall yields. Most households have livestock. Cattle and buffalo are principally held for cultivation and meat production. Pigs are fattened for sale and some fowl may be kept for special occasions or for sale. There are strong interrelationships between crops and livestock, with the latter recycling agricultural waste and by-products into manure.

12. **The target group's** average per capita income was estimated in 1998 at USD 182, and annual grain availability from on-farm sources was about 309 kg, which was in sharp contrast to the national average of 400 kg. The relatively good cash income position of the household is seriously eroded by the lack of food production. Livestock provides the main farm cash income, with minor average contributions from economic (cash) crops. Off-farm employment provides the main source of cash income, making out-migration of primarily men household members a common and indispensable practice, hence the feminization of agricultural production. Due to the remoteness of many villages in the project area, the provision of social services is deficient. Farmers usually classify themselves in one of four categories: the better off, the poor, the very poor, the poorest. Project activities will primarily target the latter three groupings. About 240 000 households in total in the project area will be eligible to participate. Households in more remote villages that are poorer than those with better access to facilities will receive top priority. The poorest category, usually with sick or handicapped family members will face difficulty in participating in productive activities, but more support and guidance will be given to them to ensure that, where practical, they will be able to participate in social activities, especially the health and education programmes.



B. Objectives and Scope

13. The goal of the project is to achieve sustainable and equitable poverty eradication for 240 000 vulnerable rural households living in an environment with degraded natural resources. The objective is to achieve a sustainable increase in productive capacity, both on- and off-farm, and to offer increased access to economic and social resources, including financial services, education, health and social networks.

14. The specific outputs of project activities will be: (a) provision of more farmer-, gender- and poverty-responsive extension services with poor farmers as demonstrators; (b) marketing support systems strengthened; (c) land and land use improved through increased investment in irrigation and various improvements in dryland agriculture; (d) RCC financial services, including 175 000 seasonal loans, made more sensitive to poverty and gender and target-group driven, with lending substantially increased to poor women and men for a variety of activities; (e) social service facilities in health and education upgraded, including a large adult literacy programme for 41 800 trainees; (f) women's support programmes, in particular skill training implemented for about 78 100 trainees; (g) rural infrastructure construction, rehabilitation and maintenance programme implemented; and (h) participatory and gender-sensitive VDPs established and operational.

C. Components

15. The project components seek to achieve increased agricultural output, notably of staple food items and highly marketable fruits, and much-improved access to social services. Credit and human capital are the principal means of stimulating on and off-farm production and income. For credit to achieve its fullest potential, one must increase the intrinsic productivity of agricultural land through irrigation and dryland improvements and strengthen key support mechanisms, notably agricultural, livestock and tree-crop input supply and extension services. Also, specific infrastructure increments and water and road communication will facilitate full participation in economic and social development among isolated communities. Human development requires better access to social services, especially for women. The facilities and operational capacity of health and education need to be improved. It is equally important to enhance target-group receptivity to progress. Hence the project will include a substantial training and awareness-building programme, addressing the requirements of adult women and children on a priority basis.

16. **Agricultural development** will increase the proportion of more productive land through adequate irrigation of 13 265 ha of flat land through lining of 543 km of canals for better water-use efficiency and construction of 20 000 irrigation tanks of 60 m³ each for additional water. About 6 065 ha of dry land, mainly on slopes, will be improved through soil deepening, levelling and terracing. Soil fertility and productivity will be enhanced through increased use of organic manures resulting from higher production of crop residues and expanded livestock production. Increased crop productivity will allow the planting of 16 650 ha with economic trees on steeper land and/or low-fertility sites previously cultivated annually. These regenerative farming techniques, together with economic-environmental forestry in about 86 650 ha of degraded forest, will increase the production opportunities for non-timber forest products and further the establishment of a sustainable natural resource management system. Village implementation groups (VIGs) will organize the beneficiaries in water user groups to ensure operation and maintenance. Technical training and about 92 000 on-farm demonstrations will mainly include poor farmers and especially women. Agricultural and animal-husbandry extension stations will have common premises to ensure integrated production advice and messages. They will be strengthened and made more gender- and poverty-aware.

17. **Financial services.** Services with a poverty and gender focus are a major instrument in helping the target group build assets for sustainable development. Emphasis will be on credit and savings mobilization to ensure sustainability. The driving force behind the production activities will be credit implemented by the township RCCs, under the overall supervision of the county Rural Credit



Cooperative Unions (RCCUs). Improved access to credit will directly benefit farmers, especially women, and target profitable activities such as cereal grain production, annual and perennial cash crops, economic trees, food processing and a wide range of income-generating off-farm activities. The aim will be to develop the RCCs into an effective, efficient and viable rural cooperative banking system, with farmers as members holding shares and with savings collected for additional sustainability. Before the credit programme will begin, a savings and credit awareness campaign will be executed at the village level, with close coordination between RCCs, PMOs, WF, village committees and other concerned bodies. Savings mobilization and shareholding of RCCs will be high on the agenda. Details of loan availability, procedures, terms and conditions will be explained to households. The project will enable township RCCs to acquire incremental equipment to ensure that they are able to handle credit activities efficiently and to develop an overall capacity as prudent financial intermediaries. Staff training will also be offered in management, loan assessment, processing and inspection. Village leaders and agents will also receive training.

18. **Social development.** Poor education levels and ill health reinforce poverty. Therefore improved access of the poor to social services is the starting point for creating human capital to produce physical assets. Activities will concentrate on training and will include literacy training, particularly for women, and health and nutritional awareness-building. The reduction of primary-school drop-out rates, particularly among girls, will be another major activity. Support to village health workers and rehabilitation of primary schools at the village level to improve access to literacy and skills training will shore up previous activities. There will also be a large element of skills training in preparation for obtaining loans for income-generation activities. WF will organize this training in recognition of the strong focus on women of this component and will have a permanent staff position under each PMO. A special microinitiatives fund that WF has initiated in some counties will be expanded. About 22 500 family biogas units will complement the efforts in the area of household fuel improvement. Technical training for productive activities and awareness-building on food security will be major activities throughout the implementation period in all components. Training will be provided for trainers, for women and men in the villages and for administrators in PMOs and RCCs.

19. **Rural infrastructure.** Improvements in the availability and quality of drinking water, better access roads and more electrification will ease the burden on women and facilitate the development of off-farm income-generating activities. Drinking water will be provided mainly through the construction of almost 16 000 household water tanks of about 30 m³ each and about 137 larger schemes at the village level. The most remote and isolated villages will be linked with rural market centres through the construction of about 193 km of access roads serving 76 villages. Moreover the local government plans the electrification of all villages, which will enhance the utility of education facilities and the development of small businesses.

20. **Project management** will use the project-leading groups (PLGs) and PMOs, the proven methodology of previous IFAD/WFP projects. However, the role and structure of PMOs has been revised to become more supportive of the technical implementing agencies. Staffing has been reduced to the minimum required for effective facilitation of project implementation. They will use and coordinate the existing technical and social agencies and bureaux at province, prefecture, county and township levels for undertaking project activities. Support will consist in provincial start-up workshops, training on monitoring and PRA methodologies, computer and accounting training, transport facilities, office equipment and associated running costs. Study tours and interproject PMO workshops will be organized to share experiences. As mentioned above, technical training for productive activities and awareness-building on food security will be a major activity in all components. The training programmes are incorporated in the relevant activities in order to demonstrate the integrated nature of the training as part of each technical agency's programme. As the WF is the primary organization with a mandate to assist women, it is re-emphasized that each PMO will have a representative from the federation as a full staff member.

D. Costs and Financing

21. **Project costs.** Total project costs over six years, inclusive of contingencies, taxes and duties, are estimated at USD 107.3 million. The foreign exchange component is estimated at 4%. Taxes and duties account for less than 6% of project costs. Project costs were calculated in CNY prior to conversion into USD and are based on prices prevailing during the first quarter of 2000. Physical contingencies of 10% have been applied to all material costs related to infrastructure works. Price contingencies have been levied on all cash costs. No physical or price contingencies have been applied to WFP support and the credit revolving fund. A constant purchasing-power-parities exchange rate has been calculated to allow for the difference in foreign and domestic inflation rates. The summary of project costs by component is presented in Table 1.

TABLE 1: SUMMARY OF PROJECT COSTS^a
(USD '000)

Components	Local	Foreign	Total	% of Foreign Exchange	% of Base Costs
Agricultural development	38 591	1 801	40 392	4	41
Financial services	22 360	133	22 493	1	23
Social development	12 978	606	13 584	4	14
Rural Infrastructure	10 684	609	11 293	5	11
Project management ^b	10 773	597	11 370	5	11
Total base costs	95 386	3 746	99 132	4	100
Physical contingencies	6 051	293	6 345	5	6
Price contingencies	1 737	58	1 795	3	2
Total project costs	103 175	4 097	107 272	4	108

^a Discrepancies in totals are due to rounding.

^b Includes costs of ocean freight and local handling of WFP food.

22. **Project financing.** An IFAD loan of USD 30.4 million is proposed, which will finance 28.4% of total project costs. WFP will provide grain equivalent to USD 11.2 million or 10.4% of total project costs. The Government will contribute USD 53.0 million equivalent in cash and including all taxes and duties, and a further USD 900 000 in food for work (FFW) rations, for a combined 50.3% of total project costs. Beneficiary contributions, mainly in kind, will amount to USD 11.7 million or about 11% of total project costs. Details of the financing proposal are presented in Table 2.

23. **Retroactive financing.** In order to ensure effective project start-up, retroactive financing not exceeding USD 500 000 will be provided for expenditure incurred after 1 January 2001. Such expenditure will include support for office equipment, staff training, preparation of VDPs, preparation of the baseline survey, elaboration of literacy curriculum, visit of PMO to other projects, detailed plan of rehabilitation of agricultural extension stations and animal health stations.

TABLE 2: FINANCING PLAN^a
(USD '000)

	IFAD		WFP		Government: FFW		Government: Cash		Beneficiaries		Total		Taxes Incl. in Total
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
Agricultural development													
Crops and livestock	3 602	39.7	753	8.3	-	-	1 846	20.3	2 872	31.7	9 073	8.5	864
Irrigation	-	-	1 978	11.0	-	-	15 949	89.0	-	-	17 927	16.7	1 539
Dryland improvement	-	-	4 108	40.2	-	-	6 118	59.8	-	-	10 226	9.5	720
Tree crops	1 143	15.7	859	11.8	-	-	5 269	72.5	-	-	7 271	6.8	566
Subtotal	4 745	10.7	7 698	17.3	-	-	29 182	65.6	2 872	6.5	44 497	41.5	3 689
Financial services	14 715	62.3	-	-	-	-	130	0.5	8 790	37.2	23 636	22.0	108
Social development													
Health	1 964	57.1	384	11.2	-	-	1 090	31.7	-	-	3 437	3.2	264
Education	3 123	48.4	1 247	19.3	-	-	2 079	32.2	-	-	6 448	6.0	506
Income generation	2 333	50.1	945	20.3	-	-	1 381	29.6	-	-	4 660	4.3	94
Subtotal	7 420	51.0	2 576	17.7	-	-	4 550	31.3	-	-	14 545	13.6	865
Rural Infrastructure													
Domestic water	-	-	926	11.2	-	-	7 355	88.8	-	-	8 281	7.7	734
Access roads	-	-	-	-	945	23.0	3 166	77.0	-	-	4 111	3.8	253
Subtotal	-	-	926	7.5	945	7.6	10 521	84.9	-	-	12 392	11.6	986
Project management^b													
Provincial PMO	672	16.3	-	-	-	-	3 460	83.7	-	-	4 132	3.9	174
County PMOs	2 882	35.7	-	-	-	-	5 188	64.3	-	-	8 071	7.5	430
Subtotal	3 554	29.1	-	-	-	-	8 649	70.9	-	-	12 202	11.4	604
Total disbursement	30 433	28.4	11 200	10.4	945	0.9	53 031	49.4	11 662	10.9	107 272	100.0	6 252

^a Discrepancies in totals are due to rounding.

^b Includes costs of ocean freight and local handling of WFP food.

E. Procurement, Disbursement, Accounts and Audit

24. **Procurement.** The main items to be procured are vehicles and equipment. The quantities are limited and local competitive bidding procedures acceptable to IFAD will be applied. Civil works for the construction of buildings, irrigation works, roads and drinking-water supplies will be carried out by the relevant government agencies, using contractors where appropriate with contracts awarded following local competitive bidding procedures. Each contract estimated to cost less than USD 20 000 may be awarded on the basis of local shopping procedures.

25. **Disbursement.** The IFAD loan will be disbursed over six years. Withdrawals in respect of expenditure for less than USD 20 000 equivalent will be made against certified statements of expenditure (SOE). RCC loans to farmers will be prefinanced with an initial deposit equal to the estimated credit amount required for the first year, according to the work plan and budget as agreed by each county PMO in conjunction with the county RCCU. Monthly summaries of credit disbursed and recovered will be maintained on a gender-differentiated basis for review by supervision missions. A special account will be opened on terms and conditions acceptable to IFAD.

26. **Accounts and audit.** Consolidated project accounts will be maintained by the PMOs, assisted by the Finance Support Unit. The financial reporting and accounting practices followed by the Finance Bureau are acceptable to IFAD. The accounting sections will be adequately staffed and fully capable of handling the accounting requirements of the project. The State Audit Agency, a fully independent body reporting to the State Council, will be responsible for auditing all project accounts. Records of all expenditures on items purchased by the project will be maintained by the township, county and regional PMOs. The State Audit Agency will review the withdrawals from the project account on the basis of SOEs and provide an opinion on whether such expenditures fully comply with expenditures eligible for IFAD disbursements. It will also review the management aspects of the credit operation and comment on disbursement and recovery and on provisions for bad debts. The Government will furnish certified copies of the audit reports to IFAD and the cooperating institution not later than six months after the end



of each financial year. WFP also requires audits of project expenditure, utilization of food aid, confirmation of workdays and rations. Both audits should be performed simultaneously.

F. Organization and Management

27. **Beneficiary participation.** A VIG will be established in each village, composed of the village leader, village accountant, a representative of the WF, village agricultural and livestock technicians and three elected beneficiaries, two of whom will be women. VIG will organize the preparation of the VDP through a participatory process involving the entire village. The process will include: (a) bringing together the members of the village to discuss investment options; (b) formulating village development plans; (c) disseminating information about project activities to all households; (d) organizing labour to participate in the food-for-work activities; (e) advising upon credit applications; (f) assisting in loan disbursements, supervision and collection; and (g) ensuring that activities are properly targeted and progress monitored by the beneficiaries. Participation will be enhanced through the election of the village leader and the introduction of PRA techniques.

28. **Gender considerations.** The feminization of agriculture due to the high level of out-migration by men, the intensification of farming activities and household chores require activities with a strong impact on women. Proportionately more women are illiterate and most government services are provided by men. Thus each and every project activity will have a specific focus on: (a) time-saving technologies in agriculture; (b) more extension and training services responsive to women; (c) empowerment of women through literacy; (d) promotion of high-value crops with low labour input and income-generating activities near or within the homestead; (e) better access to credit; (f) easy access to drinking water and (g) development of biogas as a source of energy for the household. Decreased prevalence of disease will result from the availability of better health services and training, substantially improved domestic water supplies and the promotion of sustainable and sanitary energy resources. Education support will be provided to adults, predominately women, to enrol in functional literacy training programmes and/or to acquire technical skills, and children will be encouraged to continue their primary education and will be supported financially for doing so. The various training programmes, together with the institutional approach of participatory village-level activity planning, will lead to a much greater awareness and assertiveness in all matters relating to the social and economic situation of the individual, the household and the community.

29. **Rural finance targeting.** RCCs will be responsible for providing financial services, including the supply of credit financed from the proceeds of the IFAD loan. The credit management structure will reflect the project management structure and will involve support and coordination of relevant organizations, including the People's Bank of China (PBC) and RCCUs. Prior to start-up of the project, the regional PMO will assist the regional Finance Department (FD)/PBC and RCCU in preparing a detailed set of credit policies and operational procedures in the form of a manual of financial services. The operational manual and training modules will be uniform for the whole project and based on those developed with German technical assistance in the Wulin Mountains IFAD/WFP supported project. RCCs will be responsible for the assessment and approval of credit applications for the disbursement of loans, follow-up and recovery, risk management, accounting and reporting, and supervising and monitoring of credit operations. County RCCUs will manage the credit fund, channel funds to RCCs, organize and monitor training of RCC officers, supervise RCC credit operations, maintain and consolidate RCC reports and forward project data to the county FD via the county PMO.

30. **Project management.** The Ministries of Agriculture and Finance will have overall responsibility for the project at the national level. At the regional level, the Department of Agriculture will assume primary responsibility for project implementation and will guide and coordinate the work of all the technical agencies involved. The regional FD will be responsible for the management and supervision of project funds and for ensuring repayment of the IFAD loan to the Ministry of Finance. A management agreement will specify the role and responsibilities of each implementing agency, including the RCCs as



financial intermediaries, and provide details on implementation procedures. All PMOs at the regional and county level have already been established as the coordinating arms of the respective PLGs. PLGs will be responsible for providing policy guidance, approving plans, receiving reports and commenting on these, and generally guiding activities for the project. The PLGs will meet quarterly and also on an ad-hoc basis. PMOs are, and will remain, small and will operate as coordinators, leaving implementation to the involved agencies. There is already a representative of WF in all PMOs. Project resources for all items of investment and running costs will be allocated to associated agencies, including WF, on a timely basis in accordance with the approved annual work plan and budget.

31. **Monitoring.** Semi-annual and annual progress reports will be prepared by the regional PMO and will have special sections on beneficiary self-monitoring, the use of workdays and training days, quality assessment of infrastructure and gender-specific details. A joint UNOPS, WFP and IFAD mission will review progress made and provide implementation support on issues raised. Key indicators will focus on: (a) food, cash crop and livestock production; (b) household income or proxy indicators related to increased food self-sufficiency; (c) income generated by women; (d) access to health and education facilities, especially at the village level. Physical, environmental, financial, institutional and socio-economic aspects will be included in progress reports. At the regional and county level, monitoring staff will be supplied with computers and associated software. Start-up workshops will be held at the regional level and in each county. In addition, an annual review workshop will be held in each county. The primary purpose of these management workshops will be to review the past year, derive lessons from experience and ensure that these are reflected in the upcoming annual work plan and budget. In addition, intercounty workshops will be organized annually, focusing on monitoring systems, gender aspects, PRA methods and financial services in order to share issues of common interest and establish a feedback system of experience and lessons learned.

32. **Impact assessment.** The main instruments for assessing the impact of project activities are the baseline survey, the mid-term review (MTR) and the project completion review (PCR). The baseline survey will be undertaken before starting project activities and will follow the methodology introduced in the Wulin Mountains Minority Areas Development Project. Special emphasis will be given to household food security through including anthropometric measurements. An MTR and PCR will be undertaken jointly by IFAD, WFP and the cooperating institution in conjunction with the Government at the end of project year (PY) 3 and PY 6 respectively. The reviews will particularly assess the impact of project activities on the living conditions of the target group and provide the opportunity to promote knowledge sharing by stakeholders within and among projects.

G. Economic Justification

33. **Benefits and beneficiaries.** Seen in the context of a perennial food-deficit area, the project is likely to have a major effect on household food security. For instance, the total annual increment in grain output is estimated to be about 66 000 t by PY 7. This converts to an average of 51 kg of grain per person, lifting the project area from bare food subsistence to something close to self-sufficiency. This will further contribute to the achievement of a much more balanced diet, including more protein from animal and vegetable origin, but also higher quantities of fruits and vegetables. Incremental outputs of livestock are estimated at 2 600 t, about 68 000 t of vegetables and about 100 000 t of fruit. Most of the 240 000 targeted households are likely to improve their economic and social living conditions dramatically. For example, today's typical land-scarce household could well control 0.1 ha of irrigated land instead of the present 0.04 ha and may have acquired newly improved dry land as well. One or two pigs could be kept in improved conditions; more fowl will be available in the homestead. The new 0.06 ha tree plantation will gradually start to produce fruit. More importantly, a child, probably a girl, will be able to complete primary education at the rehabilitated local school, and the mother might have acquired basic literacy and some technical skills, opening the path to an income-generating activity.



34. All 240 000 households will benefit from on-farm production development through crop and/or livestock training or on-farm demonstrations. These increased farming skills, combined with the land improvement programme, will allow about 175 000 beneficiaries to receive credit for seasonal loans. The project will also support the creation of about 37 000 small enterprises and income-generating activities, using seasonal and medium-term credit and intensive training for potential entrepreneurs. The expected beneficiaries of social services will include about 41 800 trainees for literacy; about 78 100 trainees for technical skills; about 39 000 school drop-outs, mainly girls; and about 60 500 women for prenatal care.

35. **Financial and economic analysis.** The data of three models, including crop farming, livestock and tree crops, have been combined to construct an average farm enterprise system. At full deployment of project activities, the net annual income per household derived from it will increase by about 70% from about USD 516 to USD 878. The economic rate of return (ERR) calculated for the whole project area over a 20-year period is 20.8% per annum. The sensitivity test results demonstrate the robustness to exogenous perturbation in cost and/or benefit streams, while still yielding an ERR of 13.8% in the case of a 10% shortfall in benefits and a 10% increase in costs.

H. Risks

36. There are risks associated with peak climatological events such as unusually concentrated rainfall, which may result in flooding of the larger sink holes, or the early onset of winter drought, which badly affects the second-season output of maize. The project will seek to attenuate the impact of the latter risks by providing better water management for irrigation to ensure a steadier supply of water during extended dry periods. It is also possible to further promote the use of plastic sheets on spring crops to make full use of the improved water availability and to lengthen the cropping season. The rapid spread of plastic sheets for diverse cropping has demonstrated that adoption rates are maximized for proven technology. The quality and availability of inputs, particularly planting materials, may contribute some risk. The project will support seed multiplication and the provision of disease-free planting material.

I. Environmental Impact

37. The project is in a hilly area, but vegetative cover is still good and soil erosion is limited. Large government-initiated reforestation schemes, often with economic rather than forest tree species, are under way. Irrigation and dryland development will improve the productivity of cropping land. This is expected to open the way to releasing marginal annually-cropped land to ecologically and economically sustainable use, for instance perennial cash crops. All road construction will be carried out in conformity with Chinese national standards, including the planting of roadside trees to provide incremental protection. The proposed water sources for drinking-water activities meet Chinese standards and will be of much higher quality and accessibility than present sources, which often consist only of local streams. The proposed project is expected to have positive environmental effects.

J. Innovative Features

38. Project design was undertaken by a national team of consultants with limited international support. During a preparatory phase, the project area and target group were pre-identified using the VAM method, and PRA methodology was introduced through a training course of county and township PMOs. Subsequently PRAs were undertaken in 40 project villages prior to project formulation. The target groups' active involvement will be guaranteed through further use of PRA methods for preparing VDPs and for their implementation. A beneficiary-initiated self-monitoring programme will be introduced with twice-yearly written reports from the village community on the services and inputs received and the impact achieved. Impact assessment will be introduced using the baseline survey methodology and regular reporting by beneficiaries. The large-scale introduction of forest closure under a system of assisted village responsibility aims to regenerate the badly degraded



forests in the project area. Professional farmer associations will be created to represent both crop-specific and common interests of producers of crops with good market potential. Detailed market and marketing studies will underpin the system. The high emphasis on non-timber forestry production increases the profitability of the related credit packages, while simultaneously reducing environmental hazards by planting these perennial trees on some of the most erosion-prone land, in order to replace a large part of low-yielding land used for food crops. Strengthened and refocused crop extension and animal health services will better serve the poor and women. Numerous small demonstrations of selected, recommended packages will be carried out on the fields of poor farmers, women in particular, with a fair share of these occurring in remote natural villages.

PART III - LEGAL INSTRUMENTS AND AUTHORITY

39. A loan agreement between the People's Republic of China and IFAD constitutes the legal instrument for extending the proposed loan to the borrower. A summary of the important supplementary assurances included in the negotiated loan agreement is attached as an annex.

40. The People's Republic of China is empowered under its laws to borrow from IFAD.

41. I am satisfied that the proposed loan will comply with the Agreement Establishing IFAD.

PART IV - RECOMMENDATION

42. I recommend that the Executive Board approve the proposed loan in terms of the following resolution:

RESOLVED: that the Fund shall make a loan to the People's Republic of China in various currencies in an amount equivalent to twenty-three million eight hundred thousand Special Drawing Rights (SDR 23 800 000) to mature on and prior to 1 December 2040 and to bear a service charge of three fourths of one per cent (0.75%) per annum, and to be upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Fawzi H. Al-Sultan
President

SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES INCLUDED IN THE NEGOTIATED LOAN AGREEMENT

(Loan negotiations concluded on 28 November 2000)

1. The Government of the People's Republic of China (the Government) will make the proceeds of the loan available to the regional PMOs in accordance with the annual work plans and budgets (AWP/Bs) to carry out the project. The regional PMOs will make the proceeds of the loan required in accordance with the AWP/Bs available to the county and township PMOs.
2. For the purpose of depositing the proceeds of the loan in accordance with the AWP/Bs, the Government will cause the regional PMOs to open and thereafter maintain separate project development accounts (PDAs) in a bank satisfactory to IFAD.
3. The available funds and other resources called for in the AWP/Bs will be channelled to carry out the project as provided in the project management agreement, and to carry out the financial services component of the project in accordance with the subsidiary loan agreement between the county PMOs and the RCCUs.
4. The Government will ensure that:
 - (i) PMO staff will be kept to the minimum compatible with the duties of coordination facilitation and monitoring at all levels. In particular, recruitment into the PMOs of more than one senior official from each implementing agency will be avoided;
 - (ii) rules and regulations for the financial management of loan-funded projects, established by the Ministry of Finance (MOF) in 1995, will be adapted to reflect the changes introduced in the IFAD loan agreements since 1996;
 - (iii) PMOs established at regional, county and township levels will be maintained for at least fifteen years after project completion. Operational costs and financing of technical services facilities after the project will be continued and end-of-project standards maintained;
 - (iv) PMOs at all levels will have a fair share of women staff members, and future recruitment and replacement will try to reach the target ratio of 50% women members;
 - (v) the regional and county PMOs will nominate a gender focal point within their staff to monitor gender-related issues in the project;
 - (vi) support to the WF will include training units, equipment and training materials. WF will enjoy full managerial autonomy within the restrictions set by project documents and the AWP/B;
 - (vii) WF will receive the necessary funds to organize the microcredit facility, based on market conditions for credit;
 - (viii) ownership of the township training facilities will be devolved to WF, which will subsequently make these training facilities and related equipment available to other project implementing agencies;



ANNEX

- (ix) the construction or rehabilitation of the township agricultural and animal husbandry stations will be preceded by a needs assessment and inventory, and common premises will be proposed whenever possible to provide a more efficient use of funds for sites, buildings and services and to ensure optimal service to farmers. A detailed plan of action will be submitted to IFAD for approval prior to the start-up workshop;
- (x) upgrading of county facilities will be preceded by a needs and opportunity assessment;
- (xi) where project activities affect the supply and/or quality of available land, reallocation will be carried out as part of the VDP, in a participatory process involving the entire village through the village implementation groups, which include women representatives.
- (xii) demonstrations will be held on the fields or with the animals of the poorer and poorest farmers. Demonstration inputs will be supplied by the project, with a 50% grant to the farmer, who will keep the produce of the demonstration in return for providing a training ground for neighbours;
- (xiii) at least 30% of the demonstrations will be held in remote villages;
- (xiv) all planting material provided under the project will be of certified quality;
- (xv) RCCs will be offered the opportunity to acquire incremental equipment and to train their field staff in credit methods. The computers and transportation equipment will be provided on a reimbursable basis, with a repayment period of four years;
- (xvi) the credit programme in Nandan County will not absorb more than 50% of the relevant funds allocated for credit activities in that county until a satisfactory solution to the geographical coverage of the RCCs in the area is found;
- (xvii) before renovation or construction of primary school classes takes place, a parents' committee will be formed. This committee will be responsible for supplying unskilled labour for rehabilitation work and for subsequent upkeep and maintenance of the facility;
- (xviii) functional literacy training courses will be revised to include themes related to legal and administrative matters, use of agricultural inputs, primary health care and nutrition, savings and credit;
- (xix) water users committees at the village level and detailed planning for drinking-water schemes will be undertaken before starting construction; and
- (xx) food distributed to project beneficiaries will meet WFP quality standards.

5. The following is an additional condition precedent to the effectiveness of the project loan agreement:

the project management agreement has been duly signed, and the signature and performance thereof by the parties thereto have been duly authorized or ratified by all necessary administrative and governmental action.



ANNEX

6. No disbursements shall be made for the credit revolving fund until the subsidiary loan agreement has been approved by IFAD. No disbursements shall be made for each RCCU at the county level until the respective subsidiary loan agreement has been signed.

COUNTRY DATA

CHINA

Land area (km² thousand) 1997 1/	9 326	GNP per capita (USD) 1998 2/	750
Total population (million) 1998 1/	1 238.6	Average annual real rate of growth of GNP per capita, 1990-98 2/	9.6
Population density (people per km²) 1998 1/	133	Average annual rate of inflation, 1990-98 2/	9.7
Local currency	Yuan Renminbi (CNY)	Exchange rate: USD 1 =	CNY 8.26
Social Indicators		Economic Indicators	
Population (average annual population growth rate) 1980-98 1/	1.3	GDP (USD million) 1998 1/	959 030
Crude birth rate (per thousand people) 1998 1/	16	Average annual rate of growth of GDP 1/	
Crude death rate (per thousand people) 1998 1/	8	1980-90	10.1
Infant mortality rate (per thousand live births) 1998 1/	31	1990-98	11.2
Life expectancy at birth (years) 1998 1/	70	Sectoral distribution of GDP, 1998 1/	
Number of rural poor (million) (approximate) 1/	39.2	% agriculture	18.4
Poor as % of total rural population 1/	4.6	% industry	48.7
Total labour force (million) 1998 1/	743.2	% manufacturing	37.1
Female labour force as % of total, 1998 1/	45.2	% services	32.9
Education		Consumption, 1998 1/	
Primary school gross enrolment (% of relevant age group) 1997 1/	122.7	General government consumption (as % of GDP)	11.9
Adult literacy rate (% of total population) 1997 3/	82.9	Private consumption (as % of GDP)	45.4
Nutrition		Gross domestic savings (as % of GDP)	
Daily calorie supply per capita, 1996 3/	2 844	Balance of Payments (USD million)	
Prevalence of child malnutrition (height for age % of children under 5) 1992-98 1/	31.4	Merchandise exports, 1998 1/	183 527
Prevalence of child malnutrition (weight for age % of children under 5) 1992-98 1/	15.8	Merchandise imports, 1998 1/	136 914
Health		Balance of merchandise trade	
Health expenditure, total (as % of GDP) 1990-98 1/	4.5	46 613	
Physicians (per thousand people) 1990-98 1/	2	Current account balances (USD million)	
Percentage population without access to safe water 1990-97 3/	33	before official transfers, 1998 1/	
Percentage population without access to health services 1981-92 3/	n.a.	after official transfers, 1998 1/	
Percentage population without access to sanitation 1990-97 3/	76	Foreign direct investment, 1998 1/	
Agriculture and Food		43 751	
		Government Finance	
		Overall budget surplus/deficit (including grants) (as % of GDP) 1997 1/	
		-1.5	
		Total expenditure (% of GDP) 1997 1/	
		8	
		Total external debt (USD million) 1998 1/	
		154 599	
		Present value of debt (as % of GNP) 1998 1/	
		14.3	
		Total debt service (% of exports of goods and services) 1998 1/	
		8.6	
		Nominal lending rate of banks, 1998 1/	
		6.4	
		Nominal deposit rate of banks, 1998 1/	
		3.8	
Land Use			
Arable land as % of land area, 1997 1/	13.3		
Forest area (km ² thousand) 1995 1/	1 333.2		
Forest area as % of total land area, 1995 1/	14.3		
Irrigated land as % of cropland, 1995-97 1/	37.7		

n.a. not available.

Figures in italics indicate data that are for years or periods other than those specified.

1/ World Bank, *World Development Report*, 2000

2/ World Bank, *Atlas*, 2000

3/ UNDP, *Human Development Report*, 1999

PREVIOUS IFAD LOANS TO CHINA

Project Name	Initiating Institution	Cooperating Institution	Lending Terms	Board Approval	Loan Effectiveness	Current Closing Date	Loan/Grant Acronym	Currency	Approved Loan/ Grant Amount	Disbursement (as % of Approved Amount)
Northern Pasture and Livestock Development Project	IFAD	UNOPS	HC	22 Apr 81	20 Jul 81	31 Dec 88	L - I - 62 - CH	SDR	28 700 000	100%
Hebei Agricultural Development Project	IFAD	World Bank: IBRD	I	15 Sep 82	14 Jan 83	31 Dec 88	L - I - 107 - CH	SDR	22 900 000	100%
Rural Credit Project	IFAD	World Bank: IDA	HC	11 Sep 84	22 Jan 85	30 Jun 89	L - I - 153 - CH	SDR	24 250 000	100%
Guangdong Integrated Freshwater Fish Farming Project	IFAD	World Bank: IBRD	I	03 Dec 86	24 Mar 87	31 Dec 92	L - I - 195 - CH	SDR	10 150 000	96.4%
Sichuan Livestock Development Project	IFAD	UNOPS	HC	30 Nov 88	16 May 89	30 Jun 95	L - I - 233 - CH	SDR	13 400 000	100%
Shandong/Yantai Agricultural Development Project	IFAD	UNOPS	HC	07 Dec 89	10 Jul 90	31 Dec 96	L - I - 254 - CH	SDR	16 800 000	100%
Shanxi Integrated Agricultural Development Project	IFAD	UNOPS	HC	04 Apr 91	26 Jul 91	30 Jun 98	L - I - 281 - CH	SDR	17 850 000	99.9%
Jilin Low-lying Land Development Project	IFAD	UNOPS	HC	14 Apr 92	15 Jun 92	30 Jun 98	L - I - 300 - CH	SDR	20 000 000	99.9%
Yunnan-Simao Minorities Area Agricultural Development Project	IFAD	UNOPS	HC	15 Sep 93	10 Dec 93	31 Dec 00	L - I - 335 - CN	SDR	18 400 000	98.6%
Qinghai/Hainan Prefecture Agricultural Development Project	IFAD	UNOPS	HC	05 Dec 94	08 Jun 95	30 Jun 01	L - I - 364 - CN	SDR	13 500 000	96.9%
Jiangxi/Ganzhou Integrated Agricultural Development Project	IFAD	UNOPS	HC	06 Dec 95	10 May 96	30 Jun 01	L - I - 395 - CN	SDR	15 950 000	87.8%
Northeast Sichuan and Qinghai/Haidong Integrated Agricultural Development Project	IFAD	UNOPS	HC	11 Sep 96	14 May 97	31 Dec 02	L - I - 424 - CN	SDR	19 100 000	78.3%
Southwest Anhui Integrated Agricultural Development Project	IFAD	UNOPS	HC	11 Sep 97	12 Dec 97	30 Jun 03	L - I - 451 - CN	SDR	19 100 000	41.7%
Wulin Mountains Minority-Areas Development Project	IFAD	UNOPS	HC	10 Sep 98	21 Apr 99	31 Dec 04	L - I - 483 - CN	SDR	21 100 000	13.1%
Qinling Mountain Area Poverty-Alleviation Project	IFAD	UNOPS	HC	08 Dec 99	15 Aug 00		L - I - 517 - CN	SDR	21 000 000	





PROJECT COMPONENTS AND IMPLEMENTATION ARRANGEMENTS

Project Description

1. The goal of the project is to sustainably reduce the poverty of about 240 000 households living in 74 townships, spread over 10 counties. This requires improved impact of productivity gains, income growth and social services. Per capita grain availability should increase by 51 kg, and income by USD 36, while preventable diseases and number of school drop-outs will decrease and about 37 000 microenterprises will be started up. The economic and social development objectives require a multisectoral approach, combining investments in both physical and human resources with emphasis on labour productivity and implementation in a coherent and integrated fashion. Therefore, a project management agreement will specify the role and responsibilities of each technical agency and provide details on implementation procedures. PLGs and PMOs will guide, coordinate and facilitate the work of the technical implementing agencies. Project activities will be implemented by the respective agencies and will constitute five major components: (a) agricultural development; (b) financial services; (c) social development; (d) rural infrastructure; and (e) project management.

Implementation Arrangements

2. **Institutional framework.** The administrative system comprises a multi-tier structure from the central Government, through region, prefecture, county and township to the administrative village level. In the GZAR the prefecture level is less well developed and administrative relations run from region to county, often bypassing the prefecture level altogether. Local officials at each level have considerable autonomy in decision-making and genuine responsibility for ensuring that the planned work is actually carried out. This arrangement is highly successful in achieving physical development with externally financed projects, as reflected in IFAD and WFP experience in China. Government officials at township level and above are "state cadres" paid by the Government. At the village level, officials are elected. These village cadres include the administrative village leader, administrative village accountant and natural-village leaders, one in each natural village. This group forms the village committee, the leading body of the administrative village. The village cadres are not paid by the state, but usually receive an allowance from taxes collected in the village. Few village cadres are women except for the WF representatives, who are present in every village and have a special responsibility, among many others, to promote family planning policies.

Agricultural Development

3. **Technical support services.** Technical support for agriculture is provided at the regional level through the Regional Agricultural and Animal Husbandry Office (comprising the Department of Agriculture, the Department of Cash Crops and the Department of Animal Husbandry) and the Forestry Administration. The Department of Water Conservancy, the Rural Enterprise Bureau and the Meteorological Bureau are also providing assistance to the farming community. At the county level, agriculture, cash crops and animal husbandry take on separate identities. The regional universities and the Academy of Agricultural Science provide training opportunities for regional, prefecture and county officials and undertake adaptive research and field experimentation, some of which is contracted out to lower-level organizations. For all projects, planning, design and implementation are monitored by the environmental protection bureaux (EPBs) at different administrative levels and follow the agricultural, forestry, land and water resources laws, and the Natural Reserves Regulation stipulations, including the new regulations concerning the cutting and removal of trees.



4. **Extension systems** for annual crops and livestock functioned relatively well during the collective responsibility system. With the shift to the household responsibility system, the number of clients has increased greatly and production practices and technologies are increasingly complex. In addition, farmers are financially independent and choose what they want to do and accept the concomitant risks. In order to continue to provide worthwhile services to farmers, the extension systems need strengthening, in particular at the base level. The system lacks the funds and basic facilities for farmer-directed extension activities, for the development of new packages and for staff training. Township level services, the only ones reaching the village, are mainly financed by local Government from local taxes. Because project townships are poor and the taxation base is low, provision of better accommodation and basic equipment are required to improve the extension systems.

5. The current extension methodology combines experiments equivalent to adaptive trials and rather large demonstrations held principally in the fields of the farmer-technicians. The system overlooks the needs of farmers in isolated villages, usually without farmer-technicians, and with worse labour conditions prevailing in those villages. The same applies to women farmers and thus the system needs additional focus on poor farms and on women farmers in outlying villages. Inputs for these demonstrations will be provided with a 50% grant portion. The farmer will keep the produce of the demonstration and receive a food ration to compensate for about 50% of the estimated cultivation time. By selecting the poorer and poorest farmers, this will help to graduate them as creditworthy while establishing demonstrations adapted to the conditions of poor households. Staff also need training in technical, financial and practical farm management skills to enable them to disseminate agricultural technology to farmers and to interface with credit officers. Despite this, it was noted, for example, that the use of agricultural plastic has spread to high valleys after only one visit from extension officers. Similarly, high-yielding varieties of paddy rice are now being used almost universally when conditions warrant it.

6. There is a lack of good-quality seed in adequate quantity. Selected farmers or groups will be supported to multiply improved seed on behalf of the seed companies, with credit for the inputs and technical support from extension staff. The average household keeps one pig and a few chickens, often with low productivity. The increased availability of crop by-products and residues for livestock feed, availability of credit to buy better quality animals and improved housing, will be supported with training and better services.

7. **Water engineering.** The water conservancy bureaux (WCBs) at the province, prefecture and county level are responsible for planning, design, construction, management and operation of major irrigation schemes, including on-farm development works and drinking water supply. The county WCBs have good experience in management and operation of existing schemes, but less experience in the design of a large number of small schemes to be implemented simultaneously over a relatively short time period. Regional and prefecture WCBs have trained staff available to make up the requirement. Engineering fees have been specified for all engineering work at a rate of about 7% of total material cost, excluding food rations. These fees will cover all costs of the WCB related to studies, site supervision, beneficiary training for scheme installation, running and management. The amounts will also enable the PMOs at county and regional level to recruit outside engineering consultants to validate the technical proposals, detailed designs and estimated construction cost made by the WCBs, in particular for the larger schemes.

8. **Irrigation and dryland development** provide one of the best ways to enable farm households to increase their food production. This was the highest priority expressed during the PRA. Opportunities for irrigation are limited by the availability of suitable land and water. A substantial number of the older schemes are not functioning well as a result of faulty design and/or construction, rendering maintenance almost impossible. The main system failure is massive seepage, which reduces efficiency of water use to a very low percentage. The first priority, therefore, is to upgrade old



systems through the provision of hard canal lining. The water saved will enable most systems to be expanded well beyond the current command area. The second priority refers to the karst-formation sink-holes. The aim is to construct individual 60 m³ tanks to capture run-off during the rainy season. These tanks are expensive, but the opportunity to lengthen the cropping season by a few weeks at both ends has dramatic effects on yields, virtually guaranteeing a proper second crop in all affected areas. Other interventions concern a handful of small pumping stations and the occasional construction of check dams, drainage ditches and one flood-control dike. In addition, dryland development will include soil deepening of more than 51 000 mu, land levelling of 18 000 mu and about 21 000 mu of terracing, soil conservation and conversion to paddy.

9. During and/or following construction of communal schemes, VIG will organize farmers in water user groups, consisting of all beneficiary farmers. If any scheme will touch territories in more than one administrative village, the township WCB-station will offer its usual management support to the overall scheme committee. The group(s) will be trained in all aspects of irrigation water management on and off the field, including control of water to the individual fields or sections, O&M procedures, including simple construction and repair of canals, pumps, reservoirs and other structures. In villages with drinking water development, training will include both topics. Water management charges will be levied to cover operational and maintenance costs, excluding voluntary labour.

10. **Economic crops.** The present contribution of perennial cash crops to the household income is low, but the potential is high. The market prospects for tea, walnuts and chestnuts, bananas and bamboo shoots as well as a range of other non-timber forest products are particularly good. The developments on annual crop land will enable farmers to restore their most unproductive land to a more rational use with perennial crops. More than 250 000 mu of privately owned plots will be established using credit. The PRA exercises have shown that items most wanted by beneficiaries are generally in line with climatic potential in the counties. Nurseries will be supported on a total area of about 800 mu. Because of the need to quickly generate seedlings in large quantities these nurseries will be established by the technical bureaus. They will be privatized as quickly as possible or closed before the project closing date. Training of county and township staff and of farmers will teach new techniques for the development of rapidly maturing trees, including new planting materials, proper planting methods and subsequent pruning and fertilization. Food-for-training compensation will encourage women, in particular, to attend these sessions.

11. **Forestry and environmental-economic tree planting** The protection of key irrigation and road infrastructure as well as of river banks prone to erosion will be supported through the establishment of about 35 000 mu of environmental-economic trees. They will be selected for their site-suitability and their capacity to contribute to household or village income and or fuel supplies from prunings. Planting will be arranged by the village through VIG, the trees will then normally be assigned to individual households in proportion to their contributions to the establishment, but communal management will be acceptable if the village so decides. Households will be entitled to the produce and prunings from the trees but will not be permitted to fell. Forestry activities will be supported by expanding an experimental system developed by the forestry bureaus. This system is known as "forest closure" and consists in assigning responsibility for about 200 ha to individual villagers for excluding all human activity in degraded forest to allow natural regeneration for 5 to 10 years. These forest guards will be recruited from villages affected by the closure. The programme is expected to cover 1.33 million mu (90 000 ha), which will require the recruitment of about 450 guards. These will receive an annual compensation package combining financial and food incentives. The organization and identification of the forest closure plots should be part of the VDP and receive full support of the village committees.

12. **Biogas** The project will further the more efficient use of energy, improve human hygiene and better livestock husbandry through the strong promotion of biogas units. These units will incorporate an



improved pig shed, a better latrine system and a biogas generator. Costs for materials and skilled labour will be borne by the project; farmers will provide unskilled labour but will receive FFW-rations in return. Care will be taken in selecting poor households. Two sizes of equipment will be used. The first will be suitable for poor households with one pig and will principally cover their lighting needs. Households with two or more pigs will be able to opt for a larger system that will provide energy for cooking as well.

Financial Services

13. **RCCs** have the most extensive network at the grass-roots level compared to other credit institutions. The main sources of funds for RCCs are savings and deposits by rural households and by township enterprises, borrowings from ABC and PBC, and borrowings from other RCCs. Yet, the RCCs' liquidity is low. In the project counties, there is usually a full-time staffed RCC in every township, with only Nandan County falling much short of this target. Furthermore, although no formal village outlets or agents work on a commission basis at the village level, grass-roots services of RCCs are maintained with the assistance of village leaders. There is a RCC Union (RCCU) in each county, which provides management, coordination and clearing services to its member RCCs. PBC support and supervision is focused on these RCCUs.

14. **Eligible borrowers** will be poor households, especially poor women, who are economically active, but who presently have little or no access to formal financial resources. Functional literacy and skills training will be associated to facilitate access to credit. The type of credit available under the project will be short, medium and long term, up to five years for individuals. Groups may obtain larger loans, if conditions warrant this. No collateral will be required for loans up to CNY 2 000. The borrowers' contribution will generally be in-kind and consist of their labour and skills. The loan size will depend upon the financing needs of the income-generating project. Short-term loans will not exceed CNY 2 000 and medium-long-term loans CNY 4 000, but these restrictions need to be applied flexibly and responsibly in consultation between client and RCC. Repayments for six and twelve-month loans will be by one-time repayment with principal and interest in the last month of the term. Yearly repayments will be made at the end of each year for loans with a maturity of two-years or longer. RCCs will be requested to consider more flexible, i.e., more frequent loan-recovery schedules that suit farmers. The interest charged will be in line with that practised by the RCCs in the project area and may exceed the usual interest rate to cover extra costs and the establishment of a risk fund.

Social Development

15. **Primary education.** The project will support the creation of primary school facilities through repairs, renovation or new building of about 1 300 classroom-equivalents. Most of these will form one-class multi-grade "teaching posts" in remote natural villages to enable children to attend primary grades 1 through 3 in their village of residence or within easy walking distance "Central" schools, usually situated in the administrative village, may receive not more than 30% of the building programme resources. Teachers will acquire skills in multi-grade teaching, which will be the norm in the outposts. By law, Mandarin Chinese is the teaching language. Therefore minorities are trained, de facto, in a second language, at times by teachers who belong to the minority and are not fully conversant with the official language. Thus teachers will also be offered Chinese language training. To reduce the number of capable children, girls in particular, who do not attend school at all or drop out in the early years of their schooling, the project will provide funding of school costs for between 400 and 1 000 pupils annually in each county. These funds will be managed, in close collaboration with the village committees, by the Women's Federation, which has acquired extensive experience with programmes for school drop-outs. Subsidies will be consigned to the school, not the parents.



16. **Health.** The lowest level of government service is the township hospital, which is normally far from the village. The quality of health service will be improved, especially at the village level, and accessibility for poor households facilitated through the following: (a) village doctors and village nurse-midwives will receive six months of additional training in aspects that are particularly relevant for villages and they will be provided with a basic technical kit; (b) township doctors will receive training to improve their capabilities in gynaecological, obstetric and paediatric disease diagnosis and dispatching, and in administering the vaccination and epidemic-control programmes; (c) each health facility will receive resources to run substantial campaigns on health, sanitation and nutrition awareness in the villages; and (d) about 225 simple village clinics; 12 township hospitals and 34 township maternity wards will be upgraded or newly built and provided with relevant equipment. In addition, pregnant women will be supported with transportation costs and a food incentive to attend pre-natal check-ups in nearby township maternity facilities.

17. **Women's development and income generation.** Two distinct training programmes will be offered, each at two levels: basic and refresher. The first programme concerns literacy skills in Mandarin Chinese for largely non-Chinese speaking adults. This training will take place in a social context and will be based on the practical aspects of day-to-day social and economic life of the target population in order to impart functional literacy skills, including information on legal and administrative matters. The basic cycle will consist of 50-70 training days (TD). The refresher course will cover a further 20 to 30 TD about one year later. The education bureaux will identify one experienced primary school teacher in each administrative village, who will undergo specific training, including refresher courses, where they will be able to exchange experiences as teachers of adults. The second programme will deal with technical and managerial skills, covering the needs of candidates for income-generating activities. This programme will be aimed at (semi-) literate people, and will simultaneously sharpen literacy and math skills. Duration of training is expected to vary considerably with the required skill. All training will be supported by FFT-rations for beneficiaries and cash incentives for trainers; other financial resources will be allocated to the production and distribution of training materials. The WF will be entrusted with implementation.

18. **Women's Federation (WF).** WF was created in 1949 and is the primary organization mandated to assist women throughout China. There is a WF representative in every village committee, as well as at all higher administrative levels. WF has coordinated many practical courses for rural women, including agricultural technology, and operates a marketing scheme for women's produce. WF will be strengthened with equipment and with training facilities constructed in the townships. Incremental recurrent costs, including running costs for the vehicles allocated to WF, will be covered through specific annual allocations to the relevant WF budgets. WF will also manage a special "microinitiatives" fund, which will build upon the experience of WFs in the project counties with income-generating activities for women, based on microcredit and close monitoring and training support.

Rural Infrastructure

19. **Drinking water** is in very short supply in some parts of the project area. Women in particular have to walk long distances, often up or down significant gradients, to find water that is frequently unsuitable for human consumption. The project will support about 16 000 households with drinking-water tanks to capture run-off water during the rainy season. These tanks, constructed of masonry or concrete, have a capacity of about 30 cubic meters. The project will also support 83 village supply systems and 54 community tank schemes. These will provide water to common faucets and plastic standpipes in the community. Beneficiaries will receive training in water management. Committees will be established with full representation of women, and water charges will be levied appropriate to the needs of each scheme. Before construction, full detailed planning is required for each site and the contribution by the community, through the provision of labour and/or materials, will have to be



agreed. The project will assist WCB to establish suitable quality-monitoring programmes, particularly for tank water. In this regard, education of the beneficiaries in organoleptic testing will be important. Estimated costs include "engineering fees" to defray WCB costs in respect of site investigations, engineering studies, on-site supervision and beneficiary training.

20. **Village roads.** The project will construct about 193 km of village roads touching 76 administrative villages with an estimated 112 000 inhabitants. These roads will be in compliance with Chinese national standards for Class 4 roads and will follow the routes of existing small tracks. Detailed design studies and surveys will be made prior to beginning work on any road.

Project Management

21. **Project Management Offices (PMO)**, staffed by personnel from existing units and operating from existing premises have already been established at regional and county level. Township PMOs will be established before the project starting date. Staffing will be kept to the minimum compatible with efficient discharge of the PMO tasks, which are: (a) facilitating the work of the implementing technical agencies by providing them with the necessary funding for training, equipment and operating costs on a timely basis; and (b) monitoring project implementation and reporting. PMOs will recruit not more than one senior staff member from each implementation bureau. To ensure that the additional work load created by project implementation will be handled efficiently, the project will provide funds for start-up and management workshops, as well as for M&E and PRA methodology, implementation and analysis training for regional and county-level PMOs. Computer and credit-management training will also be offered to key staff. Mobility and office operations will be facilitated through the provision of vehicles, office equipment and coverage of the associated running costs. Additional funds are allocated in the budget of the regional PMO to finance tracer investigations, especially in relation to M&E, and to search for innovative opportunities for project management or beneficiary activities. The efficient operation of county and township PMOs is essential for the overall performance of the project. Ongoing training workshops on a variety of technical and administrative topics will be held throughout the life of the project. Training will also be provided for villagers and trainers for VIGs. Study tours to other IFAD/WFP projects or to relevant local sites will be arranged both to PMOs and project beneficiaries of VIGs.

APPENDIX IV

LOGICAL FRAMEWORK

Narrative Summary	Performance Indicators	Means of Verification	Important Assumption
PROJECT GOAL			
1 Sustainable and equitable poverty reduction achieved in the Karst area of GZAR	1 Population below official poverty lines reduced by 75% by 2008	1 Leading Group on Poverty periodical reports	1 Other on-going programmes continued
PROJECT PURPOSE			Purpose to Goal
1 Achieve total factor productivity and income growth and increase impact of social services	1.1 Per caput grain availability increased by 45 kg before 2008 1.2 Per caput income increased by CNY 300, expressed in 1999 values 1.3 Incidence of preventable disease reduced 1.4 numbers of school drop-outs reduced by 50%, mostly girls 1.5 Enterprise start-ups, in particular by women	1.1 MOA reports and evaluation surveys 1.2 Poverty LG reports and evaluation surveys 1.3 Min. of Health reports 1.4 Education Bureau reports 1.5 RCCU reports	1.1.2 Prices and demand remain elastic 1.2.2 No major droughts 1.2 No major retrenchment in the economy of "urban" China 1.3 Costs of social services change in and line with income levels 1.4
PROJECT OUTPUTS			Outputs to Purpose
1.1 Responsive farmer extension services provided; farmers training programme designed and implemented	1.1.1 2 250 mu of crop experiments 1.1.2 92 000 on-farm demonstrations, notably on poor HH land 1.1.3 550 000+ farmer training days held, gender specific data kept	1.1 MOA periodic reports 1.2 MOA periodic reports 1.3 MOA periodic reports	1.1.2 New technology accepted by farmers
1.2 Marketing support systems strengthened	1.2 establishment of 5 farmer professional associations for specialty crops	1.2 MOA periodic reports	1.2 2 pilot schemes successful
2 Land and land use improved	2.1 199 000 mu of irrigation schemes upgraded or built by eop 2.2 91 000 mu of improved by various soil management techniques 2.3 254 000 mu of individual plots planted with economic crops 2.4 35 000 mu of common land planted with fuel and/or economic trees 2.5 1.3 million of mu of degraded forest regenerated through closure mechanism	2.1 WCB periodic reports 2.2 MOA periodic reports 2.3 MOA and FD periodic reports 2.4 ForD periodic reports 2.5 ForD periodic reports	
3 Poverty and gender sensitive rural financial services provided by RCCs	3.1 680 000 small loans given to resource poor HH for seasonal agriculture 3.2 284 000 medium-sized loans given to resource poor HH for investment in income generating activities; not less than 40% disbursed to women 3.3 All RCC staff trained	3.1 RCCU periodic reports 3.2 RCCU periodic reports 3.3 RCCU periodic reports	3 Achieved operational spreads on IFAD resources attractive for RCCs
4.1 Social service facilities upgraded	4.1.1 1 320 classes constructed/or upgraded 4.1.2 2 000+ teachers trained in MGT and teaching in putonghua 4.1.3 39 000 pupil-years of drop-outs' presence in primary schools 4.1.4 225 village health facilities upgraded or built; practitioners trained 4.1.5 12 township clinics and 34 maternity wards upgraded; all practitioners trained	4.1.1 Education Bureau reports 4.1.2 Education Bureau reports 4.1.3 Education Bureau reports 4.1.4 Min. of Health reports 4.1.5 Min. of Health reports	
4.2 Skills imparted for the Income Generation Activities	4.2.1 30 000 illiterates trained 4.2.2 57 000 semi-literates given skills for IGA	4.2.1 WF periodic reports 4.2.2 WF periodic reports	4.2.2 Skill trainers found



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5	Rural infrastructure constructed or rehabilitated	5.1 24 000 of beneficiary HH served by new domestic water supplies 5.2 193 km of rural road network upgraded to class 4 5.3 22 500 household biogas systems installed	5.1 WCB periodic reports 5.2 Transportation Bureau periodic reports 5.3 ForD periodic reports	
6	Participatory and gender sensitive Village Development Plans established and operational	6.1 overall village plans drafted in each administrative village 6.2 village plans effectively taken forward to establish higher level plan en annual 6.3 women representation not less than 2 out of every 5 in all committees and PMOs	6.1 WGPAP periodic reports 6.2 WGPAP periodic reports 6.3 WGPAP periodic reports	6.1 PRA efforts continued 6.2 WF staff in responsible posts in PMOs and VIGs
	Activities	Inputs, including Food Rations	Means of Verification	Important Assumptions
				Activity to Output
1.1	Construct/rehabilitate AES and AHS; provide equipt and support	1.1 Building materials, equipment and labour (USD 1.9 million)	1.1 Project M&E system	1.1 Counterpart funds available on time
1.2	Train staff for crops and livestock	1.2 Training and training materials (USD 0.8 million)	1.2 Project M&E system	1.2
1.3	Train farmers for crops and livestock	1.3 FFT and materials (USD 0.7 million)	1.3 Project M&E system Beneficiary surveys	1.3 Appropriate training targeted on the resource-poor
1.4	Conduct experiments and on-farm demonstrations	1.4.1 Material inputs (USD 5.0 million) 1.4.2 Voluntary labour (USD 1.3 million)	1.4 Project M&E system Beneficiary surveys	1.4 Experiments generate new technology in later years
1.5	Set up FPAs	1.5 Building materials, equipment and labour (USD 0.4 million)	1.5 Project M&E system	1.5 Markets for pilots remain stable
2.1	Construct, rehabilitate irrigations canals, construct individual irrigation tanks	2.1 Materials, skilled, unskilled labour, design and engineering supervision, training, FFW (USD 17.9 million)	2.1 Project M&E system	2.1.1 Counterpart funds and food rations available on time 2.1.2 Water user committees established and trained
2.2	Construct terraces, deepen and level soil, convert to paddy field	2.2 Materials, skilled, unskilled labour, design and engineering, supervision, training FFW (USD 10.2 million)	2.2 Project M&E system	2.2 Counterpart funds and food rations available on time
2.3	Plant ecological trees	2.3 Materials, equipment, labour, FFW, FFT and staff training (USD 1.3 million)	2.3 Project M&E system	2.3 Identification of suitable sites
2.4	Close degraded forest	2.4 Forest guards (USD 1.4 million)	2.4 Project M&E system	2.4 Successful beneficiary training
3.1	Establish revolving fund within RCC-system	3.1 Credit line of USD 13.7 million	3.1 Project M&E system	3.1
3.2	Assess, disburse, recover loans	3.2 Work with beneficiaries (p.m.)	3.2 Project M&E system	3.2
3.3	Purchase equipment	3.3 USD 0.7 million	3.3 Project M&E system	3.3
3.4	Train staff and beneficiaries	3.4 FFT and materials (USD 0.4 million)	3.4 Project M&E system	3.4
3.5	Obtain beneficiary contribution	3.5 Voluntary labour (USD 8.8 million)	3.5 Project M&E system	3.5
4.1	Build/rehabilitate and equip village clinics	4.1 Building materials, equipment and labour (USD 0.8 million)	4.1 Project M&E system	4.1 Counterpart funds available on time
4.2	Build/rehabilitate and equip township hospitals and maternity wards	4.2 Building materials, equipment and labour (USD 1.1 million)	4.2 Project M&E system	4.2 Counterpart funds available on time
4.3	Train health workers at village and township levels	4.3 Training and training materials, FFT (USD 0.9 million)	4.3 Project M&E system	4.3
4.4	Run village health campaign	4.4 FFT and materials (USD 0.4 million)	4.4 Project M&E system	4.4
4.5	Run prenatal checks	4.5 Travel costs and FFT (USD 0.3 million)	4.5 Project M&E system	4.5
4.6	Build primary school classrooms	4.6 Building materials, equipment and labour (USD 3.9 million)	4.6 Project M&E system	4.6 Acceptance to favour remote villages over central locations
4.7	Support drop-outs	4.7 Subsidies (USD 0.8 million)	4.7 Project M&E system	4.7
4.8	Train teachers	4.8 Training and training materials, FFT (USD 0.3 million)	4.8 Project M&E system	4.8



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4.9 Equip WF and build township training centres	4.9 Building materials, equipment and labour (USD 0.9 million)	4.9 Project M&E system	4.9
4.10 Train literacy trainers	4.10 Training and training materials (USD 0.3 million)	4.10 Project M&E system	4.10 Outside assistance (e.g. Gansu institute) assured
4.11 Run literacy training	4.11 Training and training materials (USD 1.1 million)	4.11 Project M&E system	4.11
4.12 Run skill training	4.12 Training and training materials (USD 1.7 million)	4.12 Project M&E system	4.12 Recurrent funding of WF assured
4.13 Fund micro-initiatives	4.13 FFT and fund (USD 1.6 million)	4.13 Project M&E system	4.13 Recurrent funding of WF assured
5.1 Build village and private Domestic water supplies	5.1 Building materials, equipment and labour (USD 8.3 million)	5.1 Project M&E system	5.1
5.2 Construct/upgrade rural roads	5.2 Building materials, equipment and labour (USD 4.1 million)	5.2 Project M&E system	5.2
5.3 Develop household biogas	5.3 Building materials, equipment and labour (USD 4.0 million)	5.3 Project M&E system	5.3
6.1 Train project management staff	6.1 Training and training materials (USD 3.0 million)	6.1 Project M&E system	6.1 Counterpart funds available on time
6.2 Purchase equipment	6.2 Material inputs (USD 1.7 million)	6.2 Project M&E system	6.2 Counterpart funds available on time
6.3 Transport and handle WFP food	6.3 Handling charges (USD 4.1 million)	6.3 Project M&E system	6.3 Counterpart funds available on time

COSTS AND FINANCING

Expenditure Accounts by Financiers (USD '000)

	IFAD		WFP		Government: FFW		Government: Cash		Beneficiaries		Total		Taxes Incl. in
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Total
Buildings	2 567	35.0	-	-	-	-	4 768	65.0	-	-	7 335	6.8	1 064
Other construction	-	-	-	-	-	-	25 450	100.0	-	-	25 450	23.7	3 690
Engineering fees	-	-	-	-	-	-	3 093	100.0	-	-	3 093	2.9	-
Studies/investigations	183	100.0	-	-	-	-	-	-	-	-	183	0.2	-
Vehicles	1 865	82.0	-	-	-	-	409	18.0	-	-	2 274	2.1	409
Technical equipment	1 875	85.4	-	-	-	-	320	14.6	-	-	2 195	2.0	320
Demonstration inputs	1 768	45.2	-	-	-	-	567	14.5	1 575	40.3	3 909	3.6	567
Other farm inputs	1 195	85.5	-	-	-	-	203	14.5	-	-	1 398	1.3	203
Training materials	1 185	100.0	-	-	-	-	-	-	-	-	1 185	1.1	-
Staff training	3 275	100.0	-	-	-	-	-	-	-	-	3 275	3.1	-
Beneficiary training (FFT)	-	-	2 937	100.0	-	-	-	-	-	-	2 937	2.7	-
Beneficiary training	1 634	100.0	-	-	-	-	-	-	-	-	1 634	1.5	-
VIG training	352	100.0	-	-	-	-	-	-	-	-	352	0.3	-
School drop-outs	809	100.0	-	-	-	-	-	-	-	-	809	0.8	-
Unskilled labour (cash)	-	-	-	-	-	-	311	100.0	-	-	311	0.3	-
Unskilled labour (FFW-WFP)	-	-	8 263	100.0	-	-	-	-	-	-	8 263	7.7	-
Unskilled labour (FFW-GOC)	-	-	-	-	945	100.0	-	-	-	-	945	0.9	-
Skilled labour	-	-	-	-	-	-	10 311	100.0	-	-	10 311	9.6	-
Family labour	-	-	-	-	-	-	-	-	10 088	100.0	10 088	9.4	-
Credit rev. fund	13 726	100.0	-	-	-	-	-	-	-	-	13 726	12.8	-
Food handling	-	-	-	-	-	-	4 050	100.0	-	-	4 050	3.8	-
Incremental O&M	-	-	-	-	-	-	3 550	100.0	-	-	3 550	3.3	-
Total	30 433	28.4	11 200	10.4	945	0.9	53 031	49.4	11 662	10.9	107 272	100.0	6 252

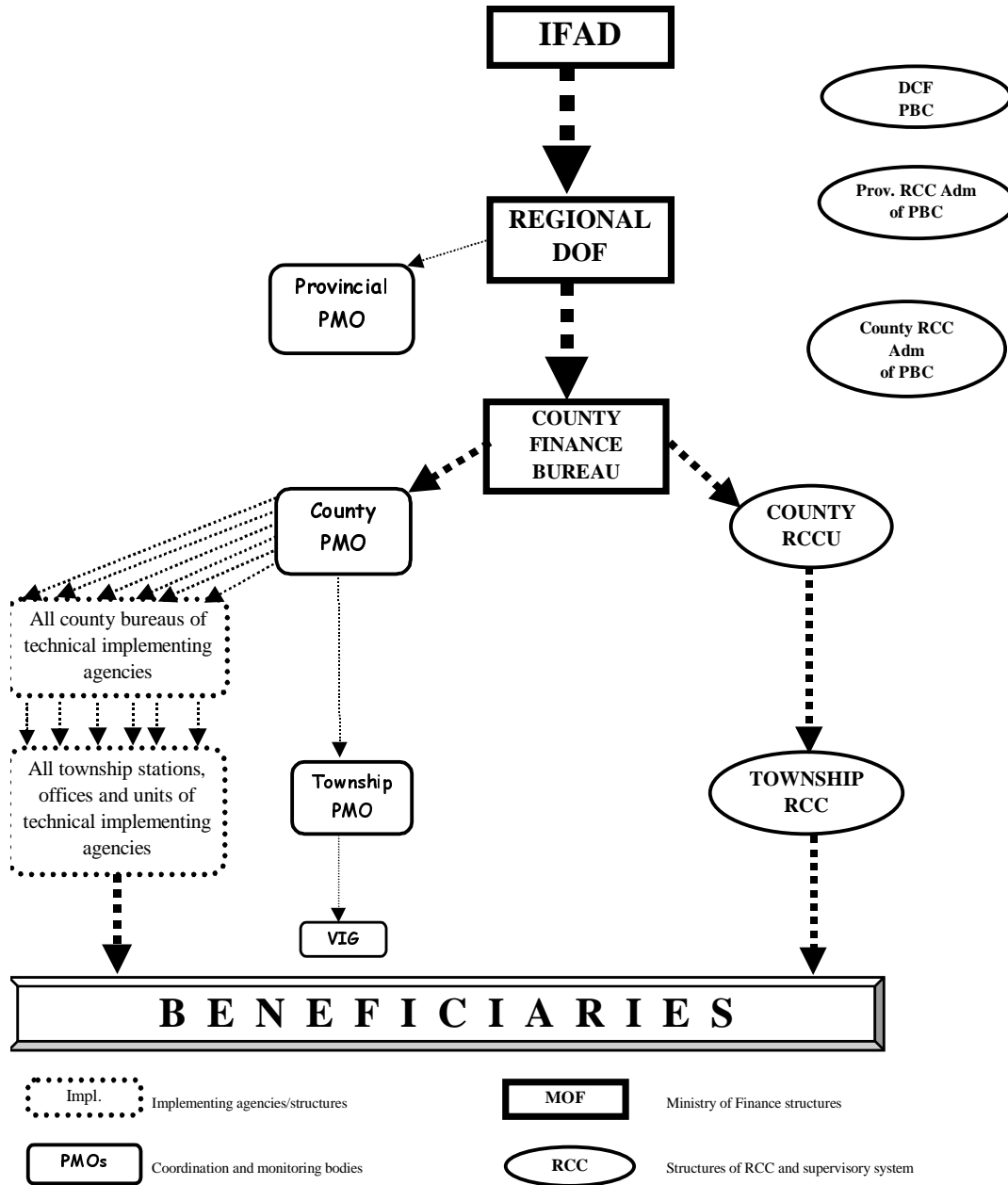


**Expenditure Accounts by Components
(USD '000)**

	Agricultural Development				Social Development				Infrastructure		Project Management		Total
	Crops and Livestock	Irrigation	Dryland Improvement	Tree Crops	Financial Services	Health	Education	Income Generation	Domestic Water	Access Roads	Provincial PMO	County PMOs	
Investment Costs													
Buildings	1 227	-	-	-	43	1 286	2 679	238	-	-	257	1 606	7 335
Other construction	-	10 617	4 966	3 065	-	-	-	-	5 060	1 742	-	-	25 450
Engineering fees	-	2 335	-	-	-	-	-	-	500	259	-	-	3 093
Studies/investigations	-	-	-	-	-	-	-	-	-	-	183	-	183
Vehicles	-	-	-	-	396	-	-	365	-	-	280	1 234	2 274
Technical equipment	260	-	-	-	307	535	812	49	-	-	107	126	2 195
Demonstration inputs	3 909	-	-	-	-	-	-	-	-	-	-	-	3 909
Other farm inputs	560	-	-	838	-	-	-	-	-	-	-	-	1 398
Training materials	75	-	-	278	1	38	67	364	-	-	-	361	1 185
Staff training	629	-	-	54	373	819	615	97	-	-	149	539	3 275
Beneficiary training	-	-	-	-	-	200	-	1 435	-	-	-	-	1 634
Beneficiary training (FFT)	753	-	-	120	-	323	795	945	-	-	-	-	2 937
VIG training	-	-	-	94	-	-	-	-	-	-	-	258	352
School drop-outs	-	-	-	-	-	-	809	-	-	-	-	-	809
Unskilled labour (cash)	86	-	-	-	-	176	-	48	-	-	-	-	311
Unskilled labour (FFW-WFP)	-	1 978	4 108	739	-	61	451	-	926	-	-	-	8 263
Unskilled labour (FFW-GOC)	-	-	-	-	-	-	-	-	-	945	-	-	945
Skilled labour	276	2 998	1 152	2 082	-	-	219	623	1 796	1 165	-	-	10 311
Family labour	1 297	-	-	-	8 790	-	-	-	-	-	-	-	10 088
Credit rev. fund	-	-	-	-	13 726	-	-	-	-	-	-	-	13 726
Food handling	-	-	-	-	-	-	-	-	-	-	2 862	1 188	4 050
Total investment costs	9 073	17 927	10 226	7 271	23 636	3 437	6 448	4 164	8 281	4 111	3 837	5 311	103 722
Recurrent costs													
Incremental O&M	-	-	-	-	-	-	-	496	-	-	295	2 759	3 550
Total recurrent costs	-	-	-	-	-	-	-	496	-	-	295	2 759	3 550
Total project costs	9 073	17 927	10 226	7 271	23 636	3 437	6 448	4 660	8 281	4 111	4 132	8 071	107 272
Taxes included in total	864	1 539	720	566	108	264	506	94	734	253	174	430	6 252



ORGANIZATION AND MANAGEMENT





FINANCIAL AND ECONOMIC ANALYSIS

1. **The financial analysis** is based on a series of crop models that are combined into food-crop, livestock and tree-crop models. The data of the three farm systems have been combined to construct a "whole farm enterprise" development model. The assumptions are that the household will (a) modernize its annual crops in line with the average model; (b) plant 1 mu of tree/cash crops and (c) will upgrade its pig management so that it can bring four instead of two fattened piglets to market annually. Table 1 shows that the change in the economic performance of farming will be substantial at full deployment of project activities. Net income will increase by about 70% from USD 516 to USD 878 a result of a 35% increase in farm-labour productivity.

Table 1. Key Indicators on Whole Farm Development

	Without Project				With Project				Difference (%)
	Annual Crops	Live-stock	Tree Crops	Whole Farm	Annual Crops	Live-stock	Tree Crops	Whole Farm	
Gross output	2 893	2 724	-	5 617	4 901	3 500	1 667	10 068	79.2
Purchased inputs	378	950	-	1 328	877	1 460	394	2 731	105.6
Income before labour	2 515	1 774	-	4 289	4 024	2 040	1 273	7 337	71.0
Return per day	13.0	37.0	-	17.6	16.9	48.6	41.4	23.7	34.7

2. The economic analysis at the overall project level has been undertaken on the basis of an implementation schedule for project activities over a six-year period. Household labour has been costed at a uniform CNY 8 per day, which is about equal to the minimum wage rate available with government public work programmes, but also to what farmers appear to be paying among themselves for various kinds of menial work if food is taken into account. An extension of COSTAB beyond the project term of six years shows that the annual recurrent costs will be on the order of CNY 15.7 million. This includes a provision for the replacement of equipment such as computers and vehicles in accordance with estimated useful lives. The ERR in the baseline configuration works out to 20.8% per annum. Sensitivity test results are given in Table 2, which demonstrates the robustness to exogenous perturbation in cost and/or benefit streams and still yields an ERR of 13.8% in the case of a 10% shortfall in benefits and 10% increase in costs at the same time.

Table 2. Sensitivity of the EIRR

Costs	Benefits		
	Baseline	- 10%	- 20%
Baseline	20.8	17.1	13.1
+ 10%	17.4	13.8	9.8
+ 20%	14.4	10.8	6.7