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PEOPLE'S REPUBLIC OF CHINA HUNAN AGRICULTURAL AND RURAL INFRASTRUCTURE IMPROVEMENT PROJECT

project design completion report

Stage: DESIGN COMPLETION

Main Report and Annexes

Asia and the Pacific Division
Programme Management Department

REPORT No.

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PR CHINA: HUNAN AGRICULTURAL AND RURAL INFRASTRUCTURE IMPROVEMENT PROJECT PROJECT DESIGN REPORT - MAIN REPORT

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CURRENCY EQUIVALENTS

Currency Unit	=	Yuan (CNY)
USD 1.00	=	CNY 6.40
CNY 1.00	=	USD 0.1563

WEIGHTS AND MEASURES

International metric system, unless specifically described in text; except:

1 ha = 15 mu 1 mu = 0.067 ha 1 kg = 2 Jin 1 Jin = 0.5 kg

FISCAL YEAR

01 January - 31 December

ABBREVIATIONS AND ACRONYMS

ACWF All-China Women Federation
AWPB Annual Work Plan and Budget

BOA Bureau of Agriculture
BOL Bureau of Livestock
BOT Bureau of Transportation
BOWR Bureau of Water Resources

CID Community Infrastructure Development

CNY Chinese Yuan

COSOP Country Strategic Opportunities Programme of IFAD

CPMO County Project Management Office

DOA Department of Agriculture

DCM Design Completion Mission

DOF Department of Finance

DOT Department of Transportation

DOWR Department of Water Resources

DRC Development and Reform Commission

GDP Gross Domestic Product
GOC Government of China
IA Implementing Agency

IFAD International Fund for Agricultural Development

IGA Income Generating Activity

ITSC Integrated Technical Service Centre

M&E Monitoring and Evaluation

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MDG Millennium Development Goal

MOA Ministry of Agriculture MOF Ministry of Finance

MOST Ministry of Science and Technology
MOU Memorandum of Understanding

MTR Mid-Term Review

NDRC National Development Reform Commission

PAO Poverty Alleviation Office

PBAS Performance Budget Allocation System (IFAD)

PLG Project Leading Group
PMO Project Management Office

PPMO Provincial Project Management Office

RCC Rural Credit Cooperative

REO Rural Energy Office

RIMS Results and Impact Management System (IFAD)

SOE Statement of Expenditures

TPMO Township Project Management Office

USD United States Dollar

VIG Village Implementation Group

WA Withdrawal Application
WFP The World Food Programme
WUA Water Users 'Association

China Hunan Agricultural and Rural Infrastructure Improvement Project Beijing ■ Design report **43** Hubei Sichuan Yueyang Xian Chongqing ohgshan Xian Taoyuan Xian Guzhang Xian Changsha Fenghuang Xian Hunan Shaodong Xian Guizhou Jingzhou Miao Dong Zizhixia Fujian Guangxi Zhuangzu Project area Guangdong

14-11-2011

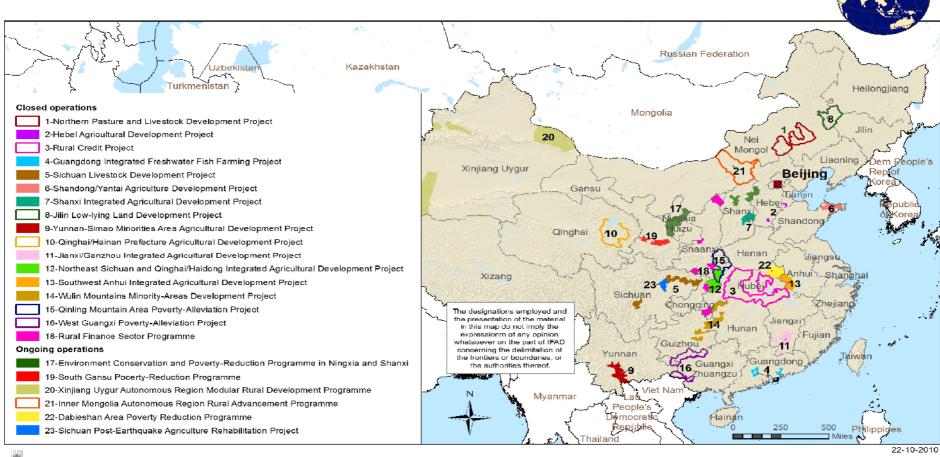
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The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD

People's Republic of China

Location of IFAD-funded operations





Map compiled by IFAD

HUNAN AGRICULTURAL AND RUAL INFRASTRUCTURE IMPROVEMENT PROJECT

Executive Summary

Initiating Institution: IFAD

Borrower: Government of the People's Republic of China

Executing Agency: Government of the Hunan Province

Total Project Cost: USD 93.2 million

Amount of IFAD Loan: SDR ___ million (equivalent to approximately USD 46.0 million)

Amount of IFAD Grant: SDR ___ million (equivalent to approximately USD 1.0 million)

<u>Terms of IFAD Loan</u> Modified ordinary terms and conditions, namely eighteen years,

including a grace period of five years with an interest rate equal to the

reference interest rate per annum as determined by IFAD.

<u>Contribution of Borrower:</u> Approximately USD 45.6 million Contribution of beneficiaries Approximately USD 0.6 million

Appraising Institution: IFAD

Supervision: Directly supervised by IFAD

Project goal: The goal of the Project is rural development and poverty reduction in targeted areas of Hunan Province. The achievement of these will be demonstrated through 35% of households recording improved asset ownership index compared to the baseline (from RIMS data), and a 15% drop in child malnutrition prevalence in the area compared to the baseline, disaggregated by gender (from RIMS).

Project objective: The specific project objective is to increase revenues, improve family food security, and strengthen the resilience of 182,000 rural households in 9 project counties, from improved agricultural production and rural infrastructure. By the end of project implementation, the following results will have been achieved: incomes of the rural poor in targeted areas increased by 25%, at project closing; and 70% of beneficiary households report improved food security as compared to the baseline..

Project Components include:

- (i) Community Infrastructure improvement, which will be the basis for expanded and improved agricultural production, decreased physical isolation and thus improved integration into the marketing value chains, and improved productive and daily-life assets for the benefit of the rural community and the households in the project area. Support is provided for irrigation facilities, village roads, drinking water supply facilities, and rural electricity grid upgrading. These activities will be critical for the project area to strengthen the community resilience to frequently-occurring climate related calamities, improve the access of the rural poor to markets, information and technical services, and develop commercialized production of agriculture, which are regarded as effective measures for rural development and poverty reduction at the current stage. The project will provide related tailor-made training to beneficiaries for the purpose of improved community-based operations and maintenance of infrastructure. Thus, increased beneficiary participation and ownership will help ensure the sustainability of project-built community assets.
- (ii) Sustainable agricultural development and market access support, which aims to support the sustainable development of diversified and adaptive agriculture through the provision of improved production inputs, technologies, technical services support, and market access. The modular approach will be adopted for the component, while the concepts and techniques of sustainable development and environment protection will be integrated within all project activities. The production modules are designed to help strengthen the farmers' resilience and adaptability to uncertainties, mainly caused by climate change and market transformations. Mainstreaming the targeted farmers into the marketing value chains for their products, and production specialisation or diversification will be achieved through the support to farmers' cooperatives. The above mentioned modular interventions will be complemented by the module of technical service support, which intervenes at the supply side.
- (iii) **Project management** will involve the establishment of an effective management structure of PMOs at provincial and county levels, and for the prefecture of Xiangxi.

PR CHINA: HUNAN AGRICULTURAL AND RURAL INFRASTRUCTURE IMPROVEMENT PROJECT PROGRAMME/PROJECT DESIGN REPORT - MAIN REPORT

Project implementation will be decentralised to the county PMOs to ensure sustainability, with the provincial PMO performing overarching functions of planning, coordinating, monitoring and reporting. HARIIP will support the establishment of a Village Implementation Group (VIG) in each of the project administrative villages to assist the coordination and implementation at village level.

It is important to note that a precondition for implementing activities in the project villages, is that organisations that will be responsible for implementation of the project activities will be sufficiently equipped and that new organisations, especially at village level, will be established. By the time of the Design Completion Mission (DCM) that took place between 14 November and 2 December 2011, the Village Implementation Groups (VIG) in each of the project administrative villages were already established in the first half of 2011. These VIG's played a crucial role in the consultation of the villagers in setting the priority list of investments for the HARIIP. Also established by then were the County Project Leading Groups (CPLG) and the steering committees at County level, in which all the relevant bureaus, including the county Poverty Alleviation Office (PAO) and –if applicable- the county Nationality and Religion Bureau, were included.

More than 180,000 rural households in 589 administrative villages, covered by 97 townships in 9 project counties, will benefit from the project's support. At least a total of 100,000 rural households should be directly reached, of which at least 35% belong to the poor and vulnerable groups. The Hunan Provincial Department of Agriculture (DOA) will be responsible for project implementation, with the Provincial Department of Finance (DOF) having the overall responsibility for loan administration and financial management.

Outlined logical framework at impact and outcome levels

Narrative Summary	Verifiable Indicators	Means of Verification	Assumptions
rantanto odininary	GOAL	modile of Verification	Assumptions
Rural development and poverty reduction in targeted areas of Hunan Province achieved.	-35% of HHs with improved asset ownership index compared to the baseline (RIMS); -15% drop in child malnutrition prevalence compared to the baseline, by gender (RIMS)	-Government's policies; -Donors' reports.	
	OBJECTIVES		
Increased incomes and improve food security for 182,000 rural households from diversified agricultural production in 9 project counties is achieved.	- Incomes of the rural poor in the targeted areas increased by 25% at project closing; -70% of HHs reporting improved food security as compared to baseline.	-RIMS and benchmark surveys; -Impact assessments.	-Continued government support for poverty reduction, agricultural development and agro-food production; -Increased income of households leads to improving HH assets and reduction in child malnutrition.
	OUTCOME BY COMPONENT (gende	er disaggregated)	
Preparatory phase Staff at county, prefecture, township & village levels equipped to supervise and manage the implementation of the project.	-PLGs, PMOs, VIGs, & WUAs, plus other O&M committees duly established & trained; -Relevant project staff at all levels trained; -VIGs trained in well-being ranking.	-Field investigations; -Progress reports.	-Continued community commitment and ownership; -PMOs commitment assured at all levels
Component A: Community infrastructure improvement: Improve living and production conditions for rural men and women, by developing community infrastructure, including irrigation facilities, village roads, drinking water supply facilities and rural electricity grid upgrading	-174,000 HHs benefit from improved community infrastructure; -45% of HHs report increased productivity resulting from improved irrigation & 50% of HHs report improved access to markets; -90% of the village infrastructure O&M committees (including WUAs and drinking water users' groups) operational after 5 years, and have introduced user fee-based maintenance mechanisms; -Drinking water: 83,000 persons report access to 104 improved drinking water supply systems; 90% of the project supported systems operational after 5 years; & 21,000 villagers trained in schemes O&M -Electric grids: 11 rural electricity grid stations upgraded, benefitting 8,800 personsIrrigation: 865 km of canals lined; 179 ponds built; 86,000 villagers trained on irrigation O&M 75% of the villages with investments in irrigation have an operational WUA;	-RIMS and benchmark surveys; -Project M&E reports; -Agricultural census data -Sector development reports -Field visits to villages	-Continued government investment in the development of rural infrastructure; -VCs are capable in organizing maintenance of community infrastructure; -VIGs play an important role in carrying out the well-being ranking and the supervision of the implementation of the rural infrastructure, thereby creating ownership and commitment with the villagers.

Narrative Summary	Verifiable Indicators	Means of Verification	Assumptions
Common and D. Custoin abla agricultural	-Village roads: 370 km of village roads paved; 250 km earth roads improved103,000 HHs benefit from project support for		
Component B: Sustainable agricultural development and market access support Increased household incomes through improved access to services, improved technologies and techniques, markets, and value chains.	sustainable agricultural development and market access support, of whom 50% are women; -75% of farmers trained adopt recommended technologies, by sector; 75% of HHs report increased incomes; 75% of supported farmer cooperatives are operational after 5 years; -50% of members report increased proportion of products marketed through cooperatives, by gender; and -75% of project-supported technical extension stations operational after 5 years.	-RIMS & benchmark surveys; -Project M&E reports; -Sector reports. -Field visits	-Recommended technologies are effective in increasing production; -Farmers adopt new technologies; -Service function of cooperatives recognized by farmersGovernment continues to support the reform of farmer-centred extension service system.
Component C: Project management Project is implemented successfully, and M&E system functions effectively	-Project planning, implementation, M&E and reporting function effectively and timely, and monitor incomes and other project impacts; -100% of IFAD loan proceeds disbursed	-Project M&E reports; -IFAD project reviews; & -Project completion report.	-PMOs have good coordination and management capacity and function well; -PLGs function adequately.

PEOPLE'S REPUBLIC OF CHINA

HUNAN AGRICULTURAL RURAL INFRASTRUCTURE IMPROVEMENT PROJECT (HARIIP)

PROJECT DETAIL DESIGN

MAIN REPORT

STRATEGIC CONTEXT AND RATIONALE

- 1. A Design Completion Mission (DCM) was assigned by IFAD to Hunan Province of the People's Republic of China in November-December, 2011. The main objective of the mission was to appraise, improve and finalize the project design documents of the Hunan Agricultural Rural Infrastructure Improvement Project, HARIIP, which were prepared in May/June 2011 by the Detail Design Mission, and subsequently reviewed by the Quality Enhancement Review (QER) panel of IFAD on 5 October 2011. The DCM had meetings at province, county and village levels and discussed its findings with key stakeholders. Discussions were held with the Department of Agriculture (DOA) and the Department of Finance at provincial level, plus the Project Management Offices (PMO's) at county and township levels and the various implementing agencies and bureaux, including the Women's Federation and the Statistical Bureau of the six project counties that were visited (Luxi, Jingzhou, Yueyang Shaodong, Taoyuan, and Guzhang). Also in-depth discussions were held with the PMO's of the counties that were not visited, namely Longshan, Lingxiang and Fenghuang, and the PMO of Xiangxi Tujia and Miao Autonomous Prefecture.
- 2. All the representatives of the Government and the Implementing Agencies (IA's) and also the people of the villages were acquainted with the objectives of the project and the project components. In the months before the mission's arrival, a good amount of the preparatory work for HARIIP was already executed. The most important achievements of the provincial and county PMOs were the selection of project villages, the establishment of the VIGs and availability of the priority lists of investments that were reportedly discussed amongst villagers of the project villages. Also the baseline survey, funded by an IFAD early implementation support grant, was underway, after the HARIIP PMO received training from the PMO of the Guangxi Integrated Agricultural Development Project that had also been supported by IFAD. This implied that all parties concerned were familiar with the project design and, therefore, in-depth discussions could be held with these parties at all levels. Useful information and new insights were given to the mission which led to new reflective thoughts, useful for the completion of the Project Design Report. The mission noted with satisfaction and great appreciation, the high level of commitment and ownership of the project design.
- 3. The present Project Design Report is, therefore, an updated version of the earlier PDR of June 2011, and is in line with the new IFAD Strategic Framework 2011 2015, the recently approved Country Strategic Opportunities Program (COSOP) for P.R. China (2011-2015), and the strategic objectives of the Government of People's Republic of China (GOC) in terms of poverty alleviation and rural development. The key elements of the updated PDR are also presented in a Memorandum of Understanding (MOU) that was signed with the provincial authorities on 2 December 2011.

A Country and rural development and poverty context

4. China has experienced an unparalleled expansion of its economy for the last 30 years, with an average Gross Domestic Product (GDP) growth rate of 9.5% per annum. GDP in 2009 accounts for a total of CNY 33,500 billion (USD 4,919 billion equivalent), a growth of 8.7% from the previous year. GDP per capita rose to CNY 25,270, equivalent to USD 3,710, in 2009. These results were achieved against a backdrop of enormous structural transformations from central planning to a market-oriented economy and from a closed to a globally integrated economy. A gradual shift in the composition of GDP took place, with agriculture losing weight from approximately 30% in 1980 to 10% in 2009 in favour of industry and services. Throughout this period, China also substantially improved its levels of human development. In 2009, China ranked 89th on the United Nations Development Programme's Human Development Index (HDI 0.663) and is noted as one of the top HDI movers. Overall life expectancy at birth stood at 74.51 years in 2010; and the adult literacy rate was at 97%.

- 5. Some 745 million persons, or 56% of the population (of 1.341 billion people in 2010), still reside in rural areas, where 64% of the population is engaged in farming, forestry, animal husbandry and aquaculture. The overall annual per capita net income of the rural population was CNY 5.153 (USD 805 equivalent) in 2009, still far below the national average. Despite these figures, the achievements of the agricultural sector were impressive since 1978. Overall per capita food crop production rose from 319 kg in 1978 to 400 kg in 2010, mainly thanks to productivity increases. China experienced its 7th consecutive year of bumper harvest in 2010 for its grain production, recording more than 500 million tons of grain harvested for the fourth consecutive year. With only 9% of the world's arable land, China is feeding 20% of the world's population. The Government has been able to consistently meet the food security goal of its agricultural policy and at the same time reduce rural poverty. Nevertheless, poverty still remains, mainly as a rural phenomenon. Poor households tend to derive a larger share of their income from agricultural activities than do all rural households and these activities show low levels of productivity. In most cases, this is caused by a poor resource base in terms of insufficient human and natural resources. Labour migration is an integral part of the rural household livelihood coping strategies. In 2010, some 153 million rural labourers took up employment outside their villages, representing just over 20% of the current rural population and more than 35% of the rural labour force. About 65% of the migrant workers are reportedly male, confirming the increasing trend of rural labour feminization. Around 42% of the migrant workers are aged between 16 - 25 years, 20% are between 26 - 30 years, and 22.3% are between 31 - 40 years, indicating the risk of losing the most active and educated rural labour for agricultural development.
- 6. Rural income per capita maintains an increasing trend since 2001, achieving an average incremental increase of 8% per year. Rural income per capita recorded an average of CNY 5,919 in 2010, or a real increase of 10.9% compared to the previous year. However, the rural Gini co-efficient increased from 0.3646 in 2001 to exceed 0.4 in 2010. Meanwhile, the income gap continues to widen between the urban and rural areas, from 3.1:1 in 2002 to over 3.2:1 in 2010 and the income gap in amount exceeded CNY 10,000 for the last three years.
- 7. Food security is in general considered achieved across the country, while some pockets of rural population may experience short and temporary food insufficiency, mostly when adverse natural events occur. While rural income generating activities may have become more diversified across rural China, conventional cropping and animal husbandry remain the principal activities in the less developed areas, such as the central and western regions, and even more present in the ethnic minority areas.
- 8. Rural development is facing emerging challenges in China. On-going government efforts and investments are focusing on a number of primary issues of development, such as quality of rural labour and migration, marketing and value chain development, farmers' associations development, and the efficiency of services and support systems. Positive changes were reported in some areas, while systematic improvement gradually takes place in the others. However, concerns have been increasingly raised on a number of emerging and old issues, such as eco-environmental protection, agricultural sector reorganization, rural infrastructure development, especially for remote and mountainous regions, sustainable farming and market linkage, feminization of rural labour, and equitable community services for the rural population.

B Rationale

- 9. **Rural Poverty**. Broad participation in the reform-driven economic growth, together with a well-funded national poverty reduction programme, have brought about a tremendous reduction in absolute rural poverty in China during the past 30 years. Using the old official poverty line of CNY 1,274 per capita, poverty prevalence dropped from about 31% in 1978 to about 4% in 2009. A new income criterion was introduced according to which *absolute poverty* is defined as rural per capita net income below CNY 1,196 per annum, combining the previous categories of low-income and poor. With this official poverty line, total rural poverty incidence is 6%. On 29 November 2011, the Chinese central government decided to raise the poverty line by 92% to a per capita net income of CNY 2,300 per annum, which would bring the proportion of the population living below the latest national poverty line to about 128 million people. It should be highlighted that, even with this recent increase, the Chinese poverty line is still defined at a level lower than the international level of USD 1.25 consumption per day per person, leaving many vulnerable households not being considered as poor. It is estimated that nearly 150 million people are living with less than USD 1.25 per day.
- 10. The dynamic of rural poverty has been changing over the last ten years, changing: (a) from food insecurity to lack of and difficult access to income generating opportunities; (b) from lack of

physical household assets to demand for sustainable support; (c) from lifting out of poverty to stopping falling back into poverty; (d) from wide-spread poverty to pockets of concentrated poor in disadvantageous areas; (e) from chronic poverty to transient poverty; and (f) from isolated rural poverty to a challenging balance between rural and urban development opportunities.

- 11. Government policies and the scale of funding of public poverty reduction and rural development programmes are exemplary. Beginning in the 1980s, the government approach towards poverty reduction focused on area development programmes targeted on poor counties. Regional economic development then was achieved through improvements in natural resources and the provision of infrastructure and capacity-building for the poor. The "poor" and "low-income" groups were the target of these national development and poverty-reduction efforts. Priority support was targeted at extremely poor areas in the central and western provinces. Since 2001, the strategy of poverty reduction has shifted to a village- and household-based approach, through identification of focal villages for poverty reduction and setting up records and development tracing of individual poverty households.
- 12. The government development strategy delineated under the current Twelve Five-Year National Economic Development Plan (2011-2015) addresses the challenge of poverty eradication and builds on the development-oriented Poverty Reduction Programme for Rural China. It calls for harmonized growth to allow the poverty-stricken areas and the poor population benefit significantly from the economic growth and social development; it commits increasing investments in support of the rural economic development in the poor areas to help strengthen the latter's economic strengths and self-development capacities. Among the Plan's numerous objectives, the following are highlighted to help consolidate and strengthen the position of agriculture as the foundation of the economy:
 - (a) Strengthening agricultural and rural infrastructure for irrigation, sanitation, transport, and rural electrification;
 - (b) Increasing farmers' income and living conditions;
 - (c) Increasing agricultural production and modernizing agriculture;
 - (d) Accelerating the development of specialized farmers' cooperatives and the organization of the agriculture sector;
 - (e) Promoting the sustainable use of and access to natural resources; and
 - (f) Improving support services for agriculture and rural development.
- 13. The Government recently formulated its new guidelines for its Rural Poverty Alleviation and Development Programme for the next ten years (2011 2020), under which the country's challenges in poverty alleviation have been analyzed and priorities identified. Rural poverty has been diagnosed as a long-term challenge, mainly persisting in the hard-stricken poor regions, border areas, ethnic minority areas and former revolutionary base areas, which are mostly typically remote and mountainous.
- 14. Poverty alleviation will continue to be addressed as a long-term task; strategic policies and efficient working mechanism will be formulated and implemented to help achieve the objective of mostly eliminating absolute poverty and substantially reducing relative poverty by 2020. The Government stresses its principle of development-driven poverty alleviation, which will combine efforts of assistance and sector development, optimizing roles and functions of central and local governments, formally extending the poverty alleviation support to cover the vulnerable groups previously designated as low-income, and emphasizing its commitment of continued and increasing funding in support of poverty alleviation in the country.
- 15. Since its beginning, IFAD's Country Programme in China has aligned its strategies to the needs and priorities for country poverty alleviation along different stages, from subsistence support to the poor households and villages, integrated development in the nationally declared poor counties, sector focus for improved access and opportunities for the poor and low-income, to on-going pursuing of innovations in poverty reduction approaches and modalities. With the overall achievements of poverty reduction in China and the renewal of the Government's poverty-reduction strategy and planning for the next ten years, IFAD's Country Programme will work to deepen its comparative advantages and thus improve its ability to discharge its mission, which is to enable poor rural people overcome poverty. IFAD's country strategy will continue to support the Government's medium-term rural poverty reduction goals enshrined in the Twelve-Five Year Plan, which are closely aligned to the

MDGs. Priority will be given to sustainable agriculture development, improved access to incomegenerating opportunities, sustainable use and protection of natural resources, improved knowledge management, and promotion of innovation and up-scaling of the best practices. Emphasizing IFAD's catalytic role, future efforts will take the form of promoting innovations and up-scaling best practices, with a strong emphasis on enhanced targeting and an adapted design of interventions tailored to the characteristics and coping strategies of the rural poor.

- 16. IFAD has been collaborating closely with a number of government agencies at all levels since the start of its Country Programme in China in the 80's. In principle, IFAD interacts with the central government agencies in relationship with consultations and dialogues in policy matters, strategic orientation and planning, while issues of implementation management and operations are normally dealt with governments and relative agencies at provincial, prefecture and county levels, depending on the nature of operational interventions required.
- 17. Since 1981, IFAD has financed 24 projects in China for a total loan amount of about USD 638 million. Six loans are on-going as of January 2012 for a total amount of USD 145 million in seven provinces, while another was signed in January 2012 for the loan amount of USD 47 million. IFAD's Performance-Based Allocation System (PBAS) rating for China is positive with regard to macro, rural sector and portfolio performance indicators.
- 18. Targeting strategies are not new in China, and they have been gradually embedded in the decentralised development strategies. Despite the availability of abundant data on the incidence of poverty and of well-known indicators, little has been monitored on the exact poverty dynamics and the data at local level are not always updated. Apart from poor households, also poor villages are central in the government policy. When it comes, however, to selecting villages for poverty reduction interventions, policies rely often on community bidding, which is generally accepted as a weak targeting mechanism. Sometimes policies give explicit priority to better-off villages to set examples.

PROJECT DESCRIPTION

A Project area and target group

- 19. **In Hunan**, rural net income per capita was on average CNY 4,910 in 2009, and a real increase of just over 9% compared to the previous year. Salaries contribute up to about 61% of the rural net income, while income from the primary sector contributes about 15%, income from the secondary and tertiary sectors was less than 1%, and transfer and property income contributed just under 24%. Those contribution rates suggest that export of migrant labour maintains a steady, but important, part. A number of rural and agricultural policies seem to take effect, yielding better share in land use right transfer, while land rents have become a significant part of the rural income source. Meanwhile, performance of on-farm operations need to be reviewed and on-farm and off-farm income generating activities require solid support to be reactivated to help maintain the livelihood quality for those who decide to, or those who have no choice but have to, stay in the rural areas and undertake agricultural operations.
- 20. **In the project counties,** rural average net income per capita was CNY 3,536 in 2009, substantially lower than the average CNY 3,974 of the project counties. While using the then austere government poverty line of income per capita of CNY 1,196, the poverty incidence was around 4%. However, the poverty incidence is estimated at 43% if applying the World Bank's USD 1.25 per day per person, or some 868,000 people living in the project area. It is noteworthy that poverty is not only an income issue; it also relates to access to opportunities, resources and services.
- 21. **Rural income dynamics**. Records of monitoring and surveys on the 20 nationally-designated poor counties in Hunan indicate that in 2009, rural net income per capita in those poor counties attained an average of CNY 2,418, an increase of about 12% as compared to the previous year, and an increase of 3 percentage points if compared to the provincial rural average net income per capita. The household on-farm operational income was an average of CNY 1,173, or only 51% of the all-province rural average. Average income from salaries is even much less significant as compared to the provincial average, at an amount of CNY 933, or less than 45% of the all-province rural average. Consumption expenditures were reported at a per capita average of CNY 2,127, an increase of 6% from the previous year. Surprisingly, the household operational expenditure was reported at a similar level of the all-province rural average, or a decrease of 2% as compared to the previous year despite the global price increase of production goods and materials, and without exception for China.

- 22. **Labour force**. Some 1,146,000 people are recorded as active labour force in the project counties, of which 46% are female. Migration was reported among 35% of the active labour force. While the majority of migrant workers are male, female percentage share keeps increasing and it is likely to reach the 50% share in the coming years. The migration figures vary considerably between villages; in some migration is a minor issue while in others almost all young people between 20-40 years went to work elsewhere. Migrant labour is a disturbing factor in many villages visited by the various design missions for HARIIP; with a major part of the active labour force elsewhere, agricultural activities in these villages are mainly done by the elderly people and women. In order for these rural communities to survive in the future and also safeguard future agricultural production, it is crucial that the economically active people between 20-40 years will return to their home villages and build up their existence. Rural agriculture will have to become again the genuine alternative to (unskilled) labour in the coastal eastern provinces/regions of the country. The HARIIP aims to make an important contribution to reach this objective.
- 23. **Rural infrastructures**. Hunan Province is considered as one of the agricultural provinces of the country. Its rural infrastructures should play a critical role in productivity enhancement and livelihood improvement. Data and field observations indicate, however, a lack of systematic development and low efficiency at village level, as compared to the required capitalisation and performance to secure the economic development of rural households.
- 24. Effective irrigation area in the project villages is reported at less than 50% for the already very limited cultivated land, while unlined canals account for 91%, significantly higher than the 88% in the non-project villages of the area.
- 25. While 2% of the project area's natural villages are reported to be without accessible roads, 34% are without hardened or paved roads.
- 26. More than 50% of the people living in the project areas are reported to be with difficult access to drinking water; 33% cannot secure an access to safe drinking water. It is a similar situation when it comes to the natural villages: 20% of them are without sound access to drinking water and 46% are without safe drinking water.
- 27. **Farming**. Intensive farming is practiced in the project area; each parcel of farmland is used to the fullest possible extent to achieve food self-reliance at household and regional levels. Crop production is based primarily on household small-scale operations with limited per capita landholding of less than 1 mu in most of the project counties, being completely made of paddy fields or uplands or different combinations of both. Inter-cropping and crop rotation are widely pursued in the project area. The yield of major crops presented a gradual increasing trend in the past five years along with popularization of improved crop varieties, adoption of new farming techniques and optimized use of inputs. However, net yields are dampened by high post-harvest losses due to poor technologies and facilities, estimated at as high as 35% for fruits and vegetables for example, compared to 2-5% in developed countries for the same.
- 28. The major crops of the nine project counties include paddy, corn, rapeseeds, soybean, sweat potato, potato, cotton, fruits and vegetables. The acreage and production of crops have been stable in the past five years where any noticeable fluctuation is attributable to factors such as weather conditions during the production season, market changes and the adoption of new crop varieties and farming techniques.
- 29. In addition to grain crops, oil-bearing and fibre crops, vegetables and fruits are also important crops among the project counties and are indispensable sources of income of farmers. In order to increase farmers' cash income after meeting the basic needs of food security, the Government has been promoting farm production diversification and structural adjustment of cropping patterns, and as a result the acreage and production of cash crops, including vegetables and fruits, have been increasing and so has the income of farmers from such crops. Some farmers in the project counties depend solely on citrus fruits or tea plantations or daylily for their annual income. Along with the improvement of living standards in urban areas, resulting from the economic boom of the country, the demand for quality fresh vegetables and fruits is on the rise; at the same time, the requirement for food safety of such products is becoming more and more stringent, which means that farming practices will need to be improved to ensure food safety, as well as the long-term healthy development of the industry.
- 30. **Root and tuber crops**. Sweet potato and potato are another two important crops in the cropping system of the project area, including inter-cropping and rotation with others on uplands and

in some cases in paddy fields as well. The yield of sweet potato is about 1.8 t/mu on average and it is around 1.5 t/mu for potato. Besides home consumption, as food or vegetables, and for animal feed, sweet potato is sold to starch processors, while potato is sold in the local market as vegetable and to starch processors for starch or noodle production. Efforts have been made by local agricultural authorities for the popularization of virus-free potato seeds in the project area. The virus-free original seeds are normally propagated at higher altitudes for use in the production landscape, which reduced the chances of virus infection of the potato crop, increasing its yield and improving its quality. However, the popularization and adaptation rates of improved varieties are still low due to a number of constraints, including limited capacity for improved seeds supply.

- 31. In addition to sweet potato and potato, there are also taro and yam in the family of root and tuber crops that are widely, but sporadically, planted in some project counties. Root and tuber crops are important to the livelihoods of farmers in the mountainous areas of the project counties of Fenghuang, Guzhang, Longshan, Luxi and Jingzhou and are vital supplements for maintaining food security at regional and farmer household levels, as these areas have larger upland areas than paddy rice fields and the availability of irrigation water is constrained because of the obvious obstacle of mountainous terrain. Statistics show, some farmers in the mountainous areas garner good income from these crops. For instance, one mu of sweet potato can produce about CNY 800 profit to farmers and about CNY 1,300 profit from potato.
- Agro-technical services. New policy instruments were initiated in 2006 by the Government 32. to rebuild the rural extension system, which encourages provincial and county governments in line with local conditions, and on a voluntary basis, to take back township extension stations from the township governments and put them directly under the Bureau of Agriculture. There is a logic in this step, since technical support to farmers is more crop related than location related. Some counties in the project area have taken the initiative to reorganize the grassroots extension network too. The county governments will provide now funding to the township agricultural extension stations and the Bureau of Agriculture will provide technical supervision to such stations so that extension agents can regain and focus on their own profession of technical service delivery to farmers. It is reported by the Bureau of Agriculture in the project counties that most of the counties will complete the process of reorganization of the township agro-technical service provision institutions by 2012. However, field assessment of the grassroots extension network at township level reveals that some townships in some of the project counties are struggling to keep their heads above water at present. Basically, little funding has been provided to township extension agents to deliver services to farmers and there is no secured salary source for the extension agents at the township level. Some extension agents have left their jobs for other opportunities while those still on the job have to engage in selling farm inputs including seeds, fertilizers and pesticides and providing some technical advices to farmers when so required.
- 33. **Farmers' cooperatives**. At present, there are 430 farmers' specialized organizations recorded in the project counties, yet only 186 are reportedly in the project area. According to relevant county agencies, about 80% of such organizations have been legally registered as cooperatives or social development associations, respectively with the Bureau of Industry and Commerce Administration and the Bureau of Civil Affairs. Despite their different appellations, formal or informal set-up, the majority adopts the loose cooperative organizational form, with equal and low-entry membership, mechanism of collective decision making, and member-service driven business scope.
- 34. Cooperatives are mostly involved in organized farming and some kind of marketing; they are still at their early stage of development, especially in the area of organizational services and capacities that help members move up the value chain by reducing post-harvest losses and adding value to products of primary form through assuming increased roles in packaging, processing, and marketing the members' produce. Membership is open, already extended to women-led and poor households that are capable of meeting the required standards.
- 35. **Geographic coverage of the project**. The project area is located in the north and western part of Hunan Province, between longitudes 109 113 E and 26 29 N, except for Shaodong county which is located in the centre.
- 36. The Project will be implemented in nine counties under four prefectures, namely: Lingxiang and Yueyang of Yueyang prefecture, Taoyuan of Chengde prefecture, Shaodong of Shaoyang prefecture, Longshan, Guzhang, Luxi and Fenghuang of Xiangxi prefecture, and Jingzhou of Huaihua prefecture. Among them four are nationally-defined poor counties (Longshan, Guzhang, Luxi, and Fenghuang), the others are identified by the provincial authorities as counties with persistent pockets

of poverty that require additional development support. Five are ethnic autonomous counties (Jingzhou, Longshan, Guzhang, Luxi, Fenghuang).

- 37. The project area is basically located in the poorer, less fertile, less accessible and less developed areas of the province. The total area of the 9 project counties is about 20,648 km². Some 564,000 ha is accounted as related to the agricultural land, of which 27% are cultivated land (21% paddy field and 6% dry land), 43% considered as ecological forest lands and 25% under economic forestry. Ponds take a share of 5%. The nine project counties administer 204 townships and 4,022 administrative villages. There are 1,285,250 households in the project counties with a total population of 4.3 million. On the basis of their poverty and vulnerability within the counties, deficiency of community productive infrastructures and potential for innovation, a total of 97 townships out of 204 have been selected to form the project area in the nine project counties. Some 589 target villages selected by the project regroup a total population of about 760,000 or 182,000 rural households as prime recipients of the project support. About 50% of the targeted beneficiaries will be women.
- 38. The target group. The prime criterion for the selection of project counties and villages therein is the level of rural poverty in the more remote villages and townships. In principle, all the rural households in the selected project townships, totalling about 512,000 households or 1,943,000 inhabitants, would be eligible to participate in the project or broadly benefit from project interventions. But more specifically, in the project selected villages, 182,000 households or 760,000 inhabitants will be targeted by project support and interventions, especially the households in more remote villages. At least half of them will be women. Within the project villages, priority will be given to the lower end of the category of average households to take part in the project activities: priority will be given to the households classified under the category of poor, who are economically active, and physically able and capable to participate in project activities. Thus, this primary group will receive priority in a number of project activities directly related to households and individual farmers, such as training, provision of technical services, support for productive modules, and inclusive mainstreaming of cooperative strengthening. Within the group of the rural poor, women and minorities will be a major part of the target group and they will receive special attention as they are either socio-economically or structurally disadvantaged due to their particular living conditions and background.
- 39. Gender situation. About 48% of the population is recorded as female in the project counties overall, and the number of female headed households is very small. Although work is shared by men and women, on-farm workload of women throughout the year tends to be higher than that of men due to out-migration of the latter and increasing intensity of farming activities. In addition to arable and perennial crop farming, and animal production activities, women carry out the daily family chores for which they spend more than 4 5 hours per day, including cooking, taking care of family, rearing pigs and poultry, sewing and mending clothes and shoes, etc. With regard to off-farm work, women are mainly engaged in fuel-wood collection and some women-specific activities, such as embroidery, whereas seasonal and permanent work in urban areas is mostly for men and single women. While the women's social status is generally perceived high by both men and women, their economic situation and status are far from being lifted and recognized at an equitable level.
- 40. Ethnic minorities. In the nine project counties, the total population amounts to some 4.3 million, of which 27% belong to the ethnic minorities, mostly the Miao, Tujia, Dong and Yao. Data collected indicate that in the project townships, ethnic minorities represent a higher share, around 28% of the total population. In general, ethnic minorities are economically more vulnerable. This is basically caused by their remote location, typically in mountainous areas of Jingzhou, Luxi, Fenghuang, Longshan, and Guzhang counties, with poor infrastructures, low levels of education and healthcare. In other counties, minorities do not form a major part of the population of the villages, so they were not a special target group for project interventions there. As the minorities are only present in large numbers in the five Western counties cited, all project interventions in those counties will target them. More than 50% of the projects under HARIIP are aimed at these Western counties and therefore target the minorities. Also the module on root and tuber crops, which is financed through the proposed IFAD grant, will be concentrated in the five mountainous Western counties and thus benefit minorities.
- 41. Table 1 on the next page summarizes the characteristics of the population segments in the project areas, indicating the poverty levels and causes.
- 42. Both women and minorities are specific target groups within the projects that have been selected by the villagers in the project area. The VIGs that were established, typically, have 5 to 15 members and poor farmers, women and –in the counties where they are present- minorities form a

considerable amount of these members. There are no formal requirements for the composition of the members of the VIG. The only requirement set by PPMO is that women and poor villagers should be represented adequately. Their representation not only ensured that in the selection of the investments their interests were reflected, but it will also ascertain that during the execution of the projects, the interests of women and minorities will be taken care of. In some villages, women are even appointed as head of the village committee (VC), such as in Tangkuan village in Jingzhou county. In Da Poliu village, Luxi county, the VIG was established in early 2011. It consists of 8 members: 2 VC members, 2 women and the rest are poor farmers. The farmers selected their own representatives in the VIG.

Table 1: Household targeting strategy in the project areas

Typology	Characteristic Poverty Levels and Causes	Project Response
Typology Category A: 3% – 15% The rich and better-off With an annual per capita net income above CNY 5,600. Access to most of the resources and benefit from opportunities required for livelihood improvement. This category will mainly benefit from the project support in public asset strengthening, such as infrastructure and service support system	 Sufficient and skilful household labour Have a good health Solid food security Solid and sufficient physical assets Well-connected in the local social network Quality farming with surplus Integrated in value chains Off-farm activities, sufficient financial buffer, access to credit Often have a family member more permanently in the urban area with specialised skills or good education and a good job, who sends remittances 	Benefit from strengthened associations Benefit from improved market and community infrastructure Benefit from improved support services Apply risk management and eco-environment friendly protection Consolidated self-development skills and strengths
Category B: 54% - 60% The average With an annual per capita net income ranging from CNY 3,001 to CNY 5,621. Access to critical resources and benefit from some opportunities required for livelihood improvement. The lower end of this category becomes part of the target group due to its vulnerability and sensitivity to external shocks.	 Healthy labour based at home Food security fully ensured Good farming income, good land, limited access to inputs, average yields Basic household physical assets Access to the local social network Involved in value chains but share low premiums Limited financial buffer, but access to credit Risk of falling into poverty if adverse events take place Often have a family member seasonally migrating with relatively good skills 	Benefit from improved community infrastructures and facilities Participation in beneficiary-governed services and management mechanism Improved productivity Diversified & specialized IGAs Adopt improved techniques and methods Apply risk management and eco-environment friendly protection Share improved premiums from value chains Benefit from improved support services Enhanced self-development skills and strengths
Category C: 25% - 43% The poor With an annual per capita net income at CNY 3,000 and lower. Insufficient access to basic resources and incapable of benefiting from opportunities required for livelihood improvement. The most vulnerable segment is the lower end with per capita net income of CNY 1,500 and lower, which represents about 13% of the category. The lowest end of this group, which represents about 3-4% may not be able to take part in the project due to their physical or skill incapacities. They are taken care of by the state welfare system	 Insufficient or constraint labour Seasonal food insufficiency Low farm productivity, no or little access to external inputs Insufficient household physical assets, and of poor productivity Distant or isolated from the local social networks No access to value chains No or little financial buffer, often indebted Difficult or no access to credit No labour migration, or seasonal labour migration with very low skills and income Low self-development skills and capacities Often burdened by unhealthy or inactive labour 	Access to improved community infrastructures and facilities Participation in beneficiary-governed services and management mechanism Improved productivity Diversified & specialized IGAs Adopt improved techniques and methods Apply risk management and eco-environment friendly protection Access to value chains and share due premiums Access to improved support services Acquire self-development skills and strengths

43. **The selection process**. The process of selecting the project villages and the projects within those villages started in the beginning of 2011. Part of it was initially top down to the extent that the counties used pre-set criteria without prior consultation with the townships and villages. But an important part was also a genuine, participatory bottom up process. VIGs were established in the

selected villages and these VIGs then consulted with the villagers on their priority list of investments. Those lists were sent to the PMO's at county level for decision. The PMO's used these as an input for their initial project proposals for HARIIP. The detailed sequence of the selection process is as follows:

- (a) County PMOs asked the townships about their interest to participate in the project;
- (b) Interested townships identified the poor villages in their commend area, and approached them about their interest to participate. The villages sent their application to the township PMO which sent it to the County PMO;
- (c) The County PMO selects the villages based on the following criteria: (i) technical feasibility of the projects, (ii) the poverty situation, (iii) the eagerness of the villagers to participate, and (iv) the manageability of the projects. When relevant other criteria are used, such as lack of infrastructure or availability of sufficient labour. But the two key criteria always used are: poverty and eagerness of farmers to participate;
- (d) The potential list of project villages is sent to the Provincial PMO (PPMO);
- (e) The Project Leading Group (PLG) at the provincial level approves the list of villages;
- (f) The villages have the possibility to make a plea to be included in the final list; and
- (g) VIGs are established in the selected project villages.
- 44. Together with the application of the interested villages, the County PMO sent a list of priority projects. The process for selecting the projects in the villages includes the following:
 - (a) The County PMO informs the villages and the VIGs on the objectives and the content of the IFAD project;
 - (b) The VIGs collect the ideas of the villagers through group discussions and household surveys;
 - (c) The villagers decide by majority what projects are on their priority list;
 - (d) All lists are collected by the County PMO, who then checks whether the projects fit within the 5 year plan & budget and makes a final list of projects. This list was included in the Project Design Report prepared in June 2011 by the IFAD detailed design mission.
- 45. The process of consultation and discussions with farmers and villagers took the VIGs on average one month. It involves the VIGs holding several meetings before consensus can be reached, sometimes by a vote on the priority list of projects. The cost pre-financed by the counties for the whole selection process (for villages and projects) ranged from CNY 100,000 CNY 300,000, including the base-line surveys and field visits. This shows a clear commitment of the counties to HARIIP.
- 46. Table 2 below shows the per capita net income levels of the counties, the project area and the villages. It reveals that the poorest villages are indeed selected as project villages for HARIIP. This is further supported by the fact that a major part of the selected villages belonged to the officially nominated poverty alleviation villages. In Shaodong County, for example, 43 of 65 project villages were state or province level key poverty alleviation villages. In Luxi county, 22 of the 51 project villages were state level key poverty alleviation villages, 73% of total state level key poverty alleviation villages in the county were included in the project.

Table 2: Net Income per capita in project areas.

Project	Average Income per	Average Income per	Average Income per capita in the
county	capita in project county	capita in project area	villages DCM visited
	(CNY)	(CNY)	
Linxiang	4,536	3,949	Not visited by DCM
Yueyang	7,451	3,510	3,500 (i)
Taoyuan	5,419	4,413	Not visited by DCM
Shaodong	4,369	3,510	1,600 ii (remittances not included)
Longshan	2,775	2,658	Not visited by DCM
Guzhang	2,381	2,243	Not visited by DCM
Luxi	3,145	3,117	2,000 (iii); 1,193 (iv); 1,800 (v)
Fenghuang	3,145	3,166	Not visited by DCM
Jingzhou	3,981	3,164	3,000 (vi); 2,200 (vii); 3,500viii

Note: (i), Kouqian village; (ii) Wuyi Village; (iii) Hetang village; (iv) Da Poliu Village; (v) Xinjie Village; (vi) Tangkuan villge; (vii) Minzhou village; (viii) Langhe village.

Data source: Provincial PMO and Design Completion Mission (DCM) field visit records.

B Project development objectives

- 47. **Project goal**. The goal of the Project is rural poverty reduction in targeted areas of Hunan Province. The achievement of these will be demonstrated through 35% of households recording improved asset ownership index compared to the baseline (from RIMS data), and a 15% drop in child malnutrition prevalence in the area compared to the baseline, disaggregated by gender (from RIMS).
- 48. **Project objective**. The specific project objective is to increase revenues, improve family food security, and strengthen the resilience of 182,000 rural households in 9 project counties, from improved agricultural production and rural infrastructure. By the end of project implementation, the following results will have been achieved: incomes of the rural poor in targeted areas increased by 25%, at project closing; and 70% of beneficiary households report improved food security as compared to the baseline.

C Project components/outcomes

49. HARIIP has three components: (a) community infrastructure improvement; (b) sustainable agricultural development and market access support; and (c) project coordination and management. These project components is preceded by a preparatory phase during which: water users' organisations will be established; technical assistance provided to executing and implementing agencies (IAs) on project management, on supervision to provincial county PMOs, and technical training on operations & maintenance at the village level; extension services and the Bureau of Agriculture (BOA) trained on participatory processes and implementation of modules; gender focus training given to IAs; designs drafted; procurement documents prepared & bidding documents produced; and also financing made available.

Component A – Community infrastructure improvement

- 50. This component will aim to achieve the outcome of strengthening the economic capacities at community level, especially the productive and livelihood assets for expanded and improved agricultural production, decreased physical isolation and thus improved integration into the market value chains, and improved productive and daily-life assets for the sake of the rural community and the households in the project area. Support will be provided for irrigation facilities, village roads, drinking water supply facilities, and rural electricity grid upgrading. These activities will be critical for the project area to strengthen the community resilience to frequently-occurring climate related calamities, improve the access of the rural poor to markets, information and technical services, improve the living conditions & health situation of the population and develop commercialized production of agriculture, which are regarded as effective measures for rural development and poverty reduction at the current stage. These measures will also be essential to revive local communities by increasing their attractiveness for migrant labour to return to their home villages.
- 51. Project interventions under this component will include: (i) improvement of irrigation facilities, mainly the lining of old existing earthen irrigation canals including the necessary water intake, the water outlets and the flood protection measures; (ii) paving of village roads with a concrete slab, connecting to administrative villages and their constituent natural (smaller and scattered) villages with non-paved gravel roads. (iii) construction of community supply facilities of safe drinking water; (iv) upgrading the rural electricity grid, especially for those that the efficiency has fallen under the state's technical standards. General training of beneficiaries and specific training for the operation and maintenance and bookkeeping of the project-built civil works will also be supported by the project.
- 52. There is general awareness amongst the villagers that infrastructure investments are very important for, and will foster, agricultural development. These investments will lead to increased quality of production, lower transportation costs, easier access to and for traders and higher producer prices. For instance, due to the bad conditions of the road, the villagers in Xinjie village of Outuan township, Jingzhou Miao and Dong Autonomous County, reportedly sell their walnuts half a month later than other villages against a 10-20% lower price due to the high transportation cost and less buyers for the village.
- 53. Implementation responsibilities will rest with the technical bureaus at county level. The Bureau of Water Resources (BoW) will be responsible for irrigation and drinking water supply development and improvement, also the Bureau of Health (BoH) will be involved in the drinking water supply projects and aftercare, the Bureau of Transportation (BoT) for roads, and the Bureau of State Electricity Grid for grid upgrading. At the village level, the VIGs will be in charge of well-being ranking

for targeting and supervising implementation. The participation of the poorest farmers, women and minorities will ensure that the interests of these vulnerable groups will be taken into due consideration.

54. The implementation of the projects should follow a logical sequence. For irrigation it is important that before construction, a water users' association (WUA) is established, but also that training on maintenance is provided to the WUA. The following implementation process is adopted for irrigation facilities, but they equally apply for the other community investments. It is based on the existing implementation process adopted by BoW in the different counties with additional steps proposed specifically for HARIIP (marked in italics). The steps are based on the assumption that the proposed irrigation projects are already selected and confirmed with the County PMOs. Besides these steps, there is also a need for an implementation process at county level.

55. Implementation process for irrigation facilities: a 12-step process.

- 1. Perform in a rapid appraisal a water resources study to assess the availability of the water sources and to ensure that the water intake to the command area does not have a negative impact downstream:
- 2. Establish and register an official Water Users Association in line with official Government policies: A WUA will have a Committee of 3 to 6 members to lead the WUAs. Like with the VIGs, poor farmers, women, and farmers from each part of the command area should be included in the Committee. A meeting will be organised with all the farmers in the command area to explain the need of a WUA and the implementation process to farmers including their participation. The VIG of the administrative village will assist in the forming of the WUAs;
- 3. The BoW staff will perform a topographic survey. Also a calculation is made by BoW of the proper cost-recovery level for maintenance of the irrigation scheme;
- 4. The design of the irrigation scheme is discussed with the WUA-committee and all the farmers in the command area. Comments raised by the WUA-members are discussed with the BoW Engineers and if technically and financially feasible, adapted in the design. The issues of operation and maintenance and the need for water fees and its transparent use are discussed with the WUA-members. Also the participation and responsibilities of the Committee during the construction process are discussed;
- 5. A formal agreement is made between BoW and the WUA-Committee on the implementation activities and the responsibilities of BoW and the Committee during the construction. Also it is made clear by the Committee who will be the responsible farmer(s) for maintenance and financial management of the water fees;
- 6. The BoW tenders the construction of the irrigation facilities to a contractor;
- 7. During the construction the WUA-Committee supervises the quality and the progress of the works;
- 8. During the construction period the WUA-Committee organises a meeting with the farmers to discuss and finalise their internal rules and regulations. Also farmers are appointed for O&M and for fee collection. The designated farmer(s) for maintenance and fee collection will receive training from the BoW in O&M and in financial management;
- 9. After completion of the construction the WUA-Committee and the BoW perform a joint check of the constructed scheme and formally accept it, if it is properly built;
- 10. During the first year, as soon as possible after the completion of the scheme, an agricultural extension programme will start;
- 11. After about one year, in a general meeting of the WUA, the functioning of the scheme is discussed. After that, another combined check is performed with the BoW, the Committee and the contractor to analyse the functioning of the scheme before the final payment is made to the contractor,
- 12. If the final payment is made to the contractor and thus the scheme is well functioning, then an official handing over paper is signed. From that date, only the WUAs will become responsible for O&M.
- 56. A more in-depth description of the stepwise approaches for the implementation of the infrastructure investments under Component A are included in Working Paper 1 (WP1) and the annexed Project Implementation Manual (Annex 11).
- 57. Sustainable operations and maintenance. Sustainable use and maintenance of the infrastructure built or upgraded under the project will be addressed, mainly through the training of beneficiaries in establishing operation and maintenance committees or users' groups and in

establishing functioning participatory management structures. IFAD funded-projects encourage community-governed operations and maintenance (O&M) mechanisms that require the active participation of beneficiaries. The following outlines for establishing a workable and improved O&M framework will be used by PMOs or implementing agencies as procedural guidelines, even where the latter are familiar with traditional community-based mechanisms.

- 58. IFAD supports the community development through a number of investments, usually in grassroots facilities and services. Those investments should not be valued only by their physical installations, but also through the participatory process by beneficiaries and related stakeholders, and the continuity of sustainable operations ensured by an effective O&M framework.
- 59. The O&M framework in this context, therefore, should include at least:
 - (a) A facility or a service established, such as an irrigation scheme, a drinking water supply scheme, an unpaved or a paved village road, and an electrical grid;
 - (b) Target beneficiaries or users of facilities or services, such as households in a village for a community road built, user households of a water source for drinking purpose, water users for irrigation facilities, and households for an electrical grid;
 - (c) Community-based and governed O&M legal entity, usually established in the form of WUAs (in the case of an irrigation scheme) or a Village Committee (in the case of road, building, drinking water supply, and electrical grid) with equitable representation for all interest groups or targeted well-being categories, and elected in a transparent and participatory manner;
 - (d) Established managerial and operational procedures with functions and responsibilities well defined. This includes (i) the designation of trained and (preferably paid) O&M managers such as road managers, water supply and sanitation managers and irrigation managers and often responsible for O&M and fund collection (ii) financial arrangements to ensure O&M cost based on cost recovery with clear scheme or perspective of selfsufficiency (iii) internal rules to ensure sustainable use of the facility or service; and
 - (e) Integration or inter-linkage with government support services and other technical providers including emergency assistance of the government in the case of natural disasters.
- 60. While local governments and state technical agencies include maintenance in their recurrent annual budgets and the service is extended to the village level, beneficiary O&M remains crucial to promote beneficiary ownership and sustainable use of community assets. For example, current drinking water tariff cannot fully cover the full cost of O&M. Therefore, there is a risk of unsustainable use, or restricted access in the future. Low water prices and low collection rates are often linked with the ability to pay for the facilities and/or the willingness to pay. Community participation is important to help to ensure that tariffs are set at levels that the community understands and is prepared to pay. Pro-poor arrangements will be addressed to ensure the poorest households can equally benefit from the services. The selected pro-poor arrangement is a rising block tariffs (two-step water price as is called locally) that is widely regarded as a pro-poor structure and water saving measures. Training of the beneficiaries to raise awareness, enhance skills on O&M and demonstrate good examples are necessary to help ensure sustainable use both during the project life and after. Similar participatory approaches for O&M will be introduced to ensure sustainable use of irrigation schemes and village roads built by the Project, while management of rural electricity grid stations will be mainly taken care of by the local state electricity grid bureau, assisted by villagers' representatives.
- 61. Project villages villagers and VIGs are now aware that costs for maintenance should be recovered from the users. For example, in Heitang village, Luxi county, the head of the VIG indicated that they will charge villagers for the small road repairs, while major repairs will be the task of the County or Provincial governments. There was also a broad awareness amongst the VIG's that dedicated user groups had to be established for services that will be provided to only a part of the population. Since VIGs do not have the formal legal status and only have a role during the project implementation period, these cannot play a role in maintenance during the project period and after that. So for maintenance the VC's will become responsible for roads and water supply, while dedicated WUAs will have to be established for maintenance of the irrigation systems. WUAs will also have to allocate the available water resources to farmers within the commend area. It will be crucial to have a proper representation of farmers in the WUA, including poor farmers and a cross section of

farmers within the commend area. (More details regarding O&M are shown in Annex 11, draft Project Implementation Manual).

Component B – Sustainable agriculture development and market access support (SAMA)

- This component aims to strengthen the self-development capacities of the rural men and women and improve their income generation opportunities by supporting the sustainable development of diversified and adaptive agriculture at the levels of production and service support. The modular approach will be adopted for the component, while the concepts and techniques of sustainable development and environment protection will be integrated within all project activities. The production modules are designed to help strengthen the farmers' resilience and adaptability to uncertainties, mainly caused by climate change and market transformation. This will be achieved through income generation diversification and adaptive farming systems at household level to orient it towards making farming a business and profitable for the poor farmers by using techniques such as eco-farming and niche-market production benefitting from timely market information systems. They will involve both improved production techniques, mechanisation, and improved processing technologies in grading, packaging, storage, and marketing to reduce post-harvest losses and add value. Mainstreaming the targeted farmers into the marketing value chains and production specialisation or diversification will be achieved through the support to farmers' cooperatives. These interventions will be complemented by the module of technical service support, which will intervene on the supply side. On the assumption of successful implementation, the sustainable production model that the related module applies will be extended to the other farmers within and outside of the project area.
- 63. Early training before module implementation: Before the implementation of the modules (cash crops/off-farm IGAs, Orchard-Poultry, Root & Tuber crops) can start it is important that training will be provided to the institutions that will be involved in, and responsible for, the implementation of the modules; i.e. the extension services and the BOA. First, during the first 2 months of the project there will be a general training to relevant staff on, for instance, IPM during the different phases in the cropping seasons. Second, also during the first 2 months of the project there will concurrently be training of staff in participatory processes on how to better involve farmers in implementation. Here it is essential to achieve an active participation of all farmers, so as to maximise learning effects. Also the training will pay attention on how to approach the needs of different target groups: poor, women, and minorities. Third, besides the general training, staff training on the specifics of the different modules itself will be carried out between the third and the sixth month of the project. These will include training on the differences in use of fertilisers, different planting and harvesting methods, different irrigation frequencies, etc. The training sessions can be divided into three: preparation of training materials based on 'training the trainers' principle, training on the implementation aspects of the project, , and (c) training of the farmers and of VIGs on different aspects of the project.
- 64. It is very important that these early training of the extension services and BOA is closely coordinated with the training efforts under module D, the Technical Service Support Module. PPMO has to check that both training courses are indeed complementary and do not overlap. The costs of the training of the extension services will fall under the county PMO budget¹.
- 65. Module 1: Cash crop/off-farm IGAs. Based on local available resources and market opportunities, the module aims at increasing and diversifying farmers' income sources in the project area through the development of cash crops; it also provides a compatible tool to the beneficiary farmers to engage in off-farm income generation activities so that their resilience to natural calamities and market shocks will be further strengthened. Activities under the module will include: (a) provision of seeds, seedlings, and other inputs required to start up off-farm income generating activities; (b) fertilizers required for cash crop production or other miscellaneous inputs needed for IGAs; and (c) beneficiary training to further strengthen the farmers' technical capacities. The support package is tailored particularly to the needs and capability of the rural poor men and women, in conjunction with the availability of diversified income opportunities mostly based on the needs of the local consumer market. Priority consideration for the implementation of the module will be given to the poor and vulnerable households, as well as the female-headed households, but the better-off households will not be excluded. Farmers in the project villages will be encouraged to engage themselves in production specialization or organized farming but on individual household basis, in order to achieve sufficient economies of scale collectively without increasing the associated co-variant risk.

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¹ Total cost for extension services is CNY 684,000, or CNY 76,000 per county, to be financed from reduction of the sustainable agriculture and market access component (SAMA) budget items HH & women inclusion and access to new technologies and know how. The total allocation to the county remains the same.

Implementation responsibility of the module, related technical services provision and the organisation of possible inputs supply will remain with the Bureau of Agriculture at county level.

- 66. Module 2: Orchard-poultry integrated farming. There are large areas of fruit orchards and non-timber forests in the project area, which can also be linked to the production of poultry. The module attempts to achieve more effective and efficient use of limited available land resources and production optimization by combining poultry production with short-term and quick returns with the production of fruits and non-timber forest products with long-term benefits. It is also conducive to the recycled use of farm wastes and nutrients and soil conservation, leading to the reduced use of chemical fertilizer at the same time. Project support will include the improvement of poultry sheds and provision of chickens, feedstuff and medicines and beneficiary training. This module aims to introduce an optimal integrated farming model at smallholder level, which should be disseminated and replicated within and outside the project area once it is proven successful. Similar to module 1, the implementation of module 2 will focus on the poor and vulnerable households and the female-headed households, although the relatively better-off households will not be excluded. The Bureau of Livestock at county level will be responsible for the module's implementation, including providing technical training, provision of the chicks and other inputs.
- 67. Module 3: Agro-forestry. This household-based agro-forestry development module follows the overall project strategy of paying close attention to rural poverty issues by means of an assorted approach. The module is to sustainably explore the income generation potential of diverse economic trees, while maintaining a sound balance in forestry conservation and protection. Project support includes planting materials, fertilizer, other inputs, on-farm facilities, beneficiary training and model dissemination. The module promotes introduction of improved varieties of economic forest species, improvement of existing low-yield economic forests, including lily, oil camellia, bamboo, kiwi, orange, grapevine, tea, and other suitable economic trees in the project area. Intercropping of young seedlings with cash crops will be encouraged where applicable. Similar to module 2, this module aims to introduce an adaptive farming system, which should be disseminated and replicated within and outside the project area once it has proven successful. The implementation will give priority to the poor and vulnerable households and the female-headed households although the better-off households will not be excluded. Implementation responsibility for the module will remain with the State Forestry Administration at county level.
- Module 4: Support to farmers cooperatives. The project will provide assistance in the form of a module to support the development of farmers' cooperatives. Under this module, eligible existing or newly established cooperatives will follow the proposed modular implementation guidelines to strengthen their capacities and improving the members' connectivity with appropriate value chains. The economically active poor households and female-headed households will be systematically mainstreamed into the cooperatives and thereby benefit from the collective bargaining power in organized production, marketing, and other enhanced services for members. Support will be provided to the cooperatives under the activities foreseen to strengthen strategic and market capabilities, the inclusion of poor households and women, access to new techniques and know-how, marketing linkages and trade promotion, and by provision of some office equipment and essential equipment required for the improvement of production and marketing. The expected outcomes should be highlighted by members' increased premium share in the value chain, cooperatives' sustainable service capacities in technical support and market information and intelligence. The Bureau of Agriculture at county level will assume the overall responsibility of the module implementation. The module will be closely linked with the other modules related to production and technical service support, and leverage from the project-supported productive infrastructures.
- 69. The cooperatives will be professionalized and focus on a better integration in the supply chain to improve the coordination between different actors within it: farmers (production & storage) traders wholesale/retailers customers. In doing so the 'time-to-market' will be shortened and possible frictions between the actors smoothened. The cooperative is a very effective mechanism to provide services to the farmers, such as market information and access technology training. For example, Tuanshan Agricultural Product Cooperative in Shaodong County, started with 40 poor households some 4 years ago and by December 2011 has 165 households (828 farmers) as member. It registered the *Brother Bird* as a special brand for organic rice and *Xiangshu (Hunan Vegetable)* for daylily. The cooperative introduced new technology and varieties to farmers, which increased the possibilities for farmers to sell higher quality products at higher prices.
- 70. The following steps will be followed in selecting and creating sustainable cooperatives with project support where poor households and women will be included as members:

- (a) Inventory and selection of potential co-operatives. As a first step in each county BOA staff will assess which cooperatives meet the selection criteria, depending on whether they are new (to-be-established) or existing. A specific check list will be made by the Provincial PMO which will be discussed with the potential cooperatives to come to a mutually agreeable set of criteria. Based on this the PPMO will decide on how many cooperatives per county can be included in the programme, and the County PMO will then select the most promising cooperatives. In an area with strong market potentials, but no existing cooperative, that meets the targeting criteria of HARIIP, the county BOA will work with the local VIGs to establish a new cooperative;
- (b) In-depth analysis of the current state of the cooperatives and inclusion of poor farmers and women. The staff of BOA will assess the current state, objective, working methods and the future expectations of the potential cooperatives to be targeted. The inclusion of poor farmers, minorities and women into the cooperative will be a precondition for support by HARIIP. The management of the cooperative will then draft (new) internal rules and regulations for the running of the cooperative, including provisions for the manner in which the poor households can join the cooperative. BoA will assist the management in this;
- (c) **Training needs assessment.** A training needs assessment will be executed by BOA to assess the management capacities of the cooperative and their knowledge on the specific market features (market types, number of suppliers and demanders, price developments), but also knowledge on strategy development;
- (d) **Development of a strategic plan**. The Cooperative, with help from BOA, will prepare a strategic plan, including an assessment of the promising markets, new developments, new opportunities and strategies to enter those markets. The strategic plan will be completed with an Action Plan, including a detailed budget;
- (e) Agreement on new cooperative and strategic plans. The strategic plan and the rules and regulations of the cooperatives will be approved and adopted at a general meeting with members. Thereafter implementation will start. Regular (around twice a month) meetings will be held to check whether farmers continue to support the strategies that were chosen and see whether farmers are satisfied with the efforts of management;
- (f) Execution of activities. The cooperative management will execute the activities proposed in the strategic plan and the action plan with support of the BOA. The management will take care of proper administration of the received funds and the activities performed. If needed, a special bookkeeping training will be provided to them. The management of the cooperative and BOA will be responsible to ensure that poor households derive a value added in participating in the cooperative activities.
- (g) Monitoring. During the project lifetime 2 yearly monitoring activities will be executed by the HARIIP, BOA, the extension services and the cooperative to assess the functioning of the cooperative, the proper use of funds and whether the objectives of the project are successfully met and agree on the need, or not, for adjustments.
- 71. Module 5: Technical service support. The objective of this module is to improve the grassroots agro-technical services network and enhance the effectiveness of service delivery, thereby creating an enabling environment for farmer-to-farmer extension. As a result, rural women and men will gain improved access to new technologies and techniques in farm production in a timelier manner. Module activities include support to the provision of essential equipment, tools and transport means, staff training and trial and demonstration activities. Capacity building of the township extension agents is particularly pronounced in the module in order to improve their skills in delivering services through participatory and hands-on approaches. Training would include, among others, farming practices that reduce the use of chemical pesticides and fertilizers, such as integrated pest management (IPM) and, where available, the use of the by-products of biogas anaerobic fermentation processes as both pesticides and farm manure. Trial and demonstrations will aim at building improved technical and crop variety reserves for scaling up. Due consideration will be given to the coping strategy for local farm production in relationship with climate change. The Bureau of Agriculture at county level will be the implementing agency. This module is also applicable to the forestry sector when local needs arise, whereby the State Forestry Administration (SFA) at county level will be the implementing agency under the coordination of the county PMO. As stipulated already, the training efforts should be closely coordinated with the training efforts for the extension services and BOA.

- 72. Module 6: Root and tuber crops. The module aims at increasing and diversifying farmers' income sources in the project counties of Fenghuang, Guzhang, Longshan, Luxi and Jingzhou through the development of root and tuber crops, so that their resilience to food price fluctuation, natural calamities and market shocks will be further strengthened. Activities under the module will include: (a) provision of seeds and fertilizers required for production enhancement; (b) irrigation development; and (c) beneficiary training to further strengthen the farmers' technical capacity. The support package is tailored particularly to the needs and capabilities of the rural poor men and women. Priority consideration for the implementation of the module will be given to the poor and vulnerable households, as well as the female-headed households, but the better-off households will not be excluded. This module will be co-financed by an IFAD grant. Implementation responsibility for the module, related technical services provision, and the organisation of possible inputs supply, will remain with the Bureau of Agriculture at county level.
- 73. The Project will also support the PPMO of Hunan Province to forge partnerships with the concerned research institutions to carry out targeted research, introduction of new varieties, experimenting new farming techniques of root and tuber crops, and trials and popularization of varieties tested successfully. Particular attention will be given to such technical options that will increase farmers' capacity to cope with climate change and food sufficiency uncertainty, including the introduction and screening of crop varieties resistant to climate adversities and farming techniques that can mitigate the adverse effects of climate change. IFAD grant proceeds will support the introduction and experiments of new varieties, study on methodologies of virus-free micro tuber production and the establishment of propagation facilities; this will be achieved mainly through the support of research enhancement and M&E under the Provincial PMO.
- 74. The implementation of activities in partnership enhancement will contribute to effective implementation of the project, the attainment of project objectives and sustainable agricultural development of the project counties in the long-run, through building genetic and technical reserves for farm production in the project area.
- 75. Implementation of all modules: The overall implementation scheme for all the modules in the project villages will be four years. This does not imply, however, that in each and every village the implementation of an individual module will be four years also. The actual implementation of a module will depend on, inter-alias, the urgency of the programme, the other project activities in a village, the capacity of the implementing agencies and villagers, and the sequencing of projects (infrastructures, such as roads and irrigation systems, have to be built before other modules are implemented). The modules approach is chosen to have sufficient flexibility to change between modules or alter the content of a module, if the market conditions demand that.

Component C – Project coordination and management

management.

76. This component will make provisions to cover the costs for the coordination, management, monitoring and evaluation of the Project. This involves the establishment of an effective management structure comprising a Provincial Project Management Office (PPMO) in Changsha, one Prefecture PMO (Prefecture PMO) in Jishou for the prefecture of Xiangxi that has the direct responsibility of overseeing administratively and financially the counties under its jurisdiction, including four project counties², and County PMOs (CPMOs) in each of the nine counties where HARIIP will be implemented. Operations will be substantially decentralised to the CPMOs, with the PPMO and Prefecture PMO in Xiangxi performing overarching functions of planning, coordination and monitoring. Support will also be provided for small Township Project Management Offices (TPMOs) in each project township, utilising existing staff and facilities of the Township Governments.

77. The project will use the designated project website that will be set up by IFAD on IFADAsia as a means of communication between the Provincial and Prefecture PMOs, CPMOs, and TPMOs. Project AWP&Bs and all working documents will be made available on the website. The website will also be used for regular announcements and information about project activities. All project staff will be expected to consult the website as needed in order to obtain information and resources needed to do their work. Partners, stakeholders, implementing agencies and project staff will be encouraged to

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² The Government of Hunan has adopted a streamlined administrative structure since 2010; the provincial government oversees directly the county administrations except for Xiangxi, which is an ethnic minority autonomous prefecture. Jishou as prefecture capital continues to oversee the county administrations within its territory. In view of this and in addition to the remoteness of the mountainous counties of Longshan, Guzhang, Luxi, Fenghuang in Xiangxi, establishment of a prefecture PMO is necessary in order to assist the provincial PMO in its functions of on-site and off-site support, coordination and

contribute information and resources to the website in order to help create a viable web-based tool for operations that can be consulted from any location with internet connectivity. The Provincial PMO will appoint a site host who will be responsible for assisting all stakeholders in using the website. The site host will also be responsible for monitoring the use of the website.

- 78. Village Implementation Groups (VIGs). There is evidence of a great deal of commitment for the HARIIP project at all levels. By the time of the design completion mission in November/December 2011, all the VIGs of the project areas were already established and operational and village representatives elected. The VIGs will act as an interface between the project and target communities, and will be responsible for the following tasks. First, which already has been done, they informed villages and households on project opportunities and access to support and they were involved in the selection of priority projects by villagers. Second, they will be in charge of the annual participatory household well-being ranking as a monitoring tool. Based on the ranking, the VIGs will then identify eligible households for every module in full coordination with the respective service providers. Third, the VIG will assist the coordination of priorities and the modules for specific villages with the service providers and in the design of their annual work plan and budget. Fourth, the VIGs will play a supervisory role during the implementation of the projects. Fifth and last, the VIGs will assist village committees (VCs) to seek for a proper arrangement for operations and management of the project constructed facilities.
- 79. The project financing will cover expenditures such as vehicles, office equipment and materials, management workshops and training, gender focus training for key project staff at all levels, monitoring and evaluation (M&E), results and impact management system (RIMS) of IFAD and baseline surveys, innovation enhancement and knowledge management, and PMO operational costs. Recurrent costs will be ensured by Government counterpart funding, covering expenditures such as staff salaries, travel costs, office operations, vehicle O&M, operational costs for township PMOs and VIGs. Budgets for M&E and knowledge management are specified in the cost tables.
- 80. Training support will be provided during the preparatory phase, to provide project management, planning & supervision training to the PMO's, to provide social organising training to PMO's, IAs, and VIG's, as well as provide operations & maintenance training to the VIG's or users' associations for infrastructure and facilities provided under the project.
- 81. **Location, phasing and linkage of interventions and modules** will be guided by the following considerations and factors:
 - (a) Selection of module/s for a particular village will be determined by beneficiary demand, together with general feasibility and resource suitability considerations;
 - (b) In some situations it will be necessary, or desirable, for certain interventions or modules to be implemented in association with the others. For example, the interventions for improved irrigation and village roads may have a better and immediate leverage effect if they are implemented in association with the cash crop module; and the module for support to farmers' cooperatives may enjoy a better chance of success when it is associated with modules leading to organized or contract farming and IGAs, such as the module for agro-forestry. Possible module associations have been indicated in relevant WPs attached to this project design report. Final determination of module associations will rely heavily on informed guidance being provided by the PMOs;
 - (c) Where modules are implemented in association with each other, careful attention will be paid to ensure that implementation of the modules is appropriately phased;
 - (d) In the final allocation of resources, it is more important to follow the general criteria of effectiveness and efficiency than it is to try and cover all villages. A reasonable balance should also be sought between spreading resources so thinly that impact becomes too dissipated; and concentrating them too heavily in too few locations.
- 82. **Budget Adjustment Rules**. The design of each intervention and module has been based on the 'typical' situation and 'average' costs, and annual budgets for each County have been calculated based on 'best estimates' of potential demand. An inherent feature of the modular approach is that it facilitates programming adjustments to reflect real situations and needs. General guidelines for adjusting the design of each module are provided in the relevant WPs. Global budget allocations are permitted to vary from the final design estimates to reflect design adjustments, and taking into account beneficiary demand that is different from that projected, subject to the following general rules:

- (a) The standard unit cost of individual modules can be adjusted by up to 25% by the CPMO on the approval of the PPMO, to take into account local conditions. The aggregate of all adjustments made in a county must remain within the original budget allocation for that year, as detailed in the Final Design cost tables;
- (b) From PY2 on, the total allocation for any one county for any one year can be adjusted by up to 25% on the approval of IFAD, to reflect changes in module unit costs and levels of demand. The aggregate of all adjustments made must remain within the original aggregate budget allocation for each county for the overall project, as detailed in the Final Design cost tables.
- 83. Similarly, actual prices or costs will be applied for infrastructures at the moment of implementation. Unit cost adjustment is possible when actual market prices vary from the design estimates. For adjustments of investments priorities, implementation should be carried out in accordance with the investment or expenditure categories that the design propose at PY1; adjustments can be considered at PY2, with due justifications included in the AWPB submitted to IFAD for approval.
- 84. An assurance that these programming rules will be adhered to will be sought during loan negotiations.

D Lessons learned and compliance with IFAD policies

- 85. Since 1981, IFAD has financed 24 projects worth some USD 638 million in loans for rural poverty reduction in China. Project interventions involved agriculture, livestock, forestry, fishery, health, education, financial services, market access, environmental conservation and gender mainstreaming. Project evaluations and project completion reports suggested a good performance in terms of the projects' achieving their rural development and poverty reduction objectives. The recent (2010) Country Program Review generated lessons for a policy dialogue feeding into the new 2011-2015 COSOP for China.
- 86. IFAD's Country Programme has built and demonstrated its relative strengthens and competences in a good number of areas and sectors, where some successes in implementation were recognized and recorded, as follows: (a) development of community-level infrastructures and facilities; (b) direct support to household assets building; (c) sustainable natural resources management; (d) agricultural production improvement for greater income generating opportunities; (e) development of sources of rural renewable energy; (f) mainstreaming of the vulnerable and poor households into the marketing value chains; (g) promotion of organized farming and cooperative marketing; (i) promotion of rural financial services both through institutional approaches and community self-governance measures; (h) capacity building for beneficiary households, service providers, and project management offices; (i) differentiated targeting of the poor with gender sensitivity; (j) cross-project mechanisms for knowledge management and experience sharing; (k) promotion of community-based management and maintenance mechanisms of community infrastructures and facilities; (l) incorporation of M&E systems into programme management; and (m) intra-project-area scaling-up and replication of success stories and innovative practices.
- 87. However, the country program review (CPR) in 2010 noted that experience from the 2006 2010 country strategic opportunities program (COSOP) indicates that policy dialogue between IFAD and the Government needs to be further strengthened in order to support and help turn the target priorities and sectors into operations.
- 88. Until then promoting and replicating innovations and best practices beyond the IFAD supported projects may be limited. A result-based mechanism of monitoring and management is hence necessary in order to help ensure the full achievement of expected objectives and outcomes; dissemination and scaling-up of innovations need to be supported with additional efforts and resources. Other important lessons learnt can be summarized as following:
 - (a) The use of project leading groups (PLGs), project management offices (PMOs) and village implementing groups (VIGs) ensures effective inter-agency coordination and timely implementation, as well as promote beneficiary participation in project activities;
 - (b) Targeting approaches of projects are effective but targeting during implementation needs to be improved in some cases. Project areas were selected on the basis of poverty

- incidence and vulnerability analyses. Village implementing groups (VIGs) make good contributions to the targeting at household level;
- (c) IFAD-funded projects were designed and implemented along a gender-sensitive, integrated rural development approach. Project impact on women's social and economic empowerment has been repeatedly confirmed in impact assessments;
- (d) Close monitoring of rural infrastructure is required during implementation to ensure designs are correctly executed, which is why follow-up during implementation is more important than providing international expertise during formulation;
- (e) Experience with agricultural infrastructure to improve water and soil management has been instrumental in ensuring better water harvesting, flood control, irrigation support, and land development;
- (f) To create more awareness of infrastructure viability and environmental impact, local user groups and VIGs should be consulted to identify major issues and provide training in the maintenance and repair of infrastructures;
- (g) IFAD projects have promoted decentralised community approaches by applying participatory planning. This approach works well and it is scaled-up by the Government in the formulation of the national poverty reduction strategy;
- (h) Under the environment of a strong economic growth, it has been found necessary to design projects in the way that enough flexibility should remain with local project management offices during implementation, which would avoid rigid interpretation of project design documents. An advance in project operations showing good potential is the introduction of a modular approach to project management;
- Close collaboration among all stakeholders in project planning and implementation is crucial for the success of project implementation, so is the adequate and appropriate staffing of local project management offices, particularly at county level;
- (j) Pro-active planning for introducing, capturing and scaling up innovations is crucial;
- (k) Leveraging project experiences and field successes in policy dialogues and further programming will be necessary;
- (I) Improved loan administration efficiency, particularly in processing withdrawal applications, will help improve the implementation efficiency and effectiveness;
- (m) Allowing greater flexibility and responsiveness in implementation modalities and approaches is primordial; and
- (n) Building on acquired strengths to introduce new and innovative elements is the way forward for the country programme.
- Alignment with country policies and IFAD policies. The 12th Five-Year plan for National 89. Economic and Social Development (2011 - 2015) calls for inclusive growth to allow the povertystricken areas and the poor population benefit more substantially from the economic growth and social development; it commits increasing investments in support of rural economic development in the poverty-stricken areas to help strengthen the latter's economic strengths and self-development capacities. The HARIIP is well in line with the national poverty reduction strategies and initiatives, as it is based on development-driven support to the vulnerable groups, innovative intervention approaches and improved access to resources and opportunities for the rural poor. The Project responds to the Government's strategy of development-driven poverty reduction by channelling its investments in the areas and sectors disposed to provide greater opportunities of income generation and improved livelihoods for the poor women and men; the targeting strategy is aligned to a household and villagebased approach, gender and ethnic minority sensitivity will be introduced and maintained, active participation of the poor households and villages in determining their priorities of development opportunities will be promoted. It is thus based on the development needs and priorities that were identified and proposed by the Hunan Provincial authorities to the central government and to IFAD in March/April 2011.
- 90. The project goal and objective refer directly to the overarching goal of the IFAD Strategic Framework 2011 2015 aligning its investments with the latter's strategic objectives related to improved natural resources and economic asset base, improved access, income generation

opportunities and decent work, capacity building for the beneficiary-governed and grassroots organizations, and enhanced service support system. HARIIP will be the first project under the new 2011-2015 results-based country strategic opportunities program (RB-COSOP). And, without ignoring the other strategic objectives of the COSOP it will particularly address the first one, namely "The rural poor in targeted areas sustainably use enhanced productive natural and economic assets and improved technology and advisory services in a changing environment and market conditions".

91. **Integration with the country programme**. The design of HARIIP took into account the achievements and lessons learnt of completed and on-going IFAD projects and programmes, mainly in the field of the modular approach, demonstration and scaling up, capacity building in the field of implementation, targeting, and the M&E framework. HARIIP will further explore innovative approaches in the following fields: (a) enhanced leverage of productive infrastructures; (b) diversified on-farm and off-farm IGAs, (c) integrated farming based on household productive assets, (d) sustainable use of agro-forestry, (e) improved market access through grassroots cooperative strengthening, (f) service-centred support system, and (g) interlinking and mutual leverage among productive assets and resources, income generation modalities and service support mechanism.

PROJECT IMPLEMENTATION

A Approach

- 92. Opportunities for rural development and poverty reduction in the intervention area are: (a) community-level productive infrastructures, (b) adaptive and diversified farming models in response to climate change and market transformation, (c) the existence of commercially-viable agriculture-related value chains, to which the rural poor have, however, limited or no access yet; and (d) the emergence of farmers' associations and cooperatives.
- 93. Mainly due to the project area's disadvantageous geographic and economic positions, the farming systems remain insufficiently linked with the marketing value chains. These systems are geared towards meeting basic livelihood requirements of the family through a core food production activity, complemented by other traditional IGAs, such as growing of small stock and fish, cash crop cultivation and off-farm employment in an attempt to defray cash expenses and consolidate household food security. The project would improve the farming systems' viability, sustainability, adaptability and resilience. Agricultural production will be substantially raised, farmers' livelihood improved through a combination of productive infrastructures, diversified on-farm and off-farm IGAs, market linkage, and need-centred technical service support. These measures will also be important with a view to revive rural communities and strengthen the labour force of these communities.
- 94. The project will directly invest in rural productive infrastructures to create and strengthen the basis for improving the productive capacity and living conditions, supporting the service support structure and farmers' associations to better assist farmers to enter the market economy and improve the leverage efficiency between different assets and resources. All this will help the farmers to raise food production and income, consolidate food security, reduce out-migration pressure or dependency, improve the capacity and efficiency of the rural labour force and production systems, create added value to local produce through transformation and market linkage. Where possible, adaptive, integrated, low-cost, environmental-friendly techniques will be preferred over conventional and costly capital goods so as to maximize input-output relations and decrease dependency relationships.
- 95. Project management will strengthen its focus on monitoring of its targeting strategy, and knowledge management for exchange with other government and donor funded projects at national and provincial level.
- 96. **Targeting strategy**. If measured by USD 1.25 per day per person, or equivalently an income per capita of CNY 3,000 per year, the total poor population in the target villages will represent around 45% of the total population and households. The Project will adopt the inclusive targeting strategy, addressing the specific needs of the different vulnerable groups; especially the poor women and men, ethnic minority groups and other possibly socio-economically marginalized groups.
- 97. The project's targeting strategy will be adapted to the changing dynamics of rural poverty in the project areas, focus on strengthening community-level assets, improving access to income generating opportunities, strengthening sustainable support services, and strengthening the target groups' resilience. It will adopt the geographic targeting strategy of the Government in identifying the pockets of rural poverty in economically disadvantaged areas, and it will continue to apply the

differentiated targeting and support model to complement the Government's poor village and poor household-based approach. Thus, within the project villages, the economically active poor and women, the vulnerable ethnic minorities will be identified and served on a priority basis.

- 98. Well Being Ranking. People living in the same village have different levels and status both socially and economically. Those differences are related to their livelihood systems. Well-being ranking is one of the participatory rural appraisal (PRA) tools used to know the different levels and status of each family in the village and their different sources of incomes at the same time. It is also important to know how people perceive their well-being as a whole, and it might be different from one village to another. Participatory well-being ranking could therefore work effectively to categorize villagers for targeting purposes. More details are described in WP4 and Annex 11 (Draft Project Implementation Manual (PIM)).
- 99. In order to ensure the targeting imperatives of IFAD assistance, HARIIP will adopt the well-being ranking that should be introduced in the project villages, under the responsibility of VIGs. Households of category C will be given priority as the main recipients of production modules, subjects of cooperative mainstreaming and technical service support. Similarly, beneficiary training should be tailored to meet the particularities of that prime vulnerable segment, there-by ensuring an equitable access to knowledge, techniques and opportunities.
- 100. **Implementation phasing and schedules.** There are 589 target villages, with each receiving 3 to 4 projects. Thus, the implementation of around 2,000 projects will need time and the projects should be spread appropriately as much as possible over the total implementation period to avoid overcrowding. Consequently, there is a need for sequencing. The activities over an implementation schedule of 4 years, including a preparatory phase during PY1, implementation of the projects in the period end PY1 to PY4, followed by a one-year consolidation phase during PY5.
- 101. There is a need to differentiate between the infrastructure investments of component A and the investments for sustainable agricultural development of component B. The implementation of infrastructure projects will be scheduled as follows: 20% in PY1, 35% in PY2, 35% in PY3 and 10% in PY4, both for infrastructure investment and training. As to the implementation of component B's modules 1, 2 and 3 (cash crops, orchards-poultry, and agro-forestry) and module 6 (root & tuber crops), as well as the technical assistance module, these will all be implemented along the same lines as infrastructure: 20% in PY1, 35% in PY2, 35% in PY3 and 10% in PY4. The Technical Service Support (module 5) will be done in two years for equipment & furniture and the establishment of cooperatives will be done in the first three years.
- 102. The above implementation scheme does not imply that in all villages and for all investments the same path has to be followed. It also does not mean that of one particular project only 20% of the investments can be made in PY1, or that there is no flexibility in the sequence of execution of projects. What it does say, is that on aggregate level, at the level of the PPMO, 20% of the allocations for projects will have to be spent in PY1, 35% in PY2 and so onwards. Thus, also at county level there is some flexibility in spending funds and setting different priorities, as long as at provincial level, the overall disbursement profile is fulfilled.

B Organizational framework

The main implementing agencies and their roles

- 103. The Ministry of Finance (MOF) is IFAD's country counterpart. It leads the IFAD country programme implementation on behalf of the Government. The MOF assumes effective coordination with central government agencies and international donors The MOF carries out its responsibilities through the Departments of Finance (DOF) at provincial level, the Bureaux of Finance (BOF) at prefecture and county levels. The Ministry of Finance as representative of the borrower of IFAD loan receives and passes on the loan proceeds to the provincial DOF of Hunan, subsequently to project prefecture and counties for financing the execution of the HARIIP. The Department of Finance (DOF) and relevant Bureaux of Finance in the prefecture of Xiangxi and the nine project counties have the responsibility for the use and flow of counterpart and loan funds.
- 104. **Project Leading Groups (PLGs)**. At county level, the project leadership will be assumed by the Project Leading Groups (PLGs) established by respective governments. PLGs should be led by a senior official of the local government and composed of representatives from local BOFs, DRCs and line agencies such as Bureaux of Agriculture, Forestry, Water Resources, Transport, State Grid, Environment Protection, Auditors, and technical partners such as the All China Women's

Federation and the Poverty Alleviation Office. PLGs are responsible for the following: (i) overall supervision of PMO operations, (ii) coordination of the government bureaux and agencies involved in project implementation, (iii) review and endorsement of AWPBs and annual progress reports, and (iv) coordination of counterpart resources.

- 105. **The Department/Bureaus of Finance (DOF/BOFs)** at the provincial and county levels, and in the prefecture of Xiangxi, respectively will be responsible for the following: (i) opening and management of the Project Accounts; (ii) administering the project resources including the IFAD loan and counterpart funds; (iii) review and approval of the financing needs of project implementation; (iv) overseeing the use of project resources; (v) ensuring effective flow of funds for project implementation; (vi) providing appropriate training to the financial officers of PMOs in terms of financial management; and (vii) preparing Withdrawal Applications (WAs) and reimbursement of eligible project expenditures on a timely basis.
- 106. **PMOs** will assume the actual project management and coordination. They focus on planning, coordinating, monitoring and reporting of the project. Implementation of project activities will be delegated to the implementing agencies (IAs) at county level (Table 3), under the coordination of CPMOs. The main IAs and their roles are explained below.
- 107. **Bureaus of Agriculture (BOAs)**. The routine of county BOAs includes the detailed planning, implementation and monitoring of agricultural and rural development activities. Technical services are provided through their technical service network, including the Agro-Technical Extension Stations, Soil and Fertilizer Stations, Plant Protection Stations, Cash Crop Working Stations, Agricultural Industrialization Offices, Green Food Development Offices, Seed Administration Stations, and Seed Companies.
- 108. For HARIIP, county BOAs will be responsible for the implementation of project modules including the cash crops/off-farm IGAs, orchard-poultry integrated farming, support to farmer cooperatives, and technical service support when it relates to agriculture development, all under the coordination of CPMOs. Its responsibilities include, inter alias, (i) the identification of eligible townships, villages, and cooperatives with given criteria; (ii) identification of target households for carrying out the modules, together with VIGs; (iii) adjustment of the modules to fit local conditions in line with given criteria, in close cooperation with the extension services which will be responsible for the implementation of the modules on the ground; (iv) technical support and follow-up services to beneficiaries on module activities; (iv) facilitating the formation of beneficiary groups by trade and linking them with relevant farmer cooperatives, or facilitating the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries; (v) monitoring and evaluation of the cooperatives that are supported by the HARIIP, and (vi) reporting to CPMOs on the progress and results of module implementation. The first two activities are already executed during the project preparations in the counties.
- 109. If in some counties the agro-forestry module leads to a preponderant linkage with the support of farmers' cooperatives and the increased support from the local technical services, implementation of modules of support to farmers' cooperatives and technical service support should be shifted to the County Bureaux of the state forestry administration (SFA) for better synergy and relevance. This should be done under the coordination of the CPMO and subject to the approval of the PPMO.
- 110. **County Bureaus of State Forestry Administration (BOSFAs)**. The County Bureaux of SFA are responsible for the detailed planning, implementation and monitoring of the agro-forestry module, under the coordination of CPMOs. Technical services are provided through their technical network, including the County Forestry Stations. Their responsibilities include, inter alia, (i) the identification of eligible villages and households with given criteria, together with VIGs; (ii) adjustment of the module to fit local conditions in line with given criteria; (iii) technical support and follow-up services to beneficiaries on module activities; (iv) facilitating the formation of beneficiary groups by trade and linking them with relevant farmer cooperatives, or facilitating the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries; and (v) reporting to CPMOs on the progress and results of module implementation.
- 111. BOSFAs may also be responsible for the implementation of the modules of support to farmers' cooperatives and technical service support, if the agro-forestry module leads to increasing demands by farmers' cooperatives and tailored technical service support.
- 112. **Bureaus of Water Resources (BOWRs).** The county BOWRs undertake the responsibility of developing irrigation schemes and drinking water supply facilities, as well as the larger maintenance

of the schemes and facilities. For drinking water supply the input of the Bureau of Health is important ensuring good quality drinking water and ensuring aftercare through quality monitoring of the source and the distribution system. At the village level, VCs will be responsible to organise and supervise the operations and maintenance of the drinking water supply system. In the irrigation schemes WUAs will manage the system and be responsible for organising and supervision of O&M. Major repairs will be the responsibility of BOWR, but smaller interventions will be carried out via the VCs and WUAs and they will charge the water users for these repairs. For HARIIP, county BOWRs will be responsible for the implementation of the construction of irrigation and drinking water supply facilities (for drinking water supply also the county BOH), under the coordination of CPMOs. Their responsibilities include, inter alias, (i) the identification of eligible villages suitable for carrying out the interventions, within the list of selected villages confirmed by the CPMOs; (ii) facilitating the formation of interest groups for the operation and maintenance of project works; (iii) detail design of the works by site; (iv) organising the construction of the infrastructure; and (v) reporting to the CPMOs on the progress and results of module implementation. The first step has already been executed in the project preparations. For a more detailed overview of the implementation processes see Annex 4 and the Working paper 1.

- 113. **Bureaus of Transportation (BOTs).** The county BOTs are responsible for the development and maintenance of roads. For HARIIP, county BOTs will be delegated with the responsibility of implementing the village roads construction, under the coordination of CPMOs. Their responsibilities include, inter alias, (i) the identification of eligible villages suitable for carrying out the activities, within the list of selected villages confirmed by CPMOs; (ii) facilitating the formation of interest groups for the operation and maintenance of the project works; (iii) detail design of the works by site; (iv) organising the implementation of the roads construction; and (v) reporting to CPMOs on the progress and results of module implementation. The first step has already been executing in the project preparations. For a more detailed overview of the implementation processes see Annex 4 and the Working paper 1.
- 114. **Bureaus of State Grid (BOSGs)**. The BOSGs are responsible for the development and maintenance of the grid network. They will be delegated the responsibility for implementing the rural grid upgrading. Its responsibilities include, inter alia, (i) the identification of eligible villages suitable for carrying out the activities, within the list of selected villages confirmed by CPMOs (which has already been executed during 2011); (ii) detail design of the works by site; (iii) organising the implementation of the grid upgrading; (iv) ensuring the operation and maintenance of the project works; and (v) reporting to CPMOs on the progress and results of module implementation. For a more detailed overview of the implementation processes see Annex 4 and the Working paper 1.
- 115. In summary, implementation of project activities will be delegated to the IAs at county level under the coordination of CPMOs. These agencies are selected because they are part of the state structure mandated for respective sector development and administration. There are no private sector players that are competent to carry out the activities. Based on its assessment on managerial, operational and technical capacities, the mission considers those IAs possess the required competence for implementing the proposed activities. The main IAs and their implementation responsibilities are summarised in table 3.

Table 3: Project Implementation Arrangement

#	Project Modules/Interventions	Implementing Agencies
1	Irrigation facilities	County BOWRs
2	Drinking water supply facilities	County BOWRs and BOHs
3	Village roads	County BOTs
4	Rural grid upgrade	County BOSGs
5	Cash crops/off-farm IGAs	County BOAs
6	Orchard-poultry integrated farming	County BOAs
7	Agro-forestry	County SFAs
8	Support to farmer cooperatives	County BOAs or BOSFAs
9	Technical service support	County BOAs of BOSFAs
10	Root and tuber crop	County BOAs

Technical partners in implementation

116. **All-China Women Federation (ACWF)**. The ACWF is a grassroots member-based organization, represented at all administrative levels up to the village committee. Its mandate includes

the coordination of, and support to, urban and rural women for their empowerment and development. ACWF works actively with other technical agencies to provide training in a broad range of areas to rural women and it is also involved in organising rural women to develop income generating activities. Although ACWF is not an implementing agency (IAs) for HARIIP, it will collaborate closely with the project under the framework of county PLGs, assisting the IAs in addressing gender issues in the project implementation, mobilizing women to participate in project activities, organising capacity building for women, and overseeing prioritized targeting to women. This will receive appropriate support for doing these. Also, often ACWF members are members of the VIGs.

117. **Poverty Alleviation Office (PAO)**. PAO undertakes the responsibilities for rural poverty reduction. Its routine includes the design of poverty reduction strategies, implementation and management of governmental poverty reduction projects. PAO manages an extensive monitoring database of rural poverty, which represents a good basis for HARIIP to use in the selection of project areas, including counties, townships and villages. It will be essential for HARIIP to share with PAO its experiences for poverty reduction in the project areas. Similar to ACWF, PAO is also not an IA for HARIIP, but it will assist the PMOs and IAs in the selection of eligible villages and beneficiaries and appropriate targeting in the project implementation, under the overall guidance of the county PLGs.

Institutional outcomes

- 118. Under the project framework, institutional development will be achieved through several avenues, intervening at both service support system and grassroots beneficiary level.
- 119. The module for technical service support will strengthen the institutional and operational capacities of the agricultural extension services. While the technical staffs will be trained and exposed to new and diversified techniques of agri-business support, equipment and materials will be provided to help upgrade the technical instruments and tools. Perhaps the most important outcome of this support does not relate to any physical or tangible add-on, but more to the fundamental change of service support, from the conventional administrative coverage to the service driven and clientele centred support modality.
- 120. The PMO structure will certainly benefit from the institutional support from the project under the component C of project management. Capacity building in the field of project management, coordination, M&E, gender mainstreaming and knowledge management will not only strengthen the operational capacities of the PMO network during the project life cycle, but also remain as part of the built institutional asset for the Department and Bureaus of Agriculture that host the PMO at provincial, prefecture and county levels.
- 121. A number of involved implementing agencies, such as the Bureaux of Agriculture, Forestry, Water Resources, Transport, and State Grids, will be exposed to the innovative approaches of agriculture and rural development, and poverty reduction introduced and implemented by the Project. It will be the same for the collaborating agencies such as local ACWFs and PAOs.
- 122. The establishment of VIGs strengthens the grassroots-level management and operational capacity, fostering community-governed and equitable representation and participation of the vulnerable groups in community decision making structure. Within the VIGs women and, where opportune, minorities have a good position. Through these experiences, their future position in the villages might become stronger and they might also take positions in the VC.
- 123. Support to the farmers' cooperatives and establishment of beneficiary self-managed O&M committees will foster grassroots organization of the rural women and men, with self-governed and sustainability-driven mechanisms established in search of strengthened capacities for production, marketing, management and self-development.

Links with complementary projects

- 124. HARIIP will establish links with relevant government and donor-funded interventions in the project areas, in order to exploit complementarities, maximize synergies and avoid duplication of efforts, and share lessons learned. Details of all relevant initiatives are presented in Key File 3. The most relevant programmes and projects are outlined below.
- 125. A wide range of special government programmes is being implemented in support of the government's key policy directions, mainly in the areas of agriculture and rural development. The most relevant to HARIIP include:
 - (a) The Yangtze River Shelterbelt Project (SFA, MOF))

- (b) Consolidating outcome of Conversion Project (SFA, MOF)
- (c) Ecological Public Welfare Forest Project (SFA)
- (d) Oil Camellia Forest Planting Project (SFA)
- (e) Construction of Bamboo Demonstration Base Sites Project (SFA)
- (f) Low and Medium Yield Farmland Improvement Project (MOA),
- (g) The Rehabilitation and Improvement for Water Saving of Large and Medium Scale Irrigation Districts (MOWR),
- (h) Comprehensive Agricultural Development Programme, State Office of Comprehensive Agricultural Development (SOCAD).
- (i) National Programme on Safety of Rural Drinking Water Supply (MWR),
- (j) Programme of Poverty Alleviation (State Council's Leading Group Office for Poverty Alleviation and Development),
- (k) Construction of Small Scale Water Conservation Works (MWR),
- (I) "Connecting-All-Village" Road Construction Project (MOT)
- 126. Some ongoing programmes may have the potential of synergy in the project area, as outlined in the following. Note that the donor community tends to gradually phase out of the support in agriculture and rural development at village and household levels in China.
- 127. The Ministry of Agriculture (MOA) launched a programme, namely "Demonstration County of agricultural extension service reform" in 2006, which has introduced the participatory extension approach into the agricultural extension system while improving the working conditions of township technical extension stations. MOA provides about CNY 1 million to each county to support demonstrations of new varieties and technologies, and technical training for farmers and technical staff. Given that the agro-extension network remains the major service provider in the project area, HARIIP will intervene at improving the conditions and effectiveness of agro-technical extension systems through its module of technical service support.
- 128. The Eco-Farming Project, financed by the World Bank, covers 18 counties in Hunan. The project aims at building eco-farming system, improving the eco-environment in rural areas, and increasing farmers' income through developing the rural economy. Its main activities include: (i) building of eco-farming systems, which cover the construction of biogas systems and the development of livestock and agriculture; and (ii) improvement of biogas technical service networks. While HARIIP will not overlap with this World-Bank assisted project, it will share experiences in implementation and management, environment friendly use of biogas by-products, synergistic effect, including improvement of infrastructure, development of integrated farming models, and improved access of the rural poor to updated technologies and remunerative markets.
- 129. The national T-bond biogas development programme, initiated in 2003, covers 24 provinces in the country, with an implementation period of seven years. The programme covers a substantial number of counties in Hunan, including some HARIIP counties. Each participating household is provided with in-kind grant worth about CNY 800 for the construction of a biogas digester, and technical support and training are provided to farmers on the construction of digesters, livestock production and utilization of digester slurry in safe and food production. HARIIP will not invest directly in building the biogas systems, but will promote the integration of the household biogas system into its production modules where possible. Cost savings in fertilizers and pesticides will be highlighted while using biogas slurries and liquids.

C Planning, M&E, learning and knowledge management

130. The Annual Work Plan and Budget (AWPB) is an important management tool and its process should be completed through a participatory exercise from the village level to avoid top-down planning. The AWPB is also a core document that is closely related to further progress reporting and M&E exercises. The annual work planning and budgeting process should also capture the assessment of the training efforts of last year and assess progress realised and further actions to be taken to fill possible training gaps.

- 131. In preparing the first AWPB, the Project Management should be aware of available budget and the amount of Initial Deposit released in order to prioritize critical investments identified. It will be necessary to prepare the following project year's budget to avoid shortage of funds available for the succeeding year. Project Management at different levels should assume the timely undertaking of AWPB and submit it to IFAD for approval (See related Loan Agreement, Article and Section related to Annual Work Plans and Budgets).
- 132. Counterpart matching funds should be secured and accounted in the AWPB (See related Loan Agreement, Article and Section related to Availability of Loan Proceeds and Other Resources).
- 133. In preparing the AWPB, the narrative presentation should be concise and precise; spreadsheet tables and schemas should be used where needed to illustrate targets, achievements, costs and financing.
- 134. An AWPB primarily consists of seven parts (chapters), which first update the past achievements with a focus on the previous year's work, then address the projections for the upcoming fiscal year:
 - (a) Update on past achievements:
 - (b) Narrative introduction
 - (c) Summary of physical and financial Achievements (N/A for PY1 AWPB)
 - (d) Projections for the upcoming fiscal year:
 - (e) Summarized presentation by components
 - (f) Detailed presentation by components
 - (g) Cost and financing
- 135. More details can be found in the draft project implementation manual (Annex 11).
- 136. **Monitoring and Evaluation (M&E)**. HARIIP will adopt the M&E framework introduced in the Country Programme in China. The provincial PMO will establish an effective and efficient Monitoring and Evaluation Framework (MEF) that is in line with IFAD's Results and Impact Management System (RIMS). Overall responsibility for monitoring and evaluation (M&E) will be vested in the M&E Specialist in the PMO at prefecture and county level. In order to undertake the key M&E functions the following activities should be carried out: (a) the M&E start-up workshop in project year one, which will focus *inter-alias* on ensuring the M&E system monitors and evaluates income data, so that by mid-term reliable information will become available; (b) regular review of M&E in line with the project reporting requirements; (c) technical backstopping and continuous external support for the reporting system; (d) training for PMO and IA staff to further develop their M&E skills; and (e) ensure the M&E system systematically tracks the main types of enterprises (or modules) to determine whether their estimated budgets developed in the present PDR have in fact been realized.
- 137. The logical framework will form the basis for the overall system for measuring the project performance based on expected outputs, outcomes and impacts. The agreed measures of output, outcome, and impact form the framework for reporting by implementing agencies and partners, as well as for PMO progress reporting to the PLG and IFAD. An Annual Review Workshop will provide a forum for analyzing implications of the results/outputs achieved in the previous years with respect to outcome and overall goal. The PPMO worked out the number of beneficiaries and expected benefits of HARIIP (WP4 and Annex 2), which have been included in the logical framework.
- 138. *Monitoring* will concentrate on selected RIMS 1st level indicators and some 2nd level ones,. This monitoring will feed into the annual performance report and help guide the project management in its decision making. Performance monitoring will include internal monitoring of implementation progress by each of the stakeholders involved in implementation, as well as participatory M&E activities conducted by the relevant stakeholder or by an external technical service provider.
- 139. Evaluation focuses on the outcome and impact levels of the Project. This impact evaluation would measure changes in the livelihoods of the beneficiaries, such as levels of incomes, asset ownership index, food security, and malnutrition, that relate to the implemented project activities. The impact evaluation will also attempt to reveal the relevance, sustainability and targeting performance of project activities. RIMS 2nd and key level indicators will contribute to such evaluation which will be undertaken through periodic surveys of RIMS and baselines three times for the Project, namely at beginning, mid-term and completion. Meanwhile, self-assessment on expected outcomes will be undertaken by PMOs, as part of the annual progress report.

- 140. In addition, state of benefits and participation at the levels of households and individual beneficiaries will be undertaken through a grassroots recording and reporting by VIGs at village-level, complemented by regular recording and reporting of the involved implementing agencies. Special attention will be given to the effectiveness of targeting of the beneficiaries, disaggregated by well-being category and by gender where applicable. The results will help to further orient the targeting of related modules, which should be adaptable to maintain a sound targeting and avoiding possible deviation.
- 141. **Learning and knowledge management**. Key elements of the Project's knowledge management strategy include the following:
 - (a) Establishment of a M&E framework to provide information and analysis on progress achieved against log frame and AWPBs;
 - (b) Implementation of results and impact management system (RIMS) of IFAD;
 - (c) Routine conduct of planning and review meetings and monitoring & evaluation ("lessons-learned") workshops at various levels;
 - (d) Participatory monitoring and evaluation by VIG, including evaluation of the targeting performance and reviewing the wealth ranking;
 - (e) Production of regular news releases on the best practices and use of other mass media (including TVs and radio) as a channel to share knowledge, experience and innovative initiatives and success:
 - (f) Conduct of annual training and workshops to consolidate "lessons learnt", involving PMOs and IAs staff at all levels; and
 - (g) In addition, PMOs will be responsible for sharing lessons learnt and to promote the approach publicly and through the country programme's internet exchange platform(s) and IFAD's region wide or global electronic networks. Cooperating agencies, such as PAO and ACWF, will be encouraged to join in sharing lessons learnt in the field of poverty alleviation, gender mainstreaming in their nationwide network and publicly.
- 142. HARIIP will participate actively in regional knowledge networking activities in areas relevant to the Project, including the effectiveness of: (a) diversified and adaptive household-level farming models, (b) development of farmers' cooperatives, (c) improvement of technical service support systems in agriculture and rural development, and (d) enhanced targeting approaches on poverty reduction. Regular contributions to the country programme's data base of knowledge management will be expected and the project management will be encouraged to take part in exchanges and experience sharing related to poverty alleviation and agricultural and rural development in the regions of East Asia and South-East Asia, but also beyond.
- 143. The Project will actively take part in the South-South Cooperation exchanges promoting Chinese poverty reduction successes and challenges among developing countries and sharing experiences and lessons learnt. The future exchanges will not be limited to conducting study and exposure tours only. Efforts will be made for them to also lead to follow-up technical assistance, where needed and demanded, by China in the areas of poverty alleviation, agriculture and rural development in which the Chinese experience and expertise are broadly recognized as valuable.
- 144. **Possible innovations**. HARIIP incorporates a number of innovative features including, but not limited to the following:
 - (a) Continued refinement of the modular approach, designed to give implementers increased flexibility to respond to changing conditions and beneficiary needs;
 - (b) Deepening of decentralised development approaches through refinement of village level representative structures and participatory planning processes, and further decentralisation of the management and maintenance of community-level assets;
 - (c) Piloting the grassroots-level technical service support, with transformation from administrative coverage to service-driven targeting, which has the potential of becoming a reference of good practice and complementary approach to the conventional extension delivery system;
 - (d) Building cohesive linkage among productive assets, sustainable on-farm and off-farm production, cooperative farming and marketing, and farmer-centred service support;
 - (e) Promotion of diversified and niche-market production and marketing as an important income generation opportunity for poor households;

- (f) Promotion of water and soil conservation techniques, safe food, green food and good agricultural practices (GAP) codes as a means of increasing consumer confidence in food safety and therefore protecting market access and returns;
- (g) Promotion of sustainable and household-based farming models that lead to increased income, reduced pressure for migration and encourage the young generation about informed farming in improved natural and socio-economic conditions; and
- (h) Formation of the farmers' cooperatives as a mechanism for mainstreaming the poor men and women into promising new market opportunities and improve connections to the value chains for their products and building partnerships between producers and other value chain participants.

D Financial management, procurement and other fiduciary aspects

- 145. **Flow of Funds**. An IFAD loan of USD 46 million equivalent will be passed on to PR China on Modified Ordinary Terms and Conditions, i.e. shall be subject to interest on the principal amount of the loan outstanding at a variable rate established semi-annually by IFAD, with a maturity period of eighteen (18) years including a grace period of three (5) years starting from the date that the Fund has determined that all conditions precedent to withdrawal of IFAD funds have been fulfilled. The Government requested aligning the usual grace period of the loans on ordinary terms and conditions, namely 3 years, with the implementation period of 5 years for the HARIIP to allow the loan repayments to IFAD to start after the project completion date. The request was endorsed by IFAD Management, and will be recommended to the Executive Board for approval. However, according to the IFAD Lending Policies and Criteria, when the grace period is different from the standard IFAD lending terms, the net present value in SDR of repayments should be maintained.
- 146. An IFAD grant of USD 1 million equivalents will be made available to co-finance the development of root and tuber crops in the project area, and undertake related M&E and research enhancement under the HARIIP framework. The support is needed for the introduction and experiments of new varieties, study on methodologies of virus-free micro tuber production and the establishment of propagation facilities; Total IFAD financing will therefore amount to USD 47 million equivalent.
- 147. The loan will be passed on, on the same IFAD loan terms and conditions without additional charges, from the Ministry of Finance (MOF) to the Hunan Provincial Government, and subsequently to each of the project Counties. At county level, IFAD loan proceeds will be transferred without delay from the Finance Bureau to PMOs and the concerned implementing agencies in accordance with the approved AWPBs. The IFAD loan resources will be repaid by the Government of P.R. China.
- 148. Two Designated Accounts respectively for the IFAD loan and grant will be opened by the DOF of Hunan Province in a bank acceptable to IFAD, through which all IFAD funding will be channelled. Once the IFAD loan and grant agreements enter into force and the conditions for disbursement of the resources under them have been fulfilled, the Borrower and the Grant Recipient may request, in one (or more) withdrawal(s), an agreed amount to be deposited into the Loan and Grant Designated Accounts respectively. For the loan this will be equivalent to the first six months of the approved AWPB, in the aggregate, and for the Grant it will be up to USD 300,000 in total. Subsequent replenishments of the Designated Accounts will be effected through the submission of WAs and accompanying supporting documents or Statements of Expenditures (SOEs), in accordance with IFAD procedures as set out in the Loan Agreement. The initial deposit will constitute the 'authorized amount' of the Designated Accounts. All withdrawals must be in line with projected expenditures detailed in the approved AWPBs.
- 149. Funds will flow from the provincial Designated Accounts to the Project Accounts in CNY held by the county BOFs. For Xiangxi Prefecture, funds will flow to the four project counties' Project Accounts via the prefecture BOF's Project Account in CNY. The provincial DOF will ensure that funds received at each level are transferred without delay. The Provincial PMO, prefecture PMO of Xiangxi and all county PMOs, will maintain separate Implementation Accounts in CNY; funds to support PMOs' activities related to implementation management and operations will be transferred from the DOF/BOF Project Accounts of respective levels.
- 150. Similarly, involved implementing agencies and service providers will open a separate Implementation Account in CNY to receive necessary funding from the county BOF's Project Account, in accordance with approved AWPBs and implementation progress.

- 151. The following will be the SOE thresholds recommended for the project, further details for which will be provided in the Letter to the Borrower and Grant Recipient.
 - (a) Contracts valued at less than USD 200,000 or its equivalent in local currency, for goods, works or contracts with consultancy firms;
 - (b) Payments of less than USD 100,000 or equivalent for consultancy contracts with individuals; and
 - (c) Local training under USD 60,000 or equivalent.
- 152. These SOE thresholds may be amended by the Fund during the course of project implementation.
- 153. **Retroactive Financing:** Provision will be made for retroactive financing of up to 10% of the IFAD loan for PY1 to finance the start-up preparation activities of the Project in the period between the signing of the MOU of the Design Completion Mission (on 2 December 2011), and the entry into force of the IFAD loan. However, amounts eligible for retroactive financing shall be reimbursed to the borrower only after the financing agreement has entered into force and any conditions precedent to disbursement have been met. It is further emphasised that these funds cannot automatically be accessed without showing proof of the SOE, including counterpart funds, from the counties to benefit. Eligible expenditures for the retroactive financing are those incurred under the project disbursement accounts C (equipment & materials), D (Training, Workshops, TA & Studies), and E (Agricultural Materials). Major activities funded thus include: (i) purchase of essential items of equipment for PMOs, excluding vehicles; (ii) establishment of an M&E system; (iii) start-up training and workshops of implementation and management; (iv) exposure visits for knowledge and experiences sharing; (v) field surveys and studies; (vi) seasonally-dependent crop demonstration activities.
- 154. **Procurement**. Goods and services financed through the proceeds of the loan will be procured in accordance with IFAD's procurement procedures, which are detailed in the IFAD Procurement Guidelines Manual. The procurement method to be applied in each particular case will depend on the nature of the expenditure and the estimated value of the contract. To the extent possible, the goods, works and consulting services financed by the IFAD loan shall be bulked into sizeable bid packages in such a manner as to permit optimal use of competitive bidding. Under all circumstances, procurement of the project will have to be well documented for post review by IFAD and for audit purposes. Related guidelines will be detailed in the Loan Agreement. In view of the nature of and amount involved in the goods and services, vehicles (including motor cycles) are suggested to be procured following the local competitive bidding (LCB) process, and may be subject to prior review by IFAD if their amounts are more than a certain threshold. Other goods and services will be procured following the local shopping or direct contracting processes as appropriate.
- 155. All bidding documents and contracts for the procurement of goods, works and services financed by the IFAD loan and grant will include a provision requiring contractors to:
 - (a) Allow full inspection by IFAD of all bid documentation and related records:
 - (b) Maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and
 - (c) Cooperate with agents or representatives of IFAD carrying out audit or investigation.
- 156. A procurement plan covering a period of 18 months will be prepared as part of the first AWPB to be reviewed and approved by IFAD. The procurement plan will be based on the individual procurement plans prepared by each project county, the provincial PMO and the prefecture PMO of Xiangxi. The plan will provide information of goods and works, disaggregated into different interventions of infrastructures, modules and management component. A draft procurement plan for PY1 is provided in Annex 8 for the PMO to further elaborate, on the basis of the detailed description goods and materials to be procured at PY1.
- 157. Details on procurement review by IFAD, including prior and post review, modifications, etc. are explained in Appendix I of the IFAD Procurement Guideline Manual. The Project will follow the national and IFAD procurement requirements and maintain all relevant documents, bids, purchase orders and payment vouchers for post review by IFAD and for audit purposes.
- 158. **Accounts and Accounting**. Separate and disaggregated Implementation Accounts will be maintained by the provincial PMO, prefecture PMO of Xiangxi, and county PMOs, in accordance with

IFAD's requirements and internationally acceptable accounting standards. IAs at various levels will also maintain disaggregated Implementation Accounts for project-funded activities. County BOFs will be responsible for periodic review of county PMO and IA accounts so as to ensure their adherence to acceptable standards of transparency and accuracy.

- 159. **Auditing**. In line with current practice for IFAD projects in China, the Provincial, Prefecture and County Audit Bureaux, which are constituted as independent bodies under the respective Government Offices, will be responsible for auditing accounts at provincial, prefecture and county levels on an annual basis. The Auditors will review withdrawals from the Project Accounts at various levels on the basis of SOEs, and provide an independent opinion on whether such expenditures fully comply with expenditures eligible for IFAD disbursements. The use of counterpart funds will be audited in a similar manner, with a corresponding audit report provided to IFAD for information. IFAD, as part of its supervision functions, will also inspect project accounts to ensure their adherence to acceptable standards.
- 160. The financial reporting and accounting practices currently followed by the DOF/BOF are acceptable to IFAD. The accounting sections of the PMOs at each level will be adequately staffed and trained to handle the accounting requirements of the Project.

E Supervision

- 161. Supervision will be carried out directly by IFAD. IFAD's direction supervision, which should normally take place every six months, will mainly relate to the project financial management, its physical and financial progress, implementation management's efficiency and implementing agencies' performance at all levels. Supervision missions will primarily address issues, including the following:
 - (a) Project fiduciary aspects;
 - (b) Implementation progress;
 - (c) Outputs, outcomes, and impact of the activities under related components and modules;
 - (d) Sustainability of project outcomes and impact;
 - (e) Risks and opportunities related to project activities;
 - (f) Innovations and knowledge management; and
 - (g) Targeting and gender mainstreaming.
- 162. Progress review will be conducted by IFAD, normally in conjunction with the annual direct supervision exercises. It will pay special attention to the performance of designed modules and intended approaches in relationship with the targeting efficiency and in correlation with the movements towards expected outcomes and impacts. Adjustments can be proposed where necessary, which should be reflected through the adjustment of the logical framework and AWPBs.
- 163. A Mid-term review will be conducted by IFAD. This is tentatively scheduled for mid-2015 towards the third full year of implementation. A key function of the MTR will be to review outreach to target groups and elite capture issues, and to adjust project focus and design if considered necessary.
- 164. *Implementation support* will be provided by IFAD as follow-ups of its direct supervision and progress review, and as a response to possible supports required by the project management. Support will be conducted on a demand-driven basis and in accordance with needs identified.

F Risk identification and mitigation

165. The Project design aligns the IFAD investments with the Government's development policies and strategies in poverty alleviation, agriculture and rural development; it is based on the development needs and priorities that the Hunan Province identified and proposed. Risks associated with the Project, therefore, relate essentially to the fast changing socio-economic environment and are of an operational nature mostly. Several risk factors have been reviewed in accordance with their coherence to the Project. Some of them are closely associated to project implementation, while others are more on a continuing basis, as shown in the following table.

Table 5: Risks and mitigation measures by project components/modules

Component/ Module	Risks	Risk level	Risk mitigation measures	Residual risk level
	Inappropriate operation and maintenance of project works resulting from inadequate capacity of O&M groups in performing their duties.	Medium	The County Bureau of Water Resources and the Township Water Resources Stations will take charge to support the groups for which they collect water fees and receive budgets from the Provincial governments yearly.	Low
Community infrastructure	Damage of project works by floods or other natural calamities.	Medium	Mechanisms for the repair of such damage exist in the back-up system of Government; related technical agencies under county government will undertake the responsibility.	Low
	Soil and water erosion resulting from excavations for the pipelines for drinking water.	Medium	All water supply works are based on existing springs and no new infrastructure like dam or new ponds will be constructed.	Low
Cash crops,	Difficulty increasing farmers' revenues due to difficult market access for their products.	Medium to high	Only those products for which known markets exist or for which appropriate twining arrangements have been made will be promoted.	medium
crops, orchard- poultry, and agro-forestry modules	Products could not meet the standard for premium market due to low capacity of the rural poor.	Medium to high	Twinning arrangements between farmers and buyers will foresee the later building the capacity of famers to meet their requirements.	medium
	Damage and failure associated with climate change and rainfall.	Medium	Competent provincial government agencies and resources will be mobilised to help the victims of such damages.	Low to medium
Technical service support	Inadequate capacity of county BOA and SFA to support township extension network.	Medium	Flexibility is inbuilt in the project to mobilise competent technical assistance from the Province of related academies and universities, if needed.	Low to medium
Support to	Failure to establish sufficient management capacity of the recipient cooperatives.	Medium	Technical support, training, exposure and access to new techniques and know-how	Low to medium
farmer cooperatives	Insufficient production for the cooperatives to have economies of scale required to survive.	Medium to high	Buyers and cooperatives will be assisted to work out more consolidation to achieve the required scale of production to remain profitable.	Low to medium
	Downward economic trends or market volatility leading to reduced margins due to increases in fixed asset investments.	Medium	The Co-operatives will work with the Provincial governments to adapt their business plans accordingly allowing the cooperatives remain solidly incorporated into the value chain.	Low to medium
Value chain enhancement	Inequitable access to facilities and services for the extreme poor.	Medium	Cooperative by laws and M&M guidance stressing inclusive access and equal right of utilization will be enforced by the provincial governments.	Low to medium
	Corruption in procurement of service and goods.	Medium to high	Local laws and regulations regarding procurement, bids and contracts will be enforced by the Provinces and IFAD procurement reviews and approval processes will capture and prevent these.	Low to medium
Project	Inadequate targeting to the poor and women during implementation.	Low to medium	Provincial Government provisions for targeting will be invoked to ensure the criteria for selection of villages and households are appropriate.	Low
management	Slow disbursements of project funds resulting from delayed preparation of withdrawal applications (WAs).	Low to medium	Implementation support will identify and remove any bottlenecks related to IFAD funds, while close supervisions will help the PMOs to ensure counterpart funds are mobilised on time.	Low

- 166. Other risks may arise, of *force majeure* nature, such as floods, drought. The main coping strategy of the households at this moment is labour migration. Government has been investing in protection system for river floods and promotes an incentives based resettlement of affected villages to safe areas. Meanwhile, the Project takes into account the challenges of possible natural calamities when proposing specific activities, which vary geographically. In the areas where floods occur frequently, for example, activities are proposed to avoid the possible flooding season or mitigate the effect of floods through developing flood-tolerant crops/trees.
- 167. In summary, those risks are considered to have a medium probability and adequate mitigating measures have been proposed under each modular package to reduce them to a low or medium low level. The Logical Framework presents the assumptions that are important for the success of the Project. The PMO will play an important role in monitoring these risks and will be instrumental in

ensuring that any issues that could jeopardize the Project's success are addressed by the relevant stakeholders or related agencies.

PROJECT COSTS, FINANCING AND BENEFITS

A Project costs

168. The total Project costs, including physical and price contingencies, are estimated at USD 93.2 million or CNY 613.6 million over five years of Project implementation period with expected start within 2012. Project investments are organized into three major components. The Community Infrastructure Component accounts for 66% of the total base costs, followed by the Sustainable Agriculture and Market Access Component (25%), and the Project Management Office for about 9% of the total base costs. The foreign exchange component amounts only to USD 0.148 million or CNY 946 million base costs mainly for expenditures related to PPMO overseas study tours. Physical and price contingencies account for about USD 0.278 million and USD 4.525 million respectively, or 0.31% and 5.124% respectively of total project base costs. And the applicable direct and indirect taxes are around USD 4.4 million or 4.8% of the total project costs. The investment costs amount to USD 85.83 million or CNY 564.7 million, representing 92% of the total base cost, while the recurrent costs amount to USD 7.37 million or CNY 48.95 million, representing 8% of the total costs. A summary of the project costs by components is shown in Table 6, while a complete set of project summary tables by county by component are presented in WP 6, Appendix 1.

Table 6: Project Costs by Components

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							%	%Total
		(CNY '000)			(000° \$2U)		Foreign	Base
	Local	Foreign	Total	Local	Foreign	Total	Exchange	Costs
A. Community Infrastructure	372,042	-	372,042	58,132	-	58,132		66
B. Sustainable Agriculture & Marketing Access	141,387	-	141,387	22,092	-	22,092	-	25
C. Project Management Office (PMO)								
 Provincial & Xiangxi Prefecture PMO 	9,623	721	10,344	1,504	113	1,616	7	2
2. County PMO	41,730	225	41,955	6,520	35	6,555	1	7
Subtotal Project Management Office (PMO)	51,353	946	52,299	8,024	148	8,172	2	9
Total BASELINE COSTS	564,782	946	565,728	88,247	148	88,395	-	100
Physical Contingencies	1,781	-	1,781	278	-	278		
Price Contingencies	46,044	92	46,136	4,516	9	4,525	-	5
Total PROJECT COSTS	612,607	1,038	613,645	93,042	157	93,199		105

Table 7: Project Financing: Components by Financiers (in USD'000)

	•		_	•	•		•		•			,	
												Local	
	IFA)	IFADO	3art	TheGove	ment	Benefici	aries	Tata	į	Far.	(Exd.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch	Taxes)	Taxes
A Community Infrastructure	31,182	508	-	-	29,589	482	588	1.0	61,359	658	-	58,320	3,039
B. Sustainable Agriculture & Marketing Access C. Project Management Office (PMD)	13,265	57.1	881	38	9,094	391	-	-	23,240	249	-	23,043	197
1. Provincial & Xiangxi Prefecture PMO	599	347	56	33	1,069	620	-	-	1,725	1.9	121	1,449	154
2 County PMO	953	139	ങ	09	5,859	852	-	-	6,875	7.4	36	5,792	1,047
Subtotal Project Management Office (PMO)	1,552	180	119	1.4	6,928	806	-	-	8,600	92	157	7,241	1,202
Total PROJECT COSTS	46,000	494	1,000	1.1	45,611	489	588	06	93,199	1000	157	88,604	4,437

Table 8: Project Costs: Disbursement accounts by Financiers (in USD'000)

												Local	
	IFAI)	IFAD G	rant	The Gove	rnment	Benefic	iaries	Tota	al	For.	(Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	Taxes)	Taxes
1. Civil Works	30,849	51.1	-	-	29,572	48.9	-	-	60,421	64.8	-	57,400	3,021
2. Vehides	318	73.0	-	-	117	27.0	-	-	435	0.5	44	274	117
Equipment & Materials	1,096	83.0	-	-	225	17.0	-	-	1,321	1.4	2	1,094	225
4. Training, Workshops, TA & Studies	2,904	88.7	352	10.8	18	0.5	-	-	3,274	3.5	108	3,148	18
5. Agricultural Materials	10,832	53.2	647	3.2	8,897	43.7	-	-	20,377	21.9	-	20,377	-
PMO Operating Costs	-	-	-	-	6,783	100.0	-	-	6,783	7.3	3	5,723	1,057
7. Community Infrastructures O&M	-	-	-	-		-	588	100.0	588	0.6	-	588	
Total PROJECT COSTS	46,000	49.4	1,000	1.1	45,612	48.9	588	0.6	93,199	100.0	157	88,604	4,437

B Project financing

- IFAD and Government resources, including the contributions of the beneficiaries, will jointly 169. finance the project expenditures at an average ratio of about 1:1. The overall project costs of USD 93.2 million will be financed by an IFAD loan of USD 46 million and an IFAD grant of USD 1. million, both representing 49.4% and 1.1% respectively of total costs (see Table 7). The Government of China will provide USD 45.6 million or 48.9% of total project costs, which will be used to finance direct investments, salaries, O&M, taxes and duties. Both IFAD and counterpart funds will be used to jointly finance all module implementation costs, vehicles, equipment and materials, as well as the cost of workshops, training, technical assistance and studies. Government and beneficiaries will finance all the recurrent costs (Table 8). The project beneficiaries will contribute USD 0.59 million or 0.6% of total project costs, and their contribution will mainly finance the operation and maintenance of the community infrastructures. Module financing is shared between IFAD and Government at a ratio of 58% IFAD and 42% Government for the modules related to cash crops, off-farm IGAs, orchard-poultry integrated farming, Agro-forestry, technical service support, and root and tuber crops; the module for support to farmers' cooperatives will be financed 70% by IFAD and 30% by Government. As far as expenditure/disbursement categories are concerned, IFAD resources will finance about 90% of the category for vehicles, equipment and materials, and the same for the category for training, workshops, technical assistance (TA), studies, while Government finances 10%.
- 170. The project resources will be allocated to the project counties based on the following considerations: (i) conformity with government's development plan and priorities on related sectors; (ii) minimum allocation of resources for effective management, (iii) size of poverty and vulnerable population, as well as the depth of poverty prevalent in the individual counties, (iv) the deficiency of the counties in productive infrastructure; (v) willingness of the local county governments to provide necessary counterpart funds required; and (vi) optimal potential of piloting innovative poverty reduction approaches. The approximate resulting allocation of IFAD loan proceeds available for the counties estimated at design completion in December 2011 is as follows: Lingxiang (11%), Yueyang (9%), Taoyuan (12%), Shaodong (12%), Longshan (11%) Guzhang (11%), Luxi (12%), Fenghuang (10%), and Jingzhou (10%), while the Provincial PMO and prefecture PMO of Xiangxi share 2% between them. Detailed COSTAB tables by county and by module are presented in Working Paper 6.

C Summary benefit analysis and economic analysis

- 171. **Project Area**. The Project would be implemented in nine counties of Hunan Province, namely: Lingxiang and Yueyang of Yueyang prefecture, Taoyuan of Chengde prefecture, Shaodong of Shaoyang prefecture, Longshan, Guzhang, Luxi, and Fenghuang of Xiangxi prefecture, and Jingzhou of Huaihua prefecture. Within these nine selected counties, implementation would initially be extended to 97 townships and 589 administrative villages. The Project's targeting strategy would be adapted to the changing dynamics of rural poverty with focus on community-level assets of collective nature, improving access to income generating opportunities, sustainable support services and strengthening the target groups' resilience.
- 172. **Project Beneficiaries**. The overall direct target group universe includes the total population of the 589 target villages estimated at 760,000 people or 182,000 households; but all of the 512,000 HHs (1,943,000 people) in the project selected villages will benefit generally, e.g. from the community infrastructures like the roads. The Project will adopt the inclusive targeting strategy by addressing the specific needs of all members of the different vulnerable groups, especially the poor women and men, the ethnic minorities and other possibly socio-economically marginalized groups, which are estimated to be about 35% of the total population. Thereby within the Project villages, the economically active poor men and women, the vulnerable ethnic minorities will be identified and served on a priority basis.
- 173. HARIIP will adopt the geographic targeting strategy of the Government in identifying the pockets of rural poverty in economically disadvantaged areas, and continue to apply the differentiated targeting and support model to complement the Government's poor village and poor household-based approach. As a result, the prime target group universe of the Project will be the economically active poor men and women, and the vulnerable ethnic minorities mainly involved in agricultural production.
- 174. Households or people in the target areas will benefit from the Project in varying degrees depending on their participation in the different Project activities. Beneficiaries can be classified as those: (a) farmers who would directly and actively participate in the Project's agricultural production modules by adopting the cropping patterns in their farms and participating in the tailored training for these crops; (b) households of members of cooperatives which will be strengthened through training

and institutional strengthening activities for better market access; (c) farmers/households who will be exposed to new or upgraded technologies through better organized and strengthened extension services; (e) farmers who will directly and indirectly benefit from irrigation facilities that will be rehabilitated or constructed under the community infrastructure component; (f) the farmers and traders who will incur less transportation costs, hence better price to the farmers, with the improved village roads; (g) households, particularly women members, who will be more productive with more time to work because of better health and less time spent to access drinking water with the establishment of drinking water systems; (h) households who can have better quality of life and enjoy the conveniences brought about by the upgraded electrical grid; (k) workers who will be employed during the construction and operation & maintenance of the infrastructure sub-projects; and, (i) in general, all members of the community, currently residing or returning members, who will enjoy and benefit from more economic and social activities due to easier access with the paved village roads.

- 175. For the purpose of this analysis, the direct Project beneficiaries are: (a) the 22,000 farm-households beneficiaries who will adopt the full package of Project interventions, under the various Project production modules, including households of members of cooperatives; (b) 81,000 households (110,000 persons) who will benefit from the technical services support module under the sustainable agriculture and market access (SAMA) Component; and (c) 174,000 households or 696,000 persons who will benefit from the community infrastructure subprojects under the Community Infrastructure Component of the Project (see WP 1, Community Infrastructure Improvement)³. The direct beneficiaries of the Project will also benefit, among others, from the irrigation facilities, drinking water supply, pavement of village roads and rural grid upgrading. The total number of estimated target beneficiaries of the SAMA modules amount to about 103,000 households or 193,000 people⁴, who will mainly benefit from training and capacity building and Project modules aiming to sustainably improve agriculture and market support. The total number of beneficiaries of the community infrastructure is around 96% of the total target of 182,000 households (or 174,000 households).
- 176. There are also other indirect Project beneficiaries, including the unemployed and underemployed in the selected area of the various Project counties, who are among the poorest sections of the population and who often depend on casual labour as an important source of livelihood. While it is not possible to estimate how many new jobs will be created, given the demand driven nature of the modular approach, field discussions revealed that hired labour, during peak time, is quite prevalent in conjunction with family labour.
- 177. **Project Benefits**. The Project will be expected to generate substantial benefits, including (but not limited to) increased revenue and food security from the yearly incremental production of at least 51,000 metric tons of cash crops, fruits and vegetables, root crops, and tea. The increased agricultural production and incomes, under the various farm models, will be accomplished through the construction of the irrigation facilities and access roads accompanied by activities that will introduce improved irrigation practices and the conduct of training tailored to community needs, such as demonstration and up scaling of technologies, better agronomic practices, better access to markets and improved production quality through more efficient agricultural extension.
- 178. The community infrastructures such as drinking water supply systems, pavement of village roads, and rural grid upgrading will significantly contribute to better quality of life, save time for women, provide access to quality farm inputs and better prices for farm produce, besides contributing to other health and social benefits. The better crop quality produced by irrigation can increase farmgate prices for farmers by 200% to 300%. While the easy access of farmers to markets or of traders to the farmers that will be provided by the village roads can result in better prices to the farmers by as much as 30% to 50%. While these benefits are not translated in the prices or costs used in the farm and crop models (since average market prices and not farm-gate prices are used), these benefits will be directly experienced by the beneficiaries.
- 179. The Project will also generate other benefits that include improved capabilities of farmers' cooperatives to become sustainable and efficient institutions by assisting them to organise themselves on a voluntary basis to interact more effectively with other stakeholders in the value chain. HARIIP will support the formation and/or strengthening of existing farmers' cooperatives to effectively

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³ Community infrastructure; drinking water (20,819 households), roads improvement (64,650 households), electricity (2,200 households), irrigation (86,236 households)

⁴ Cash crop/off-farm IGA Module (17,347 households), Orchard-poultry integrated farming module (367 households), Support to farmers' cooperatives module (675 households), technical service support module (81,000 households), root & tuber crop module (2,242 households), agro-forestry module (1,511 households)

implement Project activities and build up their human and logistical capacity base in terms of soft/ hardware facilities, better value chain linkages, marketing oriented production and information that will reduce uncertainty and enhance market accessibility. Such support is expected to improve the cooperatives' leadership, management and negotiating skills, and thus enhance their access to training, extension services and use of economies of scale.

- 180. Finally, Project activities will also generate additional employment opportunities both for unskilled and skilled labour, as the growth in the agriculture sector is expected to stimulate growth in the rural non-farm sector. Such extra job creation allows underemployed labour to be absorbed or real wages to rise, thereby contributing to decreases in poverty.
- 181. **Economic Analysis**. The overall economic internal rate of return (EIRR) of the Project is estimated at 29% for the base case. Project net present value (NPV) of the net benefit stream, discounted at 8%, is USD 193.2 million or CNY 1,205 million. The summary of the economic analysis is presented in WP 7, Appendix 5.
- The analysis attempts to identify quantifiable benefits and costs that relate directly to the activities undertaken following implementation of critical activities under community infrastructure such as irrigation facilities, pavement of village roads - as well as from the various productive modules under sustainable agriculture and marketing support components. The main quantifiable benefits arising from improved agricultural productivity resulting from sustainably oriented production and market linkages, improved agronomic practices and better use of farm inputs are simulated based on the production patterns over the Project life. Other economic benefits derived from the Project interventions comprise pavement of village roads, rural grid upgrading, rural jobs and social benefits. These benefits were partly not quantified (rural jobs, social benefits, general well-being) and partly reflected in the analysis through the increase in production because of better yields. It is estimated that the production of paddy in the rainy season can be improved by irrigation with 33% in the total command area and the production of vegetables and potato can be improved with 300% in the total command area. These effects are incorporated in the financial models. Furthermore, the better crop quality produced by irrigation will increase prices, as will roads improvement. But such price increases were not considered in the analysis as the prices used in the economic analysis are market prices and not farm-gate prices.
- 183. Drinking water systems are expected to cause great benefits in terms of time savings, productivity gains and higher savings from health care cost. A study by WHO in 2007⁵ on the "economic and health effects of increasing coverage of low cost household drinking-water supply and sanitation interventions to countries off-track to meet MDG target 10" indicated a benefit-cost ratio of 6.9 per US dollar of investment for East Asia & the Pacific Region for achieving MDG targets for water; and 6.6 universal access to water. If the lower ratio (6.6) is applied to the investment on drinking water (amounting to CNY 37.9 million or USD 0.6 million), annual benefits will average CNY 1.7 billion and generate a 660% EIRR. Including this benefit in project EIRR computation will generate a 366.67 % EIRR. This stream of benefits can easily justify investments in drinking water system or even for the whole HARIIP where it accounts for only 6.7% of the total project base cost. Hence for purposes of Project EIRR and Sensitivity Analysis cost and benefit of the investment in drinking water system is excluded to limit that analysis to the agricultural modules.
- 184. **Sensitivity Analysis**. The analysis assesses the effect of variations in Project benefits and costs and for various lags in the realisation of benefits due to unforeseen factors. For instance, an increase in total Project costs by 10% would reduce the EIRR to about 27% and a 20% cost over-run would reduce EIRR to 26%. While a 10% decrease in overall Project benefits would reduce the EIRR to 27% and a 20% decrease in project benefits would bring EIRR to 25%. A 20% costs over-run coupled with a 20% decrease in Project benefits would reduce the EIRR to 23%. Furthermore, a one year delay in Project benefits would only reduce the EIRR to 25% while a two year lag would reduce the Project EIRR to 22%. The sensitivity analysis, therefore, indicates that the Project is relatively robust and will remain economically viable under most foreseeable adverse conditions (For details see Working Paper 7).

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⁵ WHO 2007 (Public Health and the Environment), Economic and health effects of increasing coverage of low cost household drinking-water supply and sanitation intervention to countries off-track to meet MDG target 10, Background document to the "Human Development Report 2006"

Table 9	Sans	itivity	Δnal	/eie
I able 3	. Jens	SILIVILV	HIIAI	7313

	Change in Incremental Project Benefits										
ಕ	_	-20%	-10%	0%	10%	20%					
roje	-20%	28.6%	30.4%	32.0%	33.5%	34.9%					
n Pl sts	-10%	26.8%	28.6%	30.2%	31.7%	33.1%					
nge in P Costs	0%	25.2%	27.0%	28.6%	30.0%	31.4%					
nan	10%	23.9%	25.6%	27.1%	28.6%	29.9%					
$\dot{\Box}$	20%	22.6%	24.3%	25.8%	27.3%	28.5%					

D Sustainability

- 185. The Project incorporates numerous features designed to promote long term sustainability, which are summarised below.
- 186. Target communities will have a high level of 'ownership' of assets built and activities to be implemented in their villages through the adoption of participatory planning and management processes.
- 187. In direct support of the Government's ongoing programme of strengthening the community assets, the Project will support the community-level infrastructure improvement, working directly and closely with technical agencies in charge of the government programmes and introduce community-based and beneficiary-governed managed and maintained (M&M) mechanisms as part of the sustainable use of public or collective assets.
- 188. Production modules aim more to introduce adaptive coping strategies based on income generation specialization and diversification, instead of ordering pre-identified production activities. Therefore, the modules are compatible with the local production activities, which are profitable at current prices with full accounting of operating and capital costs. Demand for these products is strong and increasing.
- 189. All production-related activities supported are designed to be environmentally sustainable. In many cases these activities will be replacing other production activities that are not. For example, the Module of orchard-poultry integrated farming is expected to reduce cropping pressure on marginal lands.
- 190. The design emphasises marketing value chain development in partnership with private sector operators (traders, brokers, processors, etc.), facilitated by farmers' cooperatives. Particular emphasis is placed on the development of improved market linkages involving contractual relationships, production of quality products, and the capture of premium prices.
- 191. The module of technical service support is designed to promote increased responsiveness of extension agents to real needs of farmers and other rural poor, and increased accountability to farmer clients. Government is already showing increased willingness to strengthen the service support system in line with the results being achieved; success of the module is expected to be referred to the extension system/network as good practice and for systematic replication.
- 192. The design of HARIIP emphasises the development of self-sustaining community-based organisations such as farmers' cooperatives, village M&M and users' groups that will be strengthened to play a key role in the implementation and on-going management of project activities.
- 193. Overall, strengthening the capacity of grassroots institutions and their support services is considered to be the most effective means of ensuring sustainability after the immediate project implementation period. The project design places major emphasis on developing the management and technical skills of stakeholders at all levels.
- 194. **Environmental impact**. The HARIIP mainly supports the improvement of community infrastructures, household-based IGAs with premium price potentials, and poor men and women's access to premium markets. Most of the envisaged activities will focus on the construction of community-based infrastructures, capacity building, income diversification and productivity improvement. It will not cause adverse environmental impacts but improve the quality and carrying capacity of the environment. Notions and techniques of environment protection and resource conservation will be introduced to the beneficiaries at the time the project support is offered,

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especially in relationship with infrastructure building and household-based production modules. The module of technical service support is to improve the capacity of farmers and in turn increase productivity in the project area through introducing updated technology, which will upgrade the basis for environmental-friendly production. The module will improve the effectiveness of technical services, incorporating with training on the best practices and ecologically sound approaches.

195. Based on the above outlined expected scale of positive impacts and in contrast to relatively minor risks, the Project should be pessimistically classified by caution for the purposes of environmental scrutiny as Category B. Local stakeholders are aware of the environmental issues and a continued attention will be paid to closely monitor the related evolution.

COUNTRY AND RURAL DEVELOPMENT AND POVERTY CONTEXT

A. Economic, Agricultural and Rural Poverty Context

Country economic background

- 1. Since the start of far-reaching economic reforms in the late 1970s China's population, estimated in 2010 to be around 1 341 million people, witnessed unparalleled economic growth that has fuelled a remarkable increase in per capita income and decline in poverty. The economy, which has since become the second largest in the world, performed strongly in 2010, even against the backdrop of the worldwide financial crisis and the soaring food prices both of which started in 2008. China's gross domestic product (GDP) in 2010 was about CNY 40,000 billion, having grown by 10.3% over the previous year up from 9.2% in 2009. Of this total, the value added of the primary sector (agriculture), was around CNY 4,000 billion, up by 4.3%, that of the secondary (industry) sector was about CNY 19,000 billion, up by 12.2%, and that of the tertiary sector (services) was estimated at CNY 17,000 billion, up by 9.5%. The overall value added in 2010 by the agricultural sector was 10.2% of the GDP, that of industry was 46.8%, and that of the tertiary sector was 43.0%. Some estimates indicate the growth will slow down, but remain at a relatively high 9.3% in 2011, 8.7% in 2012, and 8.4% between 2013 and 2015. The gross agricultural production growth is projected to decline to between 2.6%-3.0% during the period from 2011 to 2015.
- 2. With the rapid economic development and a declining population growth, per capita GDP in current prices rose from CNY 381 in 1978 to about CNY 29,700 in 2010, equivalent to about USD 4,500; the GNI (nominal, Atlas method) per capita in 2009 was estimated at USD 3,650. A significant shift in the composition of GDP has also taken place, with agriculture losing weight in favour of industry and services. China's economic boom has been built on very high levels of investment and soaring export growth. Private consumption has been relatively low, partly due to the lack of an adequate welfare safety net, which encouraged households to save rather than spend. Government spending used to focus on infrastructure investment, but in recent years increasing emphasis has been put on public services. Economic reform was dramatic since China's entry into the World Trade Organisation in 2001, which served as a catalyst for a contraction of the state-owned sector, a surge in foreign investment and explosive growth in private-sector activity. A major risk to the economy was a 32 month high inflation of 5.4% (year on year) in March 2011 on the back of higher food and other raw commodity prices.
- 3. Considerable amounts of natural resources were used during the last thirty years to maintain the high economic growth, especially in relation to energy spending, land use and water consumption. This was further aggravated by extreme weather conditions caused by climate change, which is increasingly impacting on the country's socio-economic development. The Government increasingly recognises the need to pursue sustainable development by promoting resource conservation and environmental protection, and strengthening people's resilience to these adverse conditions.

Agriculture and rural poverty

Between 50% to 55% of the population still reside in rural areas, where 64% of the population is engaged in farming, forestry, animal husbandry and fishing. Around 40% of the total employment in China occurs in the rural areas. In 2010 about 110 million hectares was sown with grains: 5 million hectares with cotton; 14 million hectares with oil crops; and 2 million hectares with sugar crops. Of these areas, slightly more than half was not irrigated, and the remainder is divided roughly equally between paddy fields and irrigated areas. The total agricultural output from the various sources in 2010 were: 550 million tons of grains; 6 million tons of cotton; 32 million tons from the oil crops; 120 million tons of sugar; 2 million tons of tea; 97 million tons of meat, with pork representing about 51 million tons out of this total; 28 million tons of eggs; 36 million tons of milk; 54 million tons of fish (aquatic) products; and 73 million m3 of timber. Recent trends show that the proportion of total arable area planted to food crops declined, although at a slower rate in the last 10 years, accompanied by diversification into other more profitable cash crops. However, this fall in sown area for food crops was compensated by yield increases, resulting in increases of overall per capita food production from 319 kg in 1978 to about 398 kg in 2009. This, combined with a steady decline in per capita grain consumption in urban areas, means that the Government has been able to consistently meet the central food security goal of its agricultural policy. Livestock and fisheries production also developed rapidly in the same period. Overall meat production therefore rose from 9 kg/person in 1978 to 57 kg/person in 2009, while fisheries products increased from 5 kg/person to 38 kg/person.

- 5. China is the first developing country to achieve the UN millennium development goals (MDGs) of reducing the number of its people living in extreme poverty and hunger by half. Its reform-driven economic growth, together with a well-funded national poverty reduction programme, has brought about a major reduction in absolute rural poverty. The average per capita net income of the rural population rose from CNY 686 in 1990 to CNY 5,919 in 2010, although that is still less than a third of the annual per capita disposable income of urban households of CNY 19,109 in the same year. According to the 2010 rural poverty line of annual per capita net income below CNY 1,274, the poor population in rural areas was around 27 million at the end of the year, 9 million less than in 2009. A large part of the growth in rural incomes has been as a result of wages from off-farm activities, although the ability to access off-farm opportunities is variable from province to province. The proportion of expenditure on food to the total expenditure of households was 41% for rural households and 36% for urban households.
- 6. Disparities in income between provinces and between urban and rural areas have been widening in the last decades. Economic growth has been more rapid in the eastern provinces than in the western provinces. In 2008 about 40% of the country's poor are from the seven autonomous regions and provinces, mostly situated in the central and western parts of the country, where the poverty incidence was 11%, some 6.8% higher than the national average of 4.2%. This widening disparity is recognised by the Government that has made a range of policy responses including the complete abolition of agricultural taxes and relaxing of labour migration regulations. Government has also actively tried to draw investment into the western provinces since 2000. However, poor human resources and physical infrastructure there make the process of development difficult.
- 7. Poverty in China remains primarily a rural phenomenon. Compared to the average rural household, poorer households tend to derive a larger share of their income from agricultural activities, which often show low levels of productivity and net profits. Labour migration has, therefore, become an integral part of the coping strategies for rural households. The total migrant workers in 2010, for example, were around 242 million. Out of them, those finding work outside their own provinces were 153 million, while 90 million found work locally. The main causes and characteristics of poverty differ among the rural poor in different provinces or autonomous regions, but they will invariably be a combination of the following:
 - (a) Frequent natural calamities, especially floods and droughts, increasingly caused by extreme weather conditions due to climate change;
 - (b) Remoteness and poor socio-economic and community infrastructure and facilities: many natural villages have no, or difficult, access to the paved road network, poor access to markets, information, safe drinking water, and health services;
 - (c) Limited natural resources and asset base, especially the decreasing farm size that now averages 0.1 hectares of arable land per capita, or less;
 - (d) Lack of skills and capacity: surveys and studies across IFAD-assisted projects, mostly situated in the Western region, indicate that only about 10% of the labour force there are educated up to the level of senior secondary school or higher, and very few received any form of vocational training. Therefore, most farmers there cannot easily upgrade their knowledge and technological levels, while rural migrants from the areas have difficulties finding good paying jobs, and women suffer disproportionately from illiteracy poor skills;
 - (e) Limited access to inputs and productive assets: poor rural households face difficulties to obtain start-up capital for income generating activities and intensive, more productive, farming. As a consequence, the poor practice subsistence farming, with little or no means of investing in environmental protection, which then results into further marginalization and degradation of natural resources and poor crop yields.
 - (f) Difficult access to the markets and value chains: The rural poor rely mainly on traditional and extensive farming techniques, characterized by very limited cash income and no surplus; their investment capacity is very limited and they are generally risk-averse. Such vulnerability often leads to social and economic isolation, keeping the poor away from being mainstreamed into the markets and related value chains;
 - (g) Disease: despite the improvements of the new rural cooperative health insurance system, the coverage of basic health care is still low, which means many rural

households fall back into poverty in the event of illness of a major income earner.

8. In summary, therefore, the causes of rural poverty can be summed up as the deficiency of opportunities for livelihood improvement due to the lack of, or difficult access to, human, physical, natural, social and financial capital. And the dynamic of rural poverty has changed over the last ten years to include, inter-alias: (a) from food insecurity to lack of, and difficult access to, income generating opportunities; (b) from lack of physical assets to demand for sustainable support; (c) from poverty alleviation to increasing resilience to falling back into poverty; (d) from wide-spread poverty to pockets of concentrated poor in disadvantageous areas; (e) from chronic poverty to transient poverty; and (f) from isolated rural poverty to in-balances between rural and urban opportunities. The most vulnerable groups are the women, the elderly and the children, and ethnic minorities who continue to live in remote mountainous areas. The increasing out-migration of rural male labour to the urban and eastern (coastal) areas sharply increased the feminization of rural labour and agriculture. Furthermore, inequality for women increases statistically with age, since many have to remain in the village to look after the children and the elderly in absence of their husband.

B. Policy, Strategy and Institutional Context

National institutional context

- 9. IFAD collaborates closely with a number of government agencies at all levels. The interactions with the central government agencies are essentially on policy matters and the strategic orientation, planning, coordination, and monitoring of IFAD's country programme, while issues of implementation, day-to-day management, and supervision of the operations are dealt with local governments and related agencies at the provincial, prefecture, county, and village levels. The key partners at the central level with oversight mandates, include: the Ministry of Finance (MOF); the National Development and Reform Commission (NDRC); and the State Council Leading Group Office of Poverty Alleviation and Development (LGOP). They are brief described as follows.
- MOF is IFAD's counterpart at the country level since 2001, after the responsibility was handed-over from the Ministry of Agriculture (MOA). Thus, MOF is in charge of coordination between central government agencies and IFAD. In the provinces that implement IFAD-assisted projects, MOF carries out its responsibilities through the Departments of Finance (DOF) at provincial level, and the Bureaux of Finance (BOF) at prefecture and county levels. They have the responsibility for the use and flow of counterpart and loan funds. NDRC is responsible for policy formulation, national planning, development and approval of new programmes. It is in charge of coordinating with stakeholders to ensure the compatibility of donor-assisted projects with the national development objectives and planning. The NDRC actively supported the formulation of IFAD's country strategy and the design of its programme. It has offices at national, provincial, prefecture, and county levels. LGOP reports directly to the State Council (equivalent of the cabinet of ministers). It is responsible for designing the national poverty alleviation strategy and for the coordination and funding of poverty alleviation programmes. It has offices at national level down to the townships and manages a nation-wide poverty alleviation programme and an extensive poverty database. In recent years, it has been experimenting with sector-oriented poverty reduction, and facilitating labour migration by linking the private sector operators with skilled rural poor.
- 11. In addition to the central oversight ministries, IFAD also works closely with some technical ministries and agencies. These, including Provincial Governments' departments of Agriculture (DOA), of transportation (DOT), or of water resources (DOWR), are in charge of implementing IFAD project components or modules, depending on the technical relevance and expertise required. In addition to them a number of grassroots organizations, such as farmers' cooperatives and organisations, play an increasing role in relevant project activities.

National rural poverty reduction strategy

12. The recently (March 2011) approved 12th Five-Year Plan calls for harmonized growth to allow the poor areas and the poor population benefit substantially from the country's impressive economic growth and social development. It has pledged increasing investments in support of rural economic development in the poor areas. Historically, since the 1980s, the government's approach towards poverty reduction focused on targeted area development in poor counties. This evolved from the previous approach of providing one-time subsistence assistance to boost economic development. Regional economic development was achieved through improvements in natural resources and the provision of infrastructure and capacity-building of the poor. The "poor" and "low-income" groups were the target group for these national development and poverty reduction efforts. Priority support was

targeted at extremely poor areas in the central and western provinces. Since 2001, poverty reduction strategies shifted to a village and household-based approach, relying on the identification of focus villages and the setting up of a data base to trace the development of individual poor households.

- 13. The government's development strategy under the Tenth Five-Year Plan (2001-2005) continued to focus on the challenge of poverty eradication and build on the Development-Oriented Poverty Reduction Programme for Rural China. The Plan reflected also the objectives of China's Western Region Development Strategy, which aims at the development of 12 western provinces. The Plan, like its successors the 11th and 12th FYPs, is based on the notions of the Xiaokang society, which evokes a middle-class society in which most people are moderately well off, prosperity is broadly distributed and material values and spiritual standards are equally important. The 11th FYP (2006-2010) had put a strong policy emphasis on "growth with equity", through which the government aimed at achieving a Xiaokang society with five areas of balance (economic/social, people/nature, rural/urban, east/west, and domestic/international). Rural development is a specific focus of the plans since rural poverty is still widespread and rural-urban disparities of income and social services continue to widen. The goals of the plan were to help the absolute poor to raise their standards of living, and to improve the basic production and living conditions in the poor areas, expand the infrastructure, improve the environment, and enhance social and cultural conditions.
- 14. Achievement of the rural poverty reduction strategies was strongly built on crop and livestock development through improved varieties and techniques and the promotion of ecologically sensitive measures. Farm products that have (niche) comparative market advantages were promoted, alongside the development of an agro-processing industry. Other elements included technology transfers, promotion of contract farming among poor farmers and the enhancement of efficient support services in information, technology and marketing. Furthermore, the volume of concessional poverty reduction loans was increased for agriculture, processing, marketing and infrastructure development. Microfinance was expanded gradually, and private enterprise development in poor areas promoted. These investments were complemented by improvements in infrastructure, communications and social services, including health and education.
- Despite its achievements, China still faces an uphill task in poverty alleviation. The Government is finalising its next Ten Year (2011-2020) Rural Poverty Alleviation and Development Programme. That programme recognises rural poverty as a long-term challenge, persisting especially in the poor provinces, border areas, ethnic minority areas and the former revolutionary bases, which are mostly remote and mountainous. Consequently, poverty alleviation will continue to be a long term task; strategic policies and efficient working mechanisms will be formulated and implemented to help achieve the objective of eliminating absolute poverty and substantially reducing relative poverty by 2020. The Government stresses its principle of development-driven poverty alleviation, which will combine assistance with sector development, optimizing roles and functions of central and local governments, extending poverty alleviation support to the vulnerable groups previously designated as "low-income" instead of "poor", and committing to continued and increasing funding for poverty alleviation. The key areas of focus of the programme will include: (a) strengthening the capacity of the poor and improving their asset base; (b) improving community-level infrastructure, facilities, and services; (c) ensuring rural per capita net incomes grow faster than the national average income; (d) further extending and improving the social safety net for the poor; and (e) gradually improving the health and living standards of the poor in general.

COUNTRY DATA

China

Land and (land the same J) 2009 1/	0.227	CNII man agrida (IJCD) 2009 1/	2.040	
Land area (km2 thousand) 2008 1/ Total population (million) 2008 1/	9 327 1 324.66	GNI per capita (USD) 2008 1/ GDP per capita growth (annual %) 2008 1/	2 940	
Population density (people per km2) 2008 1/	1 324.00	Inflation, consumer prices (annual %) 2008 1/	8	
Local currency Yuan Renminbi (CNY)	142	Exchange rate: USD 1 = CNY	U	
Edeta earroney Tutan remininor (C1(1)		Exchange rates CSD 1 - CTV1		
Social Indicators		Economic Indicators		
Population growth (annual %) 2008 1/	0.5	GDP (USD million) 2008 1/	4 326 996	
Crude birth rate (per thousand people) 2008 1/	12	GDP growth (annual %) 1/		
Crude death rate (per thousand people) 2008 1/	7	2000	8.4	
Infant mortality rate (per thousand live births) 2008 1/	18	2008	9	
Life expectancy at birth (years) 2008 1/	73			
		Sectoral distribution of GDP 2008 1/		
Total labour force (million) 2008 1/	776.88	% agriculture	11	
Female labour force as % of total 2008 1/	45	% industry	49	
		% manufacturing	34	
Education		% services	40	
School enrolment, primary (% gross) 2007 1/	112			
Adult illiteracy rate (% age 15 and above) 2008 1/	6	Consumption 2008 1/		
		General government final consumption expenditure (as % of GDP)	14	
Nutrition		Household final consumption expenditure, etc. (as % of GDP)	. 34	
Daily calorie supply per capita	n/a	Gross domestic savings (as % of GDP)	53	
Malnutrition prevalence, height for age (% of children under 5) 2008 1/	n/a	cross domestic surings (as % of C21)		
Malnutrition prevalence, weight for age (% of children under	n/a			
5) 2008 1/		Balance of Payments (USD million)		
		Merchandise exports 2008 1/ Merchandise imports 2008 1/	1 428 488 1 133 040	
Health	4.2	•	205 449	
Health expenditure, total (as % of GDP) 2007 1/	4.3	Balance of merchandise trade	295 448	
Physicians (per thousand people) 1/ Population using improved water sources (%) 2006 1/	n/a 88	Current account balances (USD million)		
Population using adequate sanitation facilities (%) 2006 1/	65	before official transfers 2008 1/	373 542	
opulation using adequate samitation facilities (%) 2000 1/	0.5	after official transfers 2008 1/	426 107	
Agriculture and Food		Foreign direct investment, net 2008 1/	94 320	
Food imports (% of merchandise imports) 2008 1/	5	Poleign direct investment, net 2008 1/	94 320	
Fertilizer consumption (hundreds of grams per ha of arable	3,311.1			
and) 2007 1/	•	Government Finance		
Food production index (1999-01=100) 2007 1/	125	Cash surplus/deficit (as % of GDP) 2008 1/	n/a	
Cereal yield (kg per ha) 2008 1/	5 535	Total expense (% of GDP) at 2008 1/	n/a	
, Or		Present value of external debt (as % of GNI) 2008 1/	10	
		Total debt service (% of GNI) 2008 1/	1	
Land Use				
Land Use Arable land as % of land area 2007 1/	15			
Land Use Arable land as % of land area 2007 1/ Forest area as % of total land area 2007 1/	15 22	Lending interest rate (%) 2008 1/	5	

a/ Indicator replaces "Total expenditure" used previously.

^{1/} World Bank, World Development Indicators database CD ROM 2010-2011

POVERTY, TARGETING AND GENDER

I. POVERTY

- 196. **Rural Poverty**. China is widely recognized for its achievements in reducing absolute poverty since the adoption of economic reforms beginning in 1978. Broad participation in the reform-driven economic growth, together with a well-funded national poverty reduction programme, have brought about a tremendous reduction in rural absolute poverty during the past 30 years. Using the official poverty lines, poverty prevalence dropped from 30.7% in 1978 to 4.2% in 2009. A new income criterion was introduced according to which *absolute poverty* is defined as rural per capita net income below CNY 1,196 per annum, combining the previous categories of low-income and poor. With this official poverty line, total rural poverty incidence is 6%. On November 29, 2011, the Chinese central government decided to raise the poverty line with 92% to a per capita net income of CNY 2,300 per annum, which would extend the coverage of poverty for about 128 million of people. It should be highlighted that, even with the recent increase, the Chinese poverty line is still defined at a level lower than the international level of USD 1.25 consumption per day per person, leaving many vulnerable households not being considered as poor. It is estimated that nearly 150 million people are living with less than USD 1.25 per day.
- 197. Dynamics of rural poverty have been changed since the last ten years; they can be summarized as following: (a) from food insecurity to lack of and difficult access to income generating opportunities, (b) from lack of physical household assets to demand for sustainable support, (c) from lifting out of poverty to stopping falling back into poverty, (d) from wide-spread poverty to pockets of concentrated poor in disadvantageous areas, (e) from chronic poverty to transient poverty, and (f) from isolated rural poverty to challenging balance between rural and urban development opportunities.
- 198. Government policies and the scale of funding of public poverty reduction and rural development programmes are exemplary. Beginning in the 1980s, the government approach towards poverty reduction focused on area development programmes targeted on poor counties. Regional economic development was achieved through improvements in natural resources and the provision of infrastructure and capacity-building among the poor. The "poor" and "low-income" groups are the target of these national development-oriented poverty-reduction efforts. Priority support is targeted at extremely poor areas in the central and western provinces. Since 2001, the strategy of poverty reduction has shifted to a village- and household-based approach, through identification of focal villages for poverty reduction and setting up records and development tracing of individual poverty households.
- 199. The government development strategy delineated under the Twelve Five-Year Plan (2011-2015) addresses the challenge of poverty eradication and builds on the Development-Oriented Poverty Reduction Programme for Rural China. It calls for harmonized growth to allow the poverty-stricken areas and the poor population benefit more significantly from the economic growth and social development; it commits increasing investments in support of the rural economic development in the poverty-stricken areas to help strengthen the latter's economic strengths and self-development capacities. Among numerous objectives, the following are highlighted to help consolidate and strengthen the position of agriculture as the foundation of the economy:
 - (a) Strengthening of the agricultural and rural infrastructures for irrigation, sanitation, transport, rural electrification;
 - (b) Increasing farmers' income and living conditions;
 - (c) Increasing agricultural production and modernizing agriculture;
 - (d) Accelerating the development of specialized farmers' cooperatives and the organization of agriculture sector;
 - (e) Promoting sustainable use and access to natural resources; and
 - (f) Improving support services for agriculture and rural development.
- 200. Despite its great achievements, China has still been charged with an uphill task in the poverty alleviation. The Government has formulated its new guidelines for its Rural Poverty Alleviation and Development Programme for the next ten years (2011 2020). Under the new guidelines, the

country's new challenges in poverty alleviation have been further analyzed and priorities of future work identified. Rural poverty has been diagnosed as a long-term challenge, mainly persisting in the hard-stricken poor regions, border areas, ethnic minority areas and former revolutionary base areas, which are mostly typically remote and mountainous.

- 201. In view of the above, poverty alleviation will continue to be addressed as a long term task; strategic policies and efficient working mechanism will be formulated and implemented to help achieve the objective of mostly eliminating the absolute poverty and substantially reducing the relative poverty by 2020. The Government stresses its principle of development-driven poverty alleviation, which will combine efforts of assistance and sector development, optimizing roles and functions of central and local governments, formally extending the project assistance support to cover the vulnerable group previously designated as low-income, and emphasizing its commitment of continued and increasing funding in support of the poverty alleviation in the country.
- 202. Targeting strategies are not new in China, and they have been gradually embedded in the decentralised development strategies. Abundant data on the incidence of poverty are available. Despite the availability of abundant data on the incidence of poverty and of well-known indicators, little has been monitored on the exact poverty dynamics and the data on local level are not always updated. Apart from poor households, also poor villages are central in the government policy. When it comes, however, to selection of villages for poverty reduction interventions, policies rely often on community bidding, which is generally accepted as a weak targeting mechanism. Often policies give explicitly priority to the better-off villages to set examples.
- 203. **In Hunan**, rural net income per capita was on average CNY 4,910 in 2009, and a real increase of 9.3% compared to the previous year. Salaries contribute up to 61.2% of the of rural net income, while income from the primary sector contributes 15.3%, income from the secondary and tertiary sectors was less than 1%, and transfer and property income contributed 23.5%. Those contribution rates suggest that export of migrant labour maintains a steady, but important, part. A number of rural and agricultural policies seem to take effect, yielding better share in land use right transfer, while rents have become a significant part of the rural income source. Meanwhile, performance of on-farm operations need to be reviewed and on-farm and off-farm income generating activities require solid support to be reactivated to help maintain the livelihood quality for those who decide to, or those who have no choice but have to stay in the rural area and undertake agricultural operations.
- 204. In the project counties, rural average net income per capita was recorded at CNY 3,536 in 2009, substantially lower than the average CNY 3,974 of the project counties. While using the current austere poverty line of income per capita of CNY 1,196, the poverty incidence is around 4% only. However, the poverty incidence is estimated at 43% if applying the World Bank's USD 1.25 per day per person, or some 868,000 people living in the project area. It is to mention that poverty is not an income issue; it also relates to access to opportunities, resources and services. The poor population under the new Chinese poverty line has not been available.
- 205. **Rural income dynamics**. Records of monitoring and surveys on the 20 nationally-designated poverty counties in Hunan indicate that in 2009, rural net income per capita in those poverty counties attained an average of CNY 2,418, an increase of 11.6% as compared to the previous year, and an increase of 2.8 percentage points if compared to the provincial rural average net income per capita. The household on-farm operational income is recorded for an average of CNY 1,173, or only 51% of the all-province rural average. Salary average income is even much less significant as compared to the provincial average, at an amount of CNY 933, or less than 45% of the all-province rural average. Consumption expenditures were reported at a per capita average of CNY 2,127, an increase of 6% from the previous year. Surprisingly, the household operational expenditure was reported at a similar level of the all-province rural average, or a decrease of 2.2% as compared to the previous year despite the global price increase of production goods and materials, and without exception for China.
- 206. **Labour force**. Some 1,146,000 people are recorded as active labour force in the project counties, of which 46% are female. Migration was reported among 35% of the active labour. While the majority of migrant workers are male, female percentage share keeps increasing and it tends to reach the 50% share in the next coming years.

II. PROJECT TARGETING

A. Target groups

- 207. **The target group**. In principle, all the rural households in the project area, totalling about 511,704 households or 1,943,442 inhabitants, would be eligible to participate in the project or broadly benefit from the project intervention. Specifically in the project target villages, 181,656 households, or 759,606 inhabitants will be targeted by project support and interventions. However, households in more remote villages which are poorer than those nearer the main roads would receive top priority. Within the project villages, encouragement will be given to the lower end of the category of average households to take part in most of the project activities. However, priority would be given to the households classified under the category of poor, who are economically active, and physically able and capable to participate in project activities. That suggests this primary group would receive priority in a number of project activities directly related to households and individual farmers, such as training, provision of technical service, support of productive module, and inclusive mainstreaming of cooperative strengthening. Women and minorities will be a major part of the target group and they will receive special attention as they are either socio-economically or structurally disadvantaged due to their particular living conditions and background.
- 208. Gender situation. 48% of the population is recorded as female in the project areas. Although work is shared by men and women, on farm workload of women throughout the year tends to be higher than that of men due to out-migration of the latter and increasing intensity of farming activities. In addition to arable and perennial crop farming, and animal production activities, women carry out the daily family chores for which they spend more than 4 5 hours per day, cooking, taking care of family, rearing pigs and poultry, sewing and mending clothes and shoes, etc. With regard to off-farm work, women are mainly engaged in fuel-wood collection and some women-specific activities, such as embroidery, whereas seasonal and permanent work in urban areas is mostly for men and single women. While the women's social status is generally perceived high by both men and women, their economic situation and status are far from being lifted and recognized at an equitably due level.
- Ethnic minorities. In the nine project counties, total population amounts to some 4.3 million, of which 25% belong to the ethnic minorities, mostly the Miao, Tujia, Dong and Yao. Data collected indicate that in the project areas, ethnic minorities take a higher share, or 28% of the total population. In general, ethnic minorities are economically more vulnerable. This is basically caused by remote location typically in mountainous area, poor infrastructures, low levels of education and healthcare. For instance, in Luxi county, 85% of poor population was minority while 60% total population were minority. From the field visit, DCM found the causes of high incidents of poverty in minority groups were: (i) the geographical constrains. Due to the historical factors, most minority population lived in remote high mountain area where farmland was infertile and not enough, and agricultural productivity was low. In Dongtou, a Miao minority village in Luxi county, with 640 mu (43 ha.) farmland for total 1260 population, only 0.5 mu farmland for each person. Most farmland was rain-fed land. Without enough farmland, some one third labours migrated for off-farm employment, (ii) Inadequate infrastructure, especially inadequate transportation, was obstacle for accessing market. For instance, due to the bad road, the villagers in Xinjie village of Outuan township, Jingzhou Miao and Dong Autonomous County, would sell their walnuts half or month later than other villages with price of 10-20% lower. (iii) Low education. It was estimated that, the minority population, especially the population older than 40 years, the major population staying in village engaging in farming, had two or three years less education than Han farmers in plain area. Large amount of minority farmers older than 40 years could not speak mandarin; they speak their ethnic language and local dialects of Chinese.
- 210. Both women and minorities are specific target groups within the projects that have been selected by the villagers in the project area. The VIGs that were established, typically, have 5 to 15 members and poor farmers, women and –in the counties where they are present- minorities form a considerable amount of these members. There are no formal requirements for the composition of the members of the VIG. The only requirement set by PPMO is that women and poor should be represented adequately. Their representation not only ensured that in the selection of the investments their interests were reflected, but it will also ascertain that during the execution of the projects, the interests of women and minorities will be taken care of. In some villages, women are even appointed as head of the VC, such as in Tangkuan village in Jingzhou county. In Da Poliu village, Luxi county, the VIG was established beginning this year. It consists of 8 members: 2 VC's, 2 women and the rest are poor farmers. The farmers selected their representatives in the VIG.

B. Geographical targeting

- 211. **Project counties.** The Project will be implemented in the following nine counties
 - (a) Lingxiang and Yueyang of Yueyang prefecture,
 - (b) Taoyuan of Chengde prefecture,
 - (c) Shaodong of Shaoyang prefecture,
 - (d) Longshan, Guzhang, Luxi, and Fenghuang of Xiangxi prefecture,
 - (e) Jingzhou of Huaihua prefecture.
- 212. Four of them Longshan, Guzhang, Luxi and Fenghuang are nationally-designated poverty counties; and Jingzhou County and Xiangxi Prefecture are minority autonomous areas. The nine counties have a jurisdiction over 4022 administrative villages in 204 townships, with a total rural population of 56.09 million.
- 213. The Project's targeting strategy will be adapted to the changing dynamics of rural poverty in the project areas, focus on strengthening community-level assets of collective nature, improving access to income generating opportunities, and strengthening sustainable service support services, and strengthening the target groups' resilience. It will adopt the geographic targeting strategy of the Government in identifying the pockets of rural poverty in economically disadvantaged areas, and it will continue to apply the differentiated targeting and support model to complement the Government's poor village and poor household-based approach. This suggests that within the project villages, the economically active poor and women, the vulnerable ethnic minorities would be identified and served on a priority basis.
- 214. The DCM found that the mechanism for targeting the poor took place via the selection process of townships and villages. The targeting of villages was based on four aspects: (i) geographical location; (ii) poverty situation in terms of income per capita (iii) eagerness of the population to participate in the HARIIP project and availability of sufficient labour for execution of the tasks; and (iv) Lack of infrastructure. In the selection of townships, geographical location was the most important criterion because most poor villages with poor and poor minorities are concentrated in the remote areas and hill townships; in the villages selection, the net income per capita was focal point because in a the same townships, there are both poor and richer villages. In the households' selection discussions with villagers was used to identify the poor households as beneficiaries.
- 215. **Project townships.** The DCM found, when project targeting to remote hilly township, most project townships were relative poor in term of rural net income per capita (See table 1) with high portion of minority due to minority concentrated in remote hilly townships. In the field visit, DCM found the minority issues were well targeted in the project. Most project villages in the minority concentrated counties are minority villages. For instance, in Luxi, one of the counties with a high concentration of minorities, 65% population in project area belongs to minorities while 60% of population in the whole county is a minority.

Table 1: Minority poverty in the project area (2009)

County		ninority Ilation	inc	armer's net come /capita)	incide	e poverty ence of rity (%)	Population % of C1+C2+C3	
	Project county	Project township	Project county	Project township	Project county	Project township	Project county	Project township
Linxiang	0	0				-		-
Yueyang	0	0						
Taoyuan	3.54%	4.66%	5419.00	4680.00	0.50%	0.27%	39.02%	26.28%
Shaodong	0.71%	0.61%	3971.00	3228.00	12.14%	12.55%	50.24%	52.89%
Longshan	80.42%	64.45%	2775.00	2657.00	5.13%	3.19%	45.89%	43.95%
Guzhang	85.66%	85.71%	2381.21	2381.21	2.76%	2.81%	89.37%	90.61%
Luxi	60.99%	66.50%	2994.00	3000.00	20.28%	11.36%	95.04%	93.05%
Fenghuang	90.62%	83.67%	3138.40	3143.12	0.91%	2.23%	33.88%	29.19%
Jingzhou	74.74%	74.39%	3981.00	3597.30	2.88%	0.47%	45.61%	47.55%
Average	27.12%	27.91%	3109.09	3059.14	6.01%	4.36%	55.40%	59.37%

Data source: County PMOs.

216. The table 2 below shows the per capita net income levels of the counties, the project area and the villages. It reveals that net incomes of the project villages that were visited by the DCM are substantially lower than the net incomes of the counties and project areas, which is a clear indication that the poorest villages are indeed selected as project villages for HARIIP. This is supported by the fact that a major part of the selected villages belonged to the officially nominated poverty alleviation villages. In Shaodong County, for example, 43 of 65 project villages were state or province level key poverty alleviation villages. In Luxi county, 22 of the 51 project villages were state level key poverty alleviation villages, 73% of total state level key poverty alleviation villages in the county were included in the project. This also is in line with the impression of the DCM.

Table 2: Net Income per capita in project areas.

	•	abic 2. Net iii	come per capita in project areas.
Project	Average	Average	Average Income per capita in the villages DCM
county	Income per	Income per	visited
	capita in	capita in	
	project	project area	
	county	(CNY)	
	(CNY)		
Linxiang	4,536	3,949	Not visited by the DCM
Yueyang	7,451	3,510	3,500 ¹
Taoyuan	5,419	4,413	Not visited by the DCM
Shaodong	4,369	3,510	1,600 (remittance was not included)
Longshan	2,775	2,658	Not visited by the DCM
Guzhang	2,381	2,243	Not visited by the DCM
	3,145	3,117	2,000"
Luxi			1,193 ^{iv}
			1,800 ^v
Fenghuang	3,145	3,166	Didn't visit by CDM
	3,981	3,164	3,000 ^{vi} .
Jingzhou			2,200 ^{vii}
_			3,500 ^{viii}

Note: (i), Kouqian village; (ii) Wuyi Village; (iii) Hetang village; (iv) Da Poliu Village; (v) Xinjie Village; (vi) Tangkuan villge; (vii) Minzhou village; (viii) Langhe village.

Data source: PMO and DCM field visit.

The next issue is who will mainly benefit from the projects that will be executed under HARIIP. Most of the infrastructure will bring benefits to the whole village. For instance, everyone not yet connected in a village will be connected to the drinking water facilities and all farmers will benefit from improved road access. As the poorest have the biggest change that they have not yet access to these facilities, they will most likely benefit. Since 48% of the project area is recorded as women and more than 50% of the projects under HARIIP are geared at Western counties and therefore targeting the minorities, it implies also that both women and minorities will reap a major part of the fruits of the projects executed under HARIIP. As to sustainable agricultural development and market-access support, the target groups will also most likely be the poorest; they do not have yet access to these inputs and they miss the knowledge how to use these. Important in the targeting strategy is also the poorest, minorities and women are well represented in the VIGs that were established in the project villages, some were even headed by women. The VIGs played a major role in the selection process for the priority investment list, which is an additional safeguard that the projects are indeed geared at the target groups. It has been targeted (see for instance log frame) that least a total of 100,000 rural households should be directly reached, of which at least 35% belong to the poor and vulnerable groups.

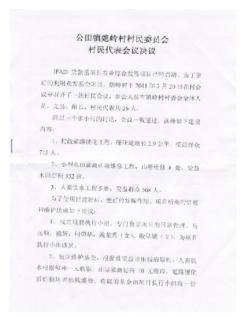
Based on the above observations and the field visits, the DCM draws the conclusion that the targeting strategy in villages and project selection was executed successfully.

218. **The selection process**. The selection processes of the project villages and the projects within the villages started in the beginning of 2011. Part of the process was top down in the sense that counties selected the townships and the villages, based on pre-set criteria. But an important part was also a genuine, participatory bottom up process. The VIGs were established in the villages that belonged to the project area and these VIGs consulted with the villagers on their priority list of investments and these lists were send to the PMO's at county level. The PMO's used this as an input for their project proposals in the HARIIP. The Design Completion Mission discussed the selection

process of the villages with PMO's and the selection followed the following sequence as explained clearly by the PMO of Jingzhou county:

- > PMO asks the townships whether they would be interested to participate in the project.
- > The townships that are interested, identify the poor villages in their commend area.
- The township approaches these poor villages whether they are interested to participate. The population and the VC were also questioned. The villages have to send in their application to the township PMO which sends the list of interested villages to the PMO at county level.
- > The PMO at county level makes the selection of villages, based on the following criteria: i) technical feasibility of the area for execution the projects, ii) the poverty situation, iii) the eagerness of the villagers to participate, iv) whether the projects could be managed (scattered areas will be more difficult to manage). Sometimes, some other criteria are used in other counties and other villages, such as lack of infrastructure or availability of sufficient labour, but two criteria are always used: poverty situation of farmers and eagerness of farmers to participate.
- The potential list of project villages is send to the PMO at provincial level.
- The Project Leading Group (PLG) approves the list of villages.
- > The villages are informed whether they are on the project villages' list.
- > The villages have the possibility to make a plea to be included in the final list
- > With small adaptions, the final list is approved.
- VIGs are established in the selected project villages. Preparations for establishment of VIGs start already earlier on in the selection process.
- 219. Together with the application of the interested villages, the county PMO sends a list of priority projects. The selection process of the projects in the project villages takes the following steps:
 - > The PMO at county level informs the villages and the VIGs on the objectives and the content of the IFAD project.
 - The VIGs will collect the ideas of the villagers by means of group discussions, the village assembly or individual household surveys.
 - > The villagers decide by majority what projects are on their priority list.
 - > All lists are collected by county PMO.
 - ➤ PMO checks the priority list whether these projects fit within the 5 year plan & budget and makes a final list of projects. This list was in the Project Design Report, presented in June 2011.
- 220. The PMO in Yueyang indicated that the process of consultation and discussions with farmers and villagers took the VIG one month. The selection process took the VIG several meetings. In Lanhe village, Yueyang County, 5 meetings were held. During the final meeting 70% of the villagers were present (migrant labours and scholars were absent) and had to vote on the priority list of projects. 90% voted in favour of the proposed priority list and it was approved.
- 221. The following table shows the priority list of one of the project village Xilin village, Gongtian township of Yueyang County, signed by farmers in the villagers' meeting on March 20th, 2011 which shows the priority investments for the IFAD project as agreed amongst and signed by the farmers (stamped by the VC).

Table 3: list of priority investments by villagers





222. The BoF of Yueyang County stipulated that the total preparatory costs of the selection of villages and projects, the base-line surveys and field visits cost the county CNY 300,000. In Linxiang County it was less, CNY 100,000, but it clearly shows the commitment for the HARIIP.

C. Household targeting

- 223. **Household targeting strategy.** The total population of the 589 target villages is 759,606, reportedly representing 181,656 households. The Project will adopt the inclusive targeting strategy, addressing the specific needs of the different vulnerable groups, especially the poor women and men, ethnic minority groups and other possibly socio-economically marginalized groups, which are estimated to be about 35% of the total population.
- 224. The following table summarizes the characteristics of the population segments in the project areas, indicating the poverty levels and causes.

Table 4: Household targeting strategy in the project areas

Typology	Poverty Levels and Causes	Project Response		
Category A: 3% – 15%	Sufficient and skilful household labour			
Category A: 3% – 15% The rich and better-off With an annual per capita net income above CNY 5,622. Access to most of the resources and benefit from opportunities required for livelihood improvement. This category will mainly benefit from the project support in public asset strengthening, such as infrastructure and service	 Sufficient and skilful household labour Have a good health Solid food security Solid and sufficient physical assets Well connected in the local social network Quality farming with surplus Integrated in value chains Off-farm activities, sufficient financial buffer, access to credit Often have a family member more permanently in the urban area with specialised skills or good education and 	 Benefit from strengthened associations Benefit from improved market and community infrastructure Benefit from improved support services Apply risk management and eco-environment friendly protection Consolidated self-development skills and strengths 		
support system	a good job, who sends remittances			

Category B: 54% - 60% The average

With an annual per capita net income ranging from CNY 3,001 to CNY 5,621. Access to critical resources and benefit from some opportunities required for livelihood improvement.

The lower end of this category becomes part of the target group due to its vulnerability and sensitivity to external shocks.

- Healthy labour based at home
- Food security fully ensured
- Good farming income, good land, limited access to inputs, average yields
- · Basic household physical assets
- Access to the local social network
- Involved in value chains but share low premiums
- Limited financial buffer, but access to credit
- Risk of falling into poverty if adverse events take place
- Often have a family member seasonally migrating with relatively good skills

- Benefit improved community infrastructures and facilities
- Participation in beneficiary-governed services and management mechanism
- Improved productivity
- Diversified and specialized IGAs
- Adopt improved techniques and methods
- Apply risk management and eco-environment friendly protection
- Share improved premiums from value chains
- Benefit from improved support services
- Enhanced selfdevelopment skills and strengths

Category C: 25% - 43% The poor

With an annual per capita net income at CNY 3,000 and lower. Insufficient access to basic resources and incapable of benefiting from opportunities required for livelihood improvement. The most vulnerable segment is the lower end of per capita net income at CNY 1,500 and lower, of which represents an average13% of the category.

The lowest end of this group, which represents about 3 - 4% may not be able to take part in the project due to their physical or skill incapacities. They are taken care by the state welfare system

- Insufficient or constraint labour
- Seasonal food insufficiency
- Low farm productivity, no or little access to external input
- Insufficient household physical assets, and of poor productivity
- Distant or isolated from the local social network
- No access to value chains
- No or little financial buffer, often indebted
- Difficult or no access to credit
- No labour migration, or seasonal labour migration with very low skills and income
- Low self-development skills and capacities
- Often burdened by unhealthy or inactive labour

- Access to improved community infrastructures and facilities
- Participation in beneficiary-governed services and management mechanism
- Improved productivity
- Diversified and specialized IGAs
- Adopt improved techniques and methods
- Apply risk management and eco-environment friendly protection
- Access to value chains and share due premiums
- Access to improved support services
- Acquire selfdevelopment skills and strengths

225. **Well-being ranking**. In project villages, the beneficiaries should be the poor households and villagers know who are the poor. Participatory well-being ranking will work effectively to categorize villagers for targeting to the poor. The following criteria is useful reference in well-being ranking where category c will be the major target of the project,

- Category A: Rich and better off group, with an annual per capita net income above CNY 5.622;
- Category B: Average group, with an annual per capita net income between CNY 3,000 and 5.622:
- Category C1: Vulnerable group, with an annual per capita net income between CNY 1.500 and 3.000:
- Category C2: Poor group, with an annual per capita net income between CNY 1,196 and 1.500:
- Category C3: Very poor group, with an annual per capita net income less than national poverty line, CNY 1,196.
- 226. In most project villages DCM visited, a well-being ranking is not conducted. The total number of various categories came from village leaders, not by a participatory well-being ranking. Most of VIG members did not know how to conduct such a well-being ranking, nor what the advantages or disadvantages would be. Training for well-being ranking is needed for VIGs in order to have this instrument used in a proper way. A training expert on participatory well-being ranking could be recruited to provide training.
 - The training should be provided to VIG members, at least one female member each VIG should be included in the training.
 - The training could cover the criteria for categories; participatory ranking and how to use the ranking in beneficiary targeting and monitoring.
 - The well-being ranking in project village would be organized by VIGs and the result would be announced to all villagers and submitted to the county PMOs.
- 227. After the training, well-being ranking would be conducted in every project villages before beneficiary households' selection. The well-being ranking will follow the procedure:

Table 5: Well-being questionnaire

	<u> </u>
Purpose	- To identify the marginalized groups in the village in order to carry out the marginalized group
	focus programs.
	- To know the perception of the community on their economic situation
Matariala	- To know and analyse the indicators of 'well being' of the particular community
Materials	Name list of each household of particular village
	- Cards
D	- Markers
Process	- Step 1:
(one of the popular processes)	 Firstly, the focused group with whom the discussion is being done should be identified. Village leaders, teachers, shopkeepers and respected elders (includes men and women) from the same village are the reliable sources to discuss about every family's level and status. Generally, it is assumed that above mentioned people know the details of each household living in the village. Step 2:
	 Before the discussion, head of family's names with number should be written in a piece of paper or a card.
	- Inform the focused group what you are going to do and why and how;
	- Read the name list of each family (hh head), make sure whether the group know the listed family. Some people in the group might know them if not everyone.
	- Step 3:
	 Start the discussion asking with low standard/level family or household among the names listed in the cards. While in the discussion, do not use the word "rich". This kind of word might lead to a difficult situation during the discussion.
	- Put the name card told by group member at the right side.
	 Then ask the name of family who has good standard or level among the names listed in the cards, put the name said by group member at the left side. Step 4:
	 Now read the name cards one by one asking the group which family falls in which standard, or compare with first two categorized family. While group members were answering the facilitators question, they also tell the indicators of being in low level or high level, if not ask why the family falls under certain category, note down any kind of indicators group members

provide. Continue asking the same questions and compare with other families. While ranking it is better to cross check in between. In this way, categorize the family with the participation of each group member.

- Step 5:
- Once the categorizing is over, cross check once again with group members reading the name card. Ask the indicators of the family again why it is under that particular category.
- Note down the indicators and number jotted down in the name card.

Notes for facilitator

- Well-being ranking is a sensitive issue, facilitator has to be very careful using certain words such as rich, poor and so on, people sometimes feel humiliated for putting themselves in poor category. In some cases, it is also found that all the members want to put themselves in poor category, as they do not like to be left out from the facilities and services receiving from the project.
- Facilitators should be neutral and their task is only to facilitate, not to speak for villagers. Even if you know about the village or family, do not make your own judgement, let the group member speak themselves about their situation.
- Facilitator should see whether all the group members are participating in the discussion. Sometimes it is dominating by only some members who are mostly powerful and wealthy.
- To establish the local criteria of categorisation, income will be the most important factor to be considered. The other factors could be considered as houses, labours, land area and agricultural output, migration labours, school children, etc.

III. GENDER ANALYSIS

- 228. **Decision making**. As in most of the patriarchal societies, men are the major decision makers at all levels in China, and it is more conspicuous in rural China. On average, female village head accounts for around 5% in the project area, among nine counties, Luxi shares the highest rate around 8%. Most of the community affairs are decided through villagers' committee or meeting of household representatives. Normally, there is only one female member in the villagers' committees, and male committee members are the principal decision makers; women may take 1/3 in meeting of household representatives due to absence of husbands that have migrated out, but their voice remians minority. At household level, officially registered female household heads only take 15.58% in the project townships against the average of 17.03% across the project counties. The proportion related to the poor and vulnerable groups is even lower. With most of the young labours migrated out, women, especially middle-age and elder women take the most of the burdens in production and household duties such as care for elders and children. The rural women tend to take a significant part of the household and production duties as means of obtaining respect from their husband; it could be said that improved family harmony and reduced domestic violence rely heavily on the rural women's active participation in rural households' livelihoods.
- 229. **Labour division**. Clear gender labour division exists throughout rural China in different forms, varying between areas and time. Commonly, men are engaged in heavy labour works while women take labour-intensive and time-consuming activities. The current trend is that male labour is more driven towards tasks of higher technical requirement and high economic return, and what they left behind often goes to women. Since labour migration has become a significant income source for many rural households, most of the agricultural production activities are conducted by middle-age women and elders. Men come home during the high agricultural seasons and help for some heavy labour or labour intensive works like ploughing, planting and harvesting of rice and tobacco. However, women's workload on agricultural production is increasing, so they need to assume most of the responsibilities of managing the daily livelihoods and taking care of the other family members; they also have to take some riskier work such as applying pesticides.
- 230. Access to credit. Through the country, Rural Credit Cooperative (RCC) is the primary official credit provider for farmers. In the project area, farmers borrow mainly for pruposes of cropping and livestock, few for seeking medical care and schooling in Fenghuang County. The loan amount varies from CNY 500 to CNY 15,000; loan period is normally one year, it could be extended to 3 years in Taoyuan County and shortened to 3 month in Jingzhou County. However, only 15% of rural households have reportedly obtained loans from RCC in 2009. According to RCC staff in Lianqiao Town of Shaodong County, the loan procedure includes borrower's application, and guarantee

property (brick house or land) estimation, or guarantee to be provided by household with adequate assets. Due to the high transaction cost of loan procedure, loan amount for farmers cannot be lower than CNY 20,000; meanwhile, the threshold of loan guarantee is too high for most of farmers. With the practice of wife moving to husband by marriage in rural China, women normally cultivate the land under their husbands' name after moving to their husband's habitat, and it is difficult for them to borrow the loan by the guarantee of house or land under their husband's title. Consequently, women took only 8.49% among the loan borrowers in project counties.

- 231. Access to technology. It was reported 0.65 million of farmers received some training in 2009, which accounts for 1/4 of the total labour. Based on interviews in the villages, there are few technical trainings at village level, and technicians only came to the villages when serious crop pests and animal disease happened. According to the village head and township staff, those farmers with large production of crop or animal were trained 1 - 3 times annually in the township, and other households with small scale production normally have no chance to be trained. They learn some techniques from their neighbours or relatives/friends in other community; when crop pests and animal disease happen, sellers in stores of pesticides or animal medicine are the only source of consultation for them. For most of the farmers with large scale production, the technical needs can be met through association. However, men take more chance participating in technical training as they are perceived as the key labour, women represent less than 40% among farmers being trained. Even there are 3,733 technicians in the project counties, each technician has to take care of 1.08 and 2.05 administrative villages individually in project counties and township, and big difference exists among project counties. In addition, female takes only a small part of technician force, which generally is considered as one of the weak conditions for rural women accessing techniques.
- 232. Gender focus is applied in the project design by responding to the needs of women and vulnerable groups. Women and vulnerable group's participation and benefit sharing in project activities will be ensured by developing measurable M&E indicators which have been discussed with villagers and government staff at different levels, and estimated by technical experts (see Table 3).
- 233. The DCM focussed especially on this issue of female headed households (defined as those households that are headed by divorced, unmarried women and widows), because they belong to the most vulnerable group within the group of females, due to no husband in such households. They could not make income from migrate works because no enough labours in the family. DCM spoke with different bureaus of poverty alleviation and with women federations in the different counties but there is no special focus on female headed households and apparently there are no separate statistics on female headed households kept. In order to be able to identify these females as a target group, efforts should be taken to identify the size of this group and to specify their specific problems and issues.

IV. GENDER MAINSTREAMING

234. **Gender mainstreaming approach.** For developing successful innovative and replicable pilot approach of gender mainstreaming in rural development, instead of gender alone activity which is normally difficult on sustainability after project's completion, gender perspective will be integrated in HARIIP by focusing on women's participation in the project design, implementation and management, and equal benefits sharing. The present gender situation was carefully analyzed, and gender mainstreaming methods and indicators were discussed with villagers, WF staff and PMO staff at different levels. Hence, it is expected the gender mainstreaming approach can not only be applied in HARIIP, but also be scaled-up in the future as the experience rooted in the existing institution system.

A Women's participation in project components

- 235. **Gender focus** is applied in the project design by responding to the needs of women and vulnerable groups. Women and vulnerable group's participation and benefit sharing in project activities will be ensured by developing measurable M&E indicators which have been discussed with villagers and government staff at different levels, and estimated by technical experts (see Table 17).
- 236. The DCM focussed especially on this issue of female headed households (defined as those **households** that are headed by divorced, unmarried women and widows), because they belong to the most vulnerable group within the group of females, as there are no husbands in such households. They could not tap income from migrate work because there are not enough labourers in the family to be able to send someone as migrant to urban areas. The DCM spoke with different bureaus of poverty alleviation and with women federations in the different counties but there is no special focus

on female headed households and apparently there are no separate statistics on female headed households kept. In order to be able to identify these females as a target group, efforts should be taken to identify the size of this group and to specify their specific problems and issues.

237. The project would pay more attention on the female labours, especially the female labours with husband in migration work. Infrastructure construction would reduce their workload and income generating activities would improve their economic situation. It is likely to have their husbands come back from their migration work if more income generating opportunities available for these households.

B. Gender mainstreaming in project management structure

- 238. **Gender equity** is an important topic in China. At provincial and county level, the Women Federation plays the role to protect women interest and deliver special programs to support women. At township and village level, there is women director to focus on women development. The DCM found, in project counties that WF played a role in the PLG. The DCM found out that at township level, women directors are involved in PMOs and at village level, women directors are member of VIGs, and in some villages, deputy director of VIGs.
- 239. **VIGs.** Women, poor households and ethnic minorities' representation is compulsory with equitable share and equal right of leadership, decision making and participation in VIG, in which, women will be no less than 40%. Hence, female members can be powerful in participating in VIG decision making as a strong women's team. The DCM also found that, in some villages, there is at least one female deputy leader of VIG which strengthens women capacity in decision making on the project activities.
- 240. **PLGs and PMOs.** At county level, Women's Federation and Poverty Alleviation Office involved in PLG. And a gender coordinator will be staffed in PMOs at township, county and provincial levels, who ensure women's participation through the project process at all levels and monitor the progress of gender indicators; whilst closely cooperating with WFs in project implementation.
- 241. **Gender awareness building** is the base for increasing gender sensitivity and reducing gender conflict in the project. The DCM thinks it is essential to have gender awareness training courses for implementing agencies. it will increase gender sensitivity by providing gender awareness training will be provided to all implementing agencies, e.g. member agencies of PLG and PMOs, especially the executive directors and gender coordinator of provincial and county PMOs at start-up of the project. The training will be organized by the provincial PMO through recruiting independent consultant or public sectors with related mandate. Gender perspective will be integrated in trainings for township PMOs' staff and VIG members during project implementation.
- TOT training: at the start-up of the project, a TOT training would be held. Trainers would be hired by PPMO and the trainees would include members of PPLG, CPMOs and county Women Federation. Participatory training would be applied. Base on the training, a manual for HARIIP would be worked out for training in project counties. Normally the training would take 3 days, including lecturing, group discussion, field visit and reporting.
- After the TOT training, the gender mainstream training would be delivered in each county before
 the project implementation. The member from county PLGs, CPMOs, project townships and VGIs
 would be included in the training. All of the staff and leaders responsible for the project would be
 acknowledged with the goal of gender mainstream in the project and know how to protect women
 interest. Their gender sensitivity would be increased.
- 242. **Female trainers and PMO staff** would have an advantage to work with rural women. They could bring more gender sensitivity in project activities selection and implementation of project. In the implementation of project, more female staff in county and township level would be included.

IV. INSTITUTIONAL ARRANGEMENT FOR PARTICIPATION

A. VIGs

243. The existing decision-making in villages: after 30 years of rural local governance reform, a decision-making system was established to promote villagers' participation which is in line with the decision making in IFAD projects.

- There are 3 major (subsided by government) leaders and few normal cadres in the administrative village. The 3 major leaders are the party secretary, a VC chairman and an accountant. The remaining cadre include a women director, a member of Party branch and members of village committee and heads of natural villages.
- Meeting of villagers' representatives. The representatives were selected by villagers to represent
 the different natural villages. Most decisions in villages are made during the meeting of villagers'
 representatives. The frequency of the meetings depends on when decision making on important
 matters is needed.
- Transparency in the decision making system. All decisions by VC in the meeting of villager representatives will be published and communicated to villagers, mostly by announcement of wall-paper.
- 244. To select **priority projects** and also to have a role for the villagers during the implementation of the project, VIGs were established in project villages. For the different villages, the numbers of VIGs members are different, but the VIGs normally consist of 5 15 members. Amongst the member of the VIGs are village leaders, e.g. VC chairman, women representatives and representatives from poor households. In a number of villages, females consisted of 50% of VIG members and some were voted as deputy director of VIGs. For instance, in Da Poliu village, Luxi county, the VIG was established beginning this year. It consists of 8 members: 2 VC's, 2 women and the rest are poor farmers. The farmers selected their representatives in the VIG.
- 245. In the **minority villages**, the head of the VIGs generally comes from a minority group, which is logical given the fact that these minorities have an all most 100 percent share in the total population.

The VIG will act as an interface between the project and target communities, and will be responsible for the following tasks. First, they will inform villages and households on project opportunities and access to support. Second, they will facilitate the annual participatory household well-being ranking as a monitoring tool. Based on the ranking, the VIG will identify eligible households for every module in full coordination with the respective service providers. Third, the VIG will assist the coordination of priorities and the modules for specific villages with the different service providers and in design of their annual plan later. Fourth, they will play a role in the supervision of the project implementation.

B. Project operation

- **246**. **Beneficiary Households selection**. As discussed with the community, PMOs and township, the basic criteria for beneficiary selection are: (i) Poor households in the villages. After the well-being ranking, the beneficiaries should be concentrated on category B and C except for few households of category A for demonstration purposes. (ii) Fulfill the requirements for project activities, e.g. the minimum requirement of land and labourers. (iii) Eagerness of households to participate.
- 247. **Procedure of beneficiary household selection.** The procedure of beneficiary selection should be transparent, the objectives should be clear to the population and it should also be clear what the role of the population should be and to what their influence in the process will be. The procedure should be: (i) The project is introduced to farmers in the villagers assembly of natural village with a request to come up with projects. The villages that want to join the project should express their willingness to be engaged in project activities. (ii) Discussions in natural villages to see who fulfills the requirements. As natural villages are small, all farmers could join the discussion; (iii) potential beneficiaries will be reported to VIGs. All potential beneficiaries are discussed in meetings with representatives of villagers at administrative level. (iv) the final list of beneficiaries will been published and communicated to villagers.
- 248. Minimum requirement land area for cash crop and agro-forestry. From field visit the DCM found the lowest acreage of farmland in the villages visited by DMC is 0.5 mu paddy land and 0.5 mu dry land per person. The average numbers of family was around 4 persons, and that means 2 mu paddy land and 2 mu dry land at least for each household, also the poor households. So 2 mu for cash crop was fine for a household (not a farmer), even the poor households when considering targeting to the poor households and economic feasibility. Discussion with the deputy director of Xiangxi Prefecture PMO showed that, the requirement of 5 mu for agro-forestry was proper as most households have more than 5 mu forestry land. For instance, forestry land per capita in Xiangxi was 3.59 mu in 2009, or around 12 mu for each household. But from the field visit the DCM found the requirement of minimum area was increased by the village heads to 15 mu in Dongtou village, Luxi county, which not approved by PMO. Though with this increased minimum requirement, project

management would become easy, but most poor households would be excluded from the project. The DCM also found that some households formed a group to join the project because each household alone didn't fulfil the minimum requirement. The difficulties of the poor households is, however, not only the small area of the forestry land, but also the relatively large investment that is needed, especially the households which does not have experience and wishes to develop agro-forestry. If the minimum requirement for agro-forestry is decreased to 2-3 mu, most poor households could be involved in the project.

249. **Design of project activities**. Project activities are designed by focusing on the needs and benefits of rural poor and vulnerable households. Community-level activities will reflect the needs of the poor and vulnerable households through participatory planning. Activities at household-level will give priority to the poor and vulnerable groups. The selection process of the projects in the project villages was described earlier on in this annex.

V. MORNITORING AND EVALUATION

250. The M&E will have to focus on how the project benefits the poor, minority and rural women, e.g. the percentage of female, poor and minority beneficiaries. As was discussed with PMO, the final target beneficiaries as set in table 6 could be used as a tool to assess the impact of the project in the M&E processes. PMOs will have to collect the beneficiary information according to their gender, well-being ranking and ethnicity.

Table 6: Expected project beneficiaries

Project component	Beneficiary (person)	% of women	% of C1+C2+C3	% of minority					
Component A: Community infrastructure improvement	695,623	48%	50%	73%					
Component B: Sustainable agriculture development and market access support									
Module 1: cash crops/off-farm IGAs	71,296	55%	60%	73%					
Module 2: orchard-poultry integrated farming	1,741	55%	50%	69%					
Module 3: Agro-forest	6,771	55%	38%	72%					
Module 4: support to farmers' cooperatives	2,277	40%	40%	67%					
Module 5: grassroots agro-technical service support	110,000	60%	55%	73%					
Module 6: Root and Tuber Crop Module	1,324	55%	70%	73%					

Data resource: recalculated based on first estimation of PPMO. C1: - vulnerable; C2: - poor; C3: very poor

COUNTRY PERFORMANCE AND LESSONS LEARNT

A. Past Results, Impact and Performance

- 1. Since 1981, when IFAD became the first IFI to assist China, it has financed 23 projects there for a total of USD 591 million in loans, out of a total project cost of USD 1.4 billion. It provided another approximately USD 10 million in grants to fund, *inter-alias*, agricultural research, innovations, capacity-building, and knowledge management. Seven loan funded projects and one large country grant are on-going at the beginning of 2011. Of these, one is in the process of closing and two will be closing in 2012. Between 1981 and 2007 all loans were on highly concessional lending terms. As China's economy and per capita income continued to grow rapidly, from 2007 to 2009 lending terms were hardened to intermediate terms, and starting from 2010 any new loans are on ordinary terms. China is the second largest recipient of IFAD assistance globally, after India. The loans have funded activities in 22 provinces, autonomous regions and municipalities of China.
- 2. Project interventions supported agriculture, livestock, forestry, fisheries, health, education, gender mainstreaming, financial services, market access and environmental conservation. Project evaluations and project completion reports suggest a satisfactory performance in terms of the project's achieving their rural development and poverty reduction objectives. Project resources have been disbursed, albeit frequently too slowly. Targeting has been generally effective, although there is scope for improvement, especially within the context of ordinary lending terms and conditions that is making provinces focus on infrastructure. Project staff tend to prioritise reaching physical targets and credit recovery rather than reaching the vulnerable.
- 3. While it is difficult to quantify the extent IFAD projects have directly resulted in fundamental changes that impacted beneficiary institutions and households, it is true that all IFAD-assisted projects are fully integrated into the local development programmes and policies. Thus, they have contributed substantially to strengthen the socio-economic capacities of the target population, reduce rural poverty at village and household-levels, help promote innovations and improve equitable access of the poor and the women to related services and resources. A review of the performance-based allocation system (PBAS) processes indicate that in recent years China's country programme has maintained good scores of around 4.3-4.4, which is above the regional average of 3.6-3.7, and is among the highest average ranking of countries in the Asia and the Pacific region.

B. Lessons Learned

Some of the relevant key lessons learnt from IFAD-China co-financed projects include: (a) the 4. use of project leading groups (PLGs), project management offices (PMOs) and village implementing groups (VIGs) ensures effective inter-agency coordination and timely implementation, as well promote beneficiary participation in the planning and selection of project activities; (b) selection of the poorest townships has been effective in reaching poorer households. Credit packages have been developed to meet the requirements of the poorer farmers and ceilings established for certain activities to avoid elite capture by better-off farmers; (c) once it was recognised that the large amounts of statistical data collected by the M&E systems were cumbersome to analyse the system was simplified by identifying, through participatory workshops and participatory rural appraisals (PRAs), an optimum number of parameters to monitor that can meet the needs of both the financiers and PMOs: (d) the use of existing financial intermediaries, namely the rural credit cooperatives (RCCs), for the delivery of credit and other financial services has proven to be successful with strengthening their capacities, but sustainably serving the needs of the rural poor continuous to be a major challenge for them; (e) close monitoring of rural infrastructure is required during implementation to ensure designs are correctly executed. Consequently, follow-up during implementation is deemed more important than providing international expertise during formulation; (f) experience with agricultural infrastructure to improve water and soil management has been instrumental in ensuring better water harvesting, flood control, irrigation support, and land development with terracing and fertilization, which in turn effectively contributed to reducing erosion and the risk of natural disasters; and (g) to create more awareness of infrastructure viability and environmental impact, local user groups and VIGs should be consulted, using PRA methods, to identify major issues and provide training in the maintenance and repair of infrastructures; (h) loans and grants must be strategically linked from the design stage in order to develop maximum synergy and impact.

DETAILED PROJECT DESCRIPTIONS

A. Project area

- 1. **Geographic coverage of the project**. The project area is located in the north and western part of Hunan Province except Shaodong county in the centre, between longitudes 109 113 E and 26 29 N.
- 2. The Project will be implemented in nine counties under four prefectures, namely: Lingxiang and Yueyang of Yueyang prefecture, Taoyuan of Chengde prefecture, Shaodong of Shaoyang prefecture, Longshan, Guzhang, Luxi and Fenghuang of Xiangxi prefecture, and Jingzhou of Huaihua prefecture. Among them four are nationally-defined poverty counties (Longshan, Guzhang, Luxi, Fenghuang), the others are identified by the province as counties with persistent pockets of poor that require additional development support. Five are the ethnic autonomous counties (Jingzhou, Longshan, Guzhang, Luxi, Fenghuang).
- 3. The project area is basically located in the poorer, less fertile, less accessible and less developed areas. The total area of the 9 project counties is about 20,648 km². Some 564,000 ha is accounted as related to the agricultural land, of which 27% are cultivated land (21% paddy field and 6% dry land), 43% considered as ecological forestry and 25% as economic forestry. Ponds take a share of 5%. The nine project counties administer 204 townships and 4,022 administrative villages. There are 1,285,250 households in the project counties with a total population of 4.3 million. On the basis of their poverty and vulnerability within the counties, deficiency of community productive infrastructures and potential for innovation, a total of 97 townships out of 204 have been selected to form the project area in the nine project counties. 589 target villages selected by the project regroup a total population of 759,606, or 181,656 rural households as prime recipients of the project support.

B. Project development objective

- 4. **Project goal**. The goal of the Project is to contribute to rural poverty reduction in targeted areas of Hunan Province by enabling rural poor men and women to benefit sustainably from economic growth, improve their agricultural production and food security, raise their incomes and strengthen their resilience through innovative and replicable approaches.
- 5. **Project objective**. The specific objective is to strengthen the economic and self-development capacities of the poor women and men to help them take full advantage of opportunities, resources and services in the project area. By the end of project implementation, the following results will have been achieved:
 - (a) Community-level infrastructures and facilities will have been improved;
 - (b) Sustainable and adaptive household income generating activity (IGA) modules will have been demonstrated and scaled up to help the rural women and men to take advantage of the decent work and income generation opportunities;
 - (c) The natural resource and economic asset base will have become more resilient to climate change, environmental degradation and market transformation;
 - (d) Innovative approaches to poverty reduction will have been demonstrated;
 - (e) Access of poor women and men to information, technology, rural support services and markets will have been improved;
 - (f) Demand-led project modules will have been successfully made available across the project area, with adjustments made to reflect local conditions;
 - (g) Women will have directly benefited from Project investments, with the proportion of women among the beneficiaries being not less than 50%;
 - (h) The institutional capacity and sustainability of rural and agricultural service support systems will have been improved;
 - (i) Project support will have enabled women and men in poor households to improve their social and economic situation in a sustainable manner such that their incomes exceed the poverty line.

C. Project components/outcomes

6. HARIIP will have three components: A) Community infrastructure improvement; B) Sustainable agricultural development and market access support; C) Project Management.

Component A – Community infrastructure improvement

- 7. This component will aim to achieve the outcome of strengthening the economic capacities at community level, especially the productive and livelihood assets for expanded and improved agricultural production, decreased physical isolation and thus improved integration into the market value chains, and improved productive and daily-life assets for the sake of the rural community and the households in the project area. Support is provided for irrigation facilities, village roads, drinking water supply facilities, and rural electricity grid upgrading. These activities would be critical for the project area to strengthen the community resilience to frequently-occurring climatic calamities, improve the access of rural poor to markets, information and technical services, increase the netincome, develop commercialized production of agriculture, increase health and improve the living conditions, which are regarded as effective measures for rural development and poverty reduction at the current stage.
- 8. Project interventions under this component include: (i) improvement of irrigation facilities, mainly the lining of old existing earthen irrigation canals including the necessary water intake, the water outlets and the flood protection measures; (ii) paving of village roads with a concrete slab, connecting to administrative villages and their constituent natural (smaller and scattered) villages with non-paved gravel roads. (iii) construction of community supply facilities of safe drinking water; (iv) upgrading the rural electricity grid, especially for those that the efficiency has fallen under the state's technical standards. General training of beneficiaries and specific training for the operation and maintenance and bookkeeping of the project-built civil works will also be supported by the project.
- 9. Implementation responsibilities will rest with the technical bureaus at county level. The Bureau of Water Resources will be responsible for irrigation and drinking water supply development/improvement activities. For the latter also the Bureau of Health is included, the Bureau of Transportation for roads, and the Bureau of State Electricity Grid for grid upgrading. The HARIIP will provide the step-wise participatory implementation processes for implementing the schemes at the beginning of the project. These are just adaptations of already existing and implemented processes. The relevant staff of the PMOs and the Implementing Agencies will receive training in these implementation steps, in planning and monitoring, participatory processes and in social organising (of village meetings). Manuals will be made at the start of the project to enhance the staff during the implementation steps.
- 251. The implementation of the projects should follow a logical sequence of steps for implementation. For irrigation it is for example important that before construction, a WUA will be established, but also that training on maintenance is provided to the WUA. The following implementation process is adopted for the implementation of irrigation facilities, but these processes equally apply for the other community investments. It is based on the existing implementation process as explained by the staff of the BoW in the different counties with additional steps included by the DCM (these are marked in italics). These steps are based on the assumption that the proposed irrigation projects are already selected and confirmed with the county PMOs. Besides these steps, there is also a need for an implementation process at county level.

252. Implementation process for irrigation facilities: a 12 step process.

- (a) Perform in a rapid appraisal a water resources study to assess the availability of the water sources and to ensure that the water intake to the command area does not have a negative impact downstream.
- (b) Establish and register an official Water Users Association in line with official Government policies. A WUA will have a Committee of 3 to 6 members to lead the WUAs. Like with the VIGs, poor farmers, women, and farmers from each part of the command area should be included in the Committee. A meeting will be organised with all the farmers in the command area to explain the need of a WUA and the implementation process to farmers including their participation. The VIG of the administrative village will assist in the forming of the WUAs.
- (c) The BoW staff will perform a topographic survey. Also a calculation is made by BoW of the proper cost-recovery level for maintenance of the irrigation scheme.

- (d) The design of the irrigation scheme is discussed with the WUA-committee and all the farmers in the command area. Comments raised by the WUA-members are discussed with the BoW Engineers and if technically and financially feasible, adapted in the design. The issues of operation and maintenance and the need for water fees and its transparent use are discussed with the WUA-members. Also the participation and responsibilities of the Committee during the construction process are discussed.
- (e) A formal agreement is made between BoW and the WUA-Committee on the implementation activities and the responsibilities of BoW and the Committee during the construction. Also it is made clear by the Committee who will be the responsible farmer(s) for maintenance and financial management of the water fees.
- (f) The BoW tenders the construction of the irrigation facilities to a contractor.
- (g) During the construction the WUA-Committee supervises the quality and the progress of the works.
- (h) During the construction period the WUA-Committee organises a meeting with the farmers to discuss and finalise their internal rules and regulations. Also farmers are appointed for O&M and for fee collection. The designated farmer(s) for maintenance and fee collection will receive training from the BoW in O&M and in financial management.
- (i) After completion of the construction the WUA-Committee and the BoW perform a joint check of the constructed scheme and formally accept it, if it is properly built.
- (j) During the first year, as soon as possible after the completion of the scheme, an agricultural extension programme will start.
- (k) After about one year, in a general meeting of the WUA, the functioning of the scheme is discussed. After that, another combined check is performed with the BoW, the Committee and the contractor to analyse the functioning of the scheme before the final payment is made to the contractor.
- (I) If the final payment is made to the contractor and thus the scheme is well functioning, then an official handing over paper is signed. From that date, only the WUAs will become responsible for O&M.
- 10. For a more in depth description of the stepwise approaches for the implementation of the infrastructure investments under Component A in WP1 and Annex 11 Project Implementation Manual.
- 11. Sustainable operations and maintenance. Sustainable use and maintenance will be addressed by the project, mainly through the general training of beneficiaries and in establishing operation and maintenance managers who work under the guidance of committees or users' groups in a participatory way. IFAD funded-projects encourage community-governed operations and maintenance (O&M) mechanisms that require the active participation of beneficiaries. In the HARIIP WUAs will be established for the irrigation activities and the Village Committees will take over the responsibilities of O&M drinking water systems and road maintenance. The below-mentioned outlines for establishing O&M framework will be used at the start of the project to develop further the implementation processes. IFAD supports the community development through a number of investments, usually in grassroots facilities and services. Those investments should not be valued only by their physical installations, but also through the participatory process by beneficiaries and related stakeholders, and the continuity of sustainable operations ensured by an effective O&M framework.
- 12. The O&M framework in this context therefore include at least:
 - (a) A facility or a service established, such as an irrigation scheme, a drinking water supplay schemes, an unpaved or a paved village road and an electrical grid.
 - (b) Target beneficiaries or users of facilities or services, such as households in a village for a community road built, user households of a water source for drinking purpose, water users for irrigation facilities and households for an electrical grid
 - (c) Community-based and governed O&M legal entity, usually established in the form of WUAs (in de the case of an irrigation scheme) or a Village Committee (in the case of road building, drinking water supply and electrical grid) with equitable representation for

- all interest groups or targeted well-being categories, and elected in a transparent and participatory manner
- (d) Established managerial and operational procedures with functions and responsibilities well defined. This includes (1) the designation of trained and (preferably paid) O&M managers such as road managers, wss managers and irrigation managers and often responsible for O&M and fund collection (2) financial arrangements to ensure O&M cost based on cost recovery with clear scheme or perspective of self-sufficiency (3) internal rules to ensure sustainable use of the facility or service.
- (e) Integration or inter-linkage with government support services and other technical providers including emergency assistance of the government in the case of natural disasters.
- While local governments and state technical agencies include maintenance in their recurrent annual budgets and the service is extended to the village level, beneficiary O&M remains crucial to promote beneficiary ownership and sustainable use of community assets. For example, current drinking water tariff for cannot fully cover for the cost of O&M therefore there is risk of unsustainable use, or restricted access in the future. Low water price and low collection rate are often linked with ability to pay and willingness to pay. Community participation is important to help ensure that tariffs are set that the community understands and is prepared to pay. As a first step, during the design the cost recovery is calculated for each scheme with respect to maintenance cost. Pro-poor arrangements will be addressed to ensure the poorest households can equally benefit from the services. Pro-poor arrangement is for instance, the waived (subsidy) the water fees for the poorest households and adopting a rising block tariffs (two-step water price as called locally) that is widely regarded as a pro-poor structure and water saving measures. In the implementation process for the HARIIP, the two-step water prices is included in the implementation process for drinking water supply. Training of the beneficiaries to raise awareness, enhance skills on O&M and demonstrate good examples are necessary to help ensure sustainable use during the project life and after. These training sessions are included in the project and part of the step-wise implementation processes. Similar participatory approach of O&M will be introduced to ensure sustainable use of irrigation schemes and village roads built by the Project. These approaches are included in the project and part of the step-wise implementation processes. Management of rural electricity grid stations will be mainly taken care by the local state electricity grid bureau, assisted by villagers' representatives Working paper 1 provide more detailed information on the step-wise approached for the 4 infrastructural investment programmes and the main elements of the Component A (justification, strategy, objectives, target group, intervention activities and cost estimates. More details regarding O&M in the annex 11 on Project Implementation Manual.

Component B - Sustainable agriculture development and market access support

- 14. This component aims to strengthen the self-development capacities of the rural men and women and improve their income generation opportunities by supporting the sustainable development of diversified and adaptive agriculture at the levels of production and service support. The modular approach will be adopted for the component, while the concepts and techniques of sustainable development and environment protection will be integrated within all project activities. The production modules are designed to help strengthen the farmers' resilience and adaptability to uncertainties, mainly caused by climate change and market transformation. This will be achieved through income generation diversification and adaptive farming system at household level to orient it towards making farming a business and profitable for the poor farmer by using techniques such as eco-farming and niche-market production benefitting from timely market information systems. Mainstreaming the target farmers into the market value chain and production specialisation or diversification will be achieved through the support to farmers' cooperatives. The above mentioned modular interventions would be complemented by the module of technical service support, which intervenes at the supply side. On the assumption of successful implementation, the sustainable production model that the related module applies will be extended to the other farmers within and outside of the project area.
- 15. Module 1: Cash crop/off-farm IGA. Based on local available resources and market opportunities, the module aims at increasing and diversifying farmers' income sources in the project area through the development of cash crops; it also provides a compatible tool to the beneficiary farmers to engage in off-farm income generation activities so that their resilience to natural calamities and market shocks will be further strengthened. Activities under the module will include: (a) provision of seeds or seedlings or other inputs required to start up off-farm IGAs; (b) fertilizers required for cash

crop production or other miscellaneous inputs needed for IGAs; and (iii) beneficiary training to further strengthen the farmers' technical capacity. The support package is tailored particularly to the needs and capability of the rural poor men and women, in conjunction with the availability of diversified income opportunities mostly based on the needs of the local consumer market. Priority consideration for the implementation of the module will be given to the poor and vulnerable households, as well as the female-headed households, but the better-off households will not be excluded. Farmers in the project villages will be encouraged to engage themselves in production specialization or organized farming but on individual household basis, in order to achieve sufficient economies of scale collectively without increasing the associated co-variant risk. Implementation responsibility of the module, related technical services provision and the organisation of possible inputs supply will remain with the Bureau of Agriculture at county level.

- 16. Module 2: Orchard-poultry integrated farming. There are large areas of fruit orchards and non-timber forest in the project area, which can also be linked to the production of poultry. The module attempts to achieve more effective and efficient use of limited available land resources and production optimization by combining poultry production with short-term and quick returns with the production of fruits and non-timber forest products with long-term benefits. It is also conducive to the recycled use of farm wastes and nutrients and soil conservation, leading to the reduced use of chemical fertilizer at the same time. Project support will include the improvement of poultry sheds and provision of chicks, feedstuff and medicines and beneficiary training. This module aims to introduce an optimal integrated farming model at smallholder level, which should be disseminated and replicated within and outside the project area once it is proven successful. Similarly to module 1, the implementation will focus on the poor and vulnerable households and the female-headed households, although the relatively better-off households will not be excluded. The Bureau of Livestock at county level will be responsible for the module's implementation, including providing technical training, provision of the chicks and other inputs.
- 17. *Module 3: Agro-forestry*. This household-based agro-forestry development module follows the overall project strategy of paying close attention to rural poverty issue by means of an assorted approach. The module is to sustainably explore the income generation potential of diverse economic trees, while maintaining a sound balance in forestry conservation and protection. Project support includes planting materials, fertilizer, other inputs, on-farm facilities, beneficiary training and model dissemination. The module promotes introduction of improved varieties of economic forest species, improvement of existing low-yield economic forests, including lily, oil camellia tree, bamboo, kiwi fruit tree, orange tree, grapevine, tea, and other suitable economic trees in the project area. Intercropping of young seedlings with cash crops will be encouraged where applicable. Similar to module 2, this module aims to introduce an adaptive farming system, which should be disseminated and replicated within and outside the project area once it has proven successful. The implementation will give priority to the poor and vulnerable households and the female-headed households although the better-off households will not be excluded. Implementation responsibility of the module will remain with the State Forestry Administration at county level.
- 18. Module 4: Support to farmers cooperatives. The project will provide assistance in the form of a module to support the development of farmers' cooperatives. Under this module, eligible existing or newly established cooperatives will follow the proposed modular implementation guidelines to strengthen their capacities in improving the members' connectivity with appropriate value chains. The economically active poor households and female-headed households will be systematically mainstreamed into the cooperatives and thereby benefit from the collective bargaining power in organized production, marketing, and other enhanced services for members. Support will be provided to the cooperatives under the activities foreseen to strengthen inclusion of poor households and women, access to new techniques and know-how, marketing linkage and trade promotion and by provision of some office equipment and essential equipment required for the improvement of production and marketing. The expected outcomes should be highlighted by members' increased premium share in the value chain, cooperatives' sustainable service capacities in technical support and market information. The Bureau of Agriculture at county level will assume the overall responsibility of the module implementation. The module will closely link with the other modules related to production and technical service support, and leverage from the project-supported productive infrastructures.
- 19. *Module 5: Technical service support.* The objective of this module is to improve the grassroots agro-technical service network and enhance the effectiveness of service delivery therefore create an enabling environment for farmer-to-farmer extension. As a result, rural women and men

would gain improved access to novelties in farm production in a timelier manner. Module activities include support to the provision of essential equipment, tools and transport means, staff training and trial and demonstration activities. Capacity building of the township extension agents is particularly pronounced in the module in order to improve their skills in delivering services through participatory and hands-on approaches. Training would include, among others, farming practices that would reduce the use of chemical pesticides and fertilizers, such as integrated pest management (IPM) and, where available, the use of the by-products of biogas anaerobic fermentation process as both pesticides and farm manure. Trial and demonstration aim at building improved technical and crop variety reserves for scaling up. Due consideration will be given to the coping strategy for local farm production in relationship with the climate change. The Bureau of Agriculture at county level will be the implementing agency. This module is also applicable to the forestry sector when local needs arise, whereby the State Forestry Administration (SFA) at county level will be the implementing agency under the coordination of the county PMO.

- 20. Module 6: Root and tuber crop. The module aims at increasing and diversifying farmers' income sources in the project counties of Fenghuang, Guzhang, Longshan, Luxi and Jingzhou through the development of root and tuber crops, so that their resilience to food price fluctuation, natural calamities and market shocks will be further strengthened. Activities under the module will include: (a) provision of seeds; (b) fertilizers required for production enhancement; (c) irrigation, and (d) beneficiary training to further strengthen the farmers' technical capacity. The support package is tailored particularly to the needs and capability of the rural poor men and women; priority consideration for the implementation of the module will be given to the poor and vulnerable households, as well as the female-headed households, but the better-off households will not be excluded. This module will be co-financed by the IFAD grant. Implementation responsibility of the module, related technical services provision and the organisation of possible inputs supply will remain with the Bureau of Agriculture at county level.
- 21. The Project will also support the PPMO of Hunan Province to forge partnership with the research institutions to carry out targeted research, introduction of new varieties, experimenting new farming techniques of root and tuber, and trials and popularization of varieties tested successful. Particular attention will be given to such technical options that will increase farmers' capacity to cope with climate change and food sufficiency uncertainty, including the introduction and screening of crop varieties resistant to climate adversities and farming techniques that can mitigate the adverse effect of climate change. IFAD grant proceeds will support the introduction and experiments of new varieties, study on methodologies of virus-free micro tuber production and the establishment of propagation facilities; this will be achieved mainly through the support of research enhancement and M&E under the provincial PMO.
- 22. The implementation of activities in partnership enhancement will contribute to effective implementation of the project, the attainment of project objectives and sustainable agricultural development of the project counties in the long-run, through building genetic and technical reserves for farm production of the project area.

Component C – Project management

- 23. This component will make provision to cover the cost for the coordination, management, monitoring and evaluation of the Project. This involves the establishment of an effective management structure comprising a Provincial Project Management Office (PPMO) in Changsha, one Prefecture PMO (Prefecture PMO) in Jishou for the prefecture of Xiangxi that has the direct responsibility of overseeing administratively and financially the counties under its jurisdiction, including four project counties ⁶, and County PMOs (CPMOs) in each of the nine counties where HARRIP will be implemented. Operations will be substantially decentralised to the CPMOs, with the PPMO and prefecture PMO in Xiangxi performing overarching functions of planning, coordination and monitoring. Support will also be provided for small Township Project Management Offices (TPMOs) in each project township, utilising existing staff and facilities of the Township Governments.
- 24. Village Implementation Group.. HARIIP will support the establishment of a Village Implementation Groups (VIGs) in each of the project administrative villages. The VIG will be composed with representatives of village committee, WF agent, and households of all categories. Women, poor households and ethnic minorities' representation is compulsory with equitable share and equal right of leadership, decision making and participation. The VIG will act as an interface

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between the project and target communities, and will be responsible for the following tasks. First, they will inform villages and households on project opportunities and access to support. Second, they will facilitate the annual participatory household well-being ranking as a monitoring tool. Based on the ranking, the VIG will identify eligible households for every module in full coordination with the respective service providers. Third, the VIG will assist the coordination of priorities and the modules for specific villages with the different service providers and in design of their annual plan later

25. The project financing will cover expenditures such as vehicles, office equipment and materials, management workshops and training, gender focus training, monitoring and evaluation (M&E), results and impact management system (RIMS) of IFAD and baseline survey, innovation enhancement and knowledge management, and PMO operational costs. Recurrent costs will be ensured by Government counterpart funding, covering expenditures such as staff salaries, travel costs, office operations, vehicle O&M, operational costs for township PMOs and VIGs. Budgets for M&E and knowledge management are specified in the cost tables.

INSTITUTIONAL ASPECTS AND IMPLEMENTATION ARRANGEMENT

A. IMPLEMENTATION

- 1. Opportunities for rural development and poverty reduction in the intervention area are: a) community-level productive infrastructures, b) adaptive and diversified farming models in response to climate change and market transformation, c) the existence of commercially-viable agriculture-related value chains, to which the rural poor have however limited or no access yet; d) the emergence of farmers' associations and cooperatives.
- 2. Mainly due to the project area's disadvantageous geographic and economic positions, the farming systems have been developed into self-sufficiency mechanisms with insufficient linkage with the market value chains. These systems are geared towards meeting basic livelihood requirements of the family through a core food production activity, complemented by other traditional IGAs, such as raising of small stock and fish, cash crop cultivation and off-farm employment in an attempt to defray cash expenses and consolidate household food security. The project would improve the farming systems' viability, sustainability, adaptability and resilience. Agriculture production would be substantially raised, farmers' livelihood improved through a combination of productive infrastructures, diversified on-farm and off-farm IGAs, market linkage, and need-centred technical service support
- 3. The project would directly invest in rural productive infrastructures to create and strengthen the basis for improving the productive capacity and living conditions, supporting the service support structure and farmers' associations to better assist farmers to enter the market economy and improve the leverage efficiency between different assets and resources. All this would help the farmers to raise food production and income, consolidate food security, reduce out-migration pressure or dependency, improve capacity and efficiency of labour force and production, create added value to local produce through transformation and market linkage. Where possible, adaptive, integrated, low-cost, environmental-friendly techniques would be preferred over conventional and costly capital goods so as to maximize input-output relations and decrease dependency relationships.
- 4. Project management will strengthen its focus on monitoring of its targeting strategy, and knowledge management for exchange with other government and donor funded project at national and provincial level.
- 5. **Targeting strategy**. If measured by USD 1.25 per day per person, or equivalently an income per capita of CNY 3,000, total poverty population in target villages represents around 45% of the total population and households. The Project will adopt the inclusive targeting strategy, addressing the specific needs of the different vulnerable groups, especially the poor women and men, ethnic minority groups and other possibly socio-economically marginalized groups.
- 6. The project's targeting strategy will be adapted to the changing dynamics of rural poverty in the project areas, focus on strengthening community-level assets of collective nature, improving access to income generating opportunities, and strengthening sustainable service support services, and strengthening the target groups' resilience. It will adopt the geographic targeting strategy of the Government in identifying the pockets of rural poverty in economically disadvantaged areas, and it will continue to apply the differentiated targeting and support model to complement the Government's poor village and poor household-based approach. This suggests that within the project villages, the economically active poor and women, the vulnerable ethnic minorities would be identified and served on a priority basis.
- 7. Well-Being Ranking. People living in the same village have different levels and status both in terms of social and economic. Those differences are related to their livelihood system. Well-being ranking is one of the PRA tools, to know the different level and status of each family in the village and their different sources of income at the same time. It is also important to know how people perceive their well-being as a whole, it might be different than one village to another. More details are described in Annex 11, Project Implementation Manual (PIM).
- 8. In order to ensure the targeting imperatives of IFAD assistance, HARIIP will adopt the well-being ranking that should be introduced in the project villages, under the coordination of VIG. Households of category C will be given priority as main recipients of production modules, subjects of cooperative mainstreaming and technical service support. Similarly, beneficiary training should be tailored to meet the particularities of that prime vulnerable segment, help ensuring them an equitable access to knowledge, techniques and opportunities.

B. ORGANIZATIONAL ARRANGEMENT

The main implementing agencies and their roles

- 9. The Ministry of Finance (MOF) is IFAD's country counterpart. It leads the IFAD country programme implementation on behalf of the Government. The MOF assumes effective coordination with central government agencies and international donors The MOF carries out its responsibilities through the Departments of Finance (DOF) at provincial level, the Bureaux of Finance (BOF) at prefecture and county levels. The Ministry of Finance as representative of the borrower of IFAD loan receives and passes on the loan proceeds to the provincial DOF of Hunan, subsequently to project prefecture and counties for financing the execution of the HARIIP. The Department of Finance (DOF) and relevant Bureaux of Finance in the prefecture of Xiangxi and the nine project counties have the responsibility for the use and flow of counterpart and loan funds.
- 10. **Project Leading Groups (PLGs)**. At county level, the project leadership will be assumed by the Project Leading Groups (PLGs) established by respective governments. PLGs should be led by a senior official of the local government and composed of representatives from local BOFs, DRCs and line agencies such as Bureaux of Agriculture, Forestry, Water Resources, Transport, State Grid, Environment Protection, Auditors, and technical partners such as Women Federation and Poverty Alleviation Office. PLGs are responsible for the following: (i) overall supervision of PMO operations, (ii) coordination of the government bureaux and agencies involved in project implementation, (iii) review and endorse AWPBs and annual progress reports, and (iv) coordination of counterpart resources.
- 11. **The Department/Bureaus of Finance (DOF/BOFs)** at the provincial and county levels, and in the prefecture of Xiangxi, respectively will be responsible for the following: (i) opening and management of the Project Accounts; (ii) administering the project resources including the IFAD loan and counterpart funds; (iii) review and approval of the financing needs of project implementation; (iv) overseeing the use of project resources; (v) ensuring effective flow of funds for project implementation; (vi) providing appropriate training to the financial officers of PMOs in terms of financial management; and (vii) preparing Withdrawal Applications (WAs) and reimbursement of eligible project expenditures on a timely basis.
- 12. **PMOs** will assume the actual project management and coordination. They focus on planning, coordinating, monitoring and reporting of the project. Implementation of project activities will be delegated to the IAs at county level (Table 2), under the coordination of CPMOs. The main IAs and their roles are as follows.
- 13. **Bureaus of Agriculture (BOAs)**. The routine of county BOAs includes the detailed planning, implementation and monitoring of agricultural and rural development activities. Technical services are provided through their technical service network, including the Agro-Technical Extension Stations, Soil and Fertilizer Stations, Plant Protection Stations, Cash Crop Working Stations, Agricultural Industrialization Offices, Green Food Development Office, Seed Administration Stations, and Seed Companies.
- 14. For HARIIP, county BOAs will be responsible for the implementation of project modules including the cash crops/off-farm IGAs, orchard-poultry integrated farming, support to farmer cooperatives, and technical service support when it relates to agriculture development, all under the coordination of CPMO. Its responsibilities include, inter alias, (i) the identification of eligible townships/villages/cooperatives with given criteria; (ii) identification of target households for carrying out the modules, together with VIGs; (iii) adjustment of the modules to fit local conditions in line with given criteria; (iii) technical support and follow-up services to beneficiaries on module activities; (iv) facilitating the formation of beneficiary groups by trade and linking them with relevant farmer cooperatives, or facilitating the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries, if needed; and (v) reporting to CPMOs on the progress and results of module implementation.
- 15. If in some counties, the agro-forestry module leads to a preponderant linkage with the support of farmers' cooperatives and the increased support from the local technical services, implementation of modules of support to farmers' cooperatives and technical service support should be shifted to the County Bureaux of SFA for better synergy and relevance. This should be done under the coordination of CPMO and subject to the approval of PPMO.

- 16. **County Bureaus of State Forestry Administration (BOSFAs)**. The County Bureaux of SFA at county level are responsible for the detailed planning, implementation and monitoring of agroforestry module, under the coordination of CPMOs. Technical services are provided through their technical network, including the county Forestry Stations. Their responsibilities include, inter alia, (i) the identification of eligible villages and households with given criteria, together with VIGs; (ii) adjustment of the module to fit local conditions in line with given criteria; (iii) technical support and follow-up services to beneficiaries on module activities; (iv) facilitating the formation of beneficiary groups by trade and linking them with relevant farmer cooperatives, or facilitating the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries, if needed; and (v) reporting to CPMOs on the progress and results of module implementation.
- 17. SFAs may also be responsible for the implementation of the modules of support to farmers' cooperatives and technical service support, if the agro-forestry module leads to increasing demands for farmers' cooperatives and tailored technical service support.
- 18. **Bureaus of Water Resources (BOWs)**. The county BOWs undertake the responsibility of developing irrigation schemes and drinking water supply facilities, as well as the operation and maintenance of the schemes and facilities, particularly those on a large scale. For HARIIP, county BOWs will be responsible for the implementation of the construction of irrigation and drinking water supply facilities, under the coordination of CPMOs. Their responsibilities include, inter alias, (i) the identification of eligible villages suitable for carrying out the interventions, within the list of selected villages confirmed by the CPMOs; (ii) facilitating the formation of interest groups for the operation and maintenance of project works; (iii) detail design of the works by site; (iv) organising the construction of the infrastructure; and (v) reporting to the CPMOs on the progress and results of module implementation. With respect to the drinking water supply also the Bureau of Health is included in the design and in monitoring in order to ensure good quality drinking water as a design criteria and for continuous aftercare through monitoring of the water quality.
- 19. **Bureaus of Transportation (BOTs)**. The county BOTs are responsible for the development and maintenance of roads. For HARIIP, county BOTs will be delegated with the responsibility of implementing the village roads construction, under the coordination of CPMOs. Their responsibilities include, inter alias, (i) the identification of eligible villages suitable for carrying out the activities, within the list of selected villages confirmed by CPMOs; (ii) facilitating the formation of interest groups for the operation and maintenance of the project works; (iii) detail design of the works by site; (iv) organising the implementation of the roads construction; and (v) reporting to CPMOs on the progress and results of module implementation.
- 20. **Bureaus of Electrical Grid (BOEGs)**. The BOEGs are responsible for the development and maintenance of the grid network. They will be delegated the responsibility for implementing the rural grid upgrading. Its responsibilities include, inter alia, (i) the identification of eligible villages suitable for carrying out the activities, within the list of selected villages confirmed by CPMOs; ii) facilitating the formation of discussion with interest groups for part of the maintenance of the project works (iii) detail design of the works by site; (iv) organising the implementation of the grid upgrading; (v) ensuring the operation and the most part of the maintenance of the project works; and (vi) reporting to CPMOs on the progress and results of module implementation.
- 21. In summary, implementation of project activities will be delegated to the IAs at county level under the coordination of CPMOs. These agencies are selected because they are part of the state structure mandated for respective sector development and administration. There are no private sector players that are competent to carry the activities out. Based on its assessment on managerial, operational and technical capacities, the mission considers those IAs possess the required competence for implementing the proposed activities. The main IAs and their implementation responsibilities are as follows.

Table 1: Project Implementation Arrangement

#	Project Modules/Interventions	Implementing Agencies
1	Irrigation facilities	County BOWRs
2	Drinking water supply facilities	County BOWRs and BOHs
3	Village roads	County BOTs
4	Rural grid upgrade	County BOSGs
5	Cash crops/off-farm IGAs	County BOAs
6	Orchard-poultry integrated farming	County BOAs
7	Agro-forestry	County SFAs
8	Support to farmer cooperatives	County BOAs or SFAs
9	Technical service support	County BOAs of SFAs
10	Root and tuber crop	County BOAs

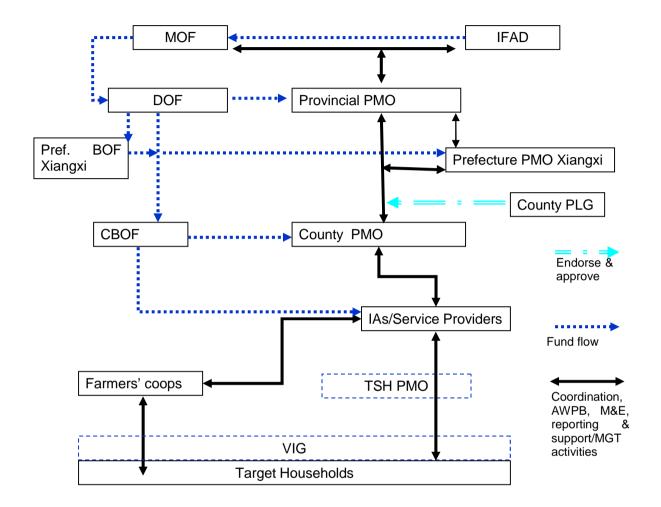
- 22. **Village Implementation Group**. HARIIP will support the establishment of a Village Implementation Groups (VIGs) in each of the project administrative villages. The VIG will be composed with representatives of village committee, WF agent, and households of all categories. Women, poor households and ethnic minorities' representation is compulsory with equitable share and equal right of leadership, decision making and participation. The VIG will act as an interface between the project and target communities, and will be responsible for the following tasks. First, they will inform villages and households on project opportunities and access to support. Second, they will facilitate the annual participatory household well-being ranking as a monitoring tool. Based on the ranking, the VIG will identify eligible households for every module in full coordination with the respective service providers. Third, the VIG will assist the coordination of priorities and the modules for specific villages with the different service providers and in design of their annual plan later
- 23. **Sustainable operations and maintenance**. Sustainable use and maintenance will be addressed by the project, mainly through the training of beneficiaries in establishing operation and maintenance committees or users' groups and in participatory management. It is important that these institutions have a legal status to perform these tasks. IFAD funded-projects encourage community-governed operations and maintenance (O&M) mechanisms that require the active participation of beneficiaries. The following outlines for establishing O&M framework can be used by PMOs or implementing agencies as procedural guidelines, if the latter are not familiar with such community-based mechanisms.
- 24. IFAD supports the community development through a number of investments, usually in grassroots facilities and services. Those investments should not be valued only by their physical installations, but also through the participatory process by beneficiaries and related stakeholders, and the continuity of sustainable operations ensured by an effective O&M framework.
- 25. The O&M framework in this context therefore include at least:
 - (a) A facility or a service established, such as an irrigation scheme, a drinking water supplay schemes, an unpaved or a paved village road and an electrical grid.
 - (b) Target beneficiaries or users of facilities or services, such as households in a village for a community road built, user households of a water source for drinking purpose, water users for irrigation facilities and households for an electrical grid
 - (c) Community-based and governed O&M legal entity, usually established in the form of WUAs (in de the case of an irrigation scheme) or a Village Committee (in the case of road building, drinking water supply and electrical grid) with equitable representation for all interest groups or targeted well-being categories, and elected in a transparent and participatory manner
 - (d) Established managerial and operational procedures with functions and responsibilities well defined. This includes (1) the designation of trained and (preferably paid) O&M managers such as road managers, WSS managers and irrigation managers and often responsible for O&M and fund collection (2) financial arrangements to ensure O&M cost based on cost recovery with clear scheme or perspective of self-sufficiency (3) internal rules to ensure sustainable use of the facility or service.

- (e) Integration or inter-linkage with government support services and other technical providers including emergency assistance of the government in the case of natural disasters
- 26. In practice in the HARIIP the institutions will be the Village Committee (already existing), the WUAs, the cooperatives and the farmers' organisations for agricultural activities. In the HARIIP it will be encouraged that the VC reflects the membership of the VIG. The latter is a project driven institution present during the project period for prioritization, for monitoring and control of project activities and for stimulation of villagers. The VC will be responsible for organising O&M and supervision on the O&M of the drinking water supply system and the village road because all villagers have an interest in these infrastructural measures. Water Users Associations, a legal entity in China, will be responsible for O&M of irrigation facilities such as water ponds and lined and unlined irrigation canals. This is because not all farmers may have land in the command area and only farmers in the command area should be involved in decision making and O&M.
- 27. The DCM is of the view that cooperatives should be professionalized and should focus on a better integration in the supply chain so as to improve the links and the coordination between the different layers within the supply chain: farmers (production & storage) traders wholesale/retailers customers. In doing so the 'time-to-market' will be shortened and possible frictions between the layers could be smoothened. Also, market signals can be better translated and transmitted to the producers. Cooperatives should also focus on developing more in house market knowledge; they should seek for new market trends and developments and discover new markets, in close coordination with their members.
- 28. From the field-visit, the DCM found that the cooperative is a very effective mechanism to provide services to the farmers, such as market information and access technology training. For example, Tuanshan Agricultural Product Cooperative in Shaodong County, started with 40 poor households some 4 years ago and currently has 165 households with 828 farmers as member. It registered the Brother Bird as special brand for organic rice and Xiangshu (Hunan Vegetable) for daylily. The cooperative also introduced new technology and varieties to farmers. Through these measures the possibilities of farmers to sell higher quality products at higher prices increased considerably.

Technical partners in implementation

- 29. **All-China Women Federation (ACWF)**. The WF is a grassroots member-based organization, represented at all administrative levels up to the village committee. Its mandate includes the coordination of and support to urban and rural women for their empowerment and development. WF works actively with other technical agencies to provide training in a broad range of areas to rural women and it is also involved in organising rural women to develop income generating activities. Although WF is not an IA for HARIIP, it will collaborate closely with the project under the framework of county PLGs, assisting the IAs in addressing gender issues in the project implementation, mobilizing women to participate in project activities, organising capacity building for women, and overseeing prioritized targeting to women.
- 30. **Poverty Alleviation Office (PAO)**. PAO undertakes the responsibilities for rural poverty reduction. Its routine includes the design of poverty reduction strategies, implementation and management of governmental poverty reduction projects. PAO manages an extensive monitoring database of rural poverty, which provides a basis for HARIIP in the selection of project areas, including counties, townships and villages. It will be essential for HARIIP to share with PAO its experiences for poverty reduction in the project areas. Similar to WF, PAO is also not an IA for HARIIP, but it will help assist the PMOs and IAs in the selection of eligible villages and beneficiaries and appropriate targeting in the project implementation, under the overall guidance of the county PLGs.

ORGANIZATIONAL ORGANOGRAM



PLANNING, M&E & LEARNING & KNOWLEDGE MANAGEMENT

- 1. **The Annual Work Plan and Budget (AWPB)** is an important management tool and its process should be completed through participatory exercise from the village level to avoid top-down planning. AWPB is also a core document that is closely related to further progress reporting and M&E exercises. The annual work planning and budgeting process should also capture the assessment of the training efforts of last year and assess progress realised and further actions to be taken to fill possible training gaps.
- 2. In preparing the first AWPB, the Project Management should be aware of available budget and the amount of Initial Deposit released in order to prioritize critical investments identified. It would be necessary to prepare the following project year's budget to avoid shortage of funds available for the succeeding year. Project Management at different levels should assume the timely undertaking of AWPB and submit it to IFAD for approval (See related Loan Agreement, Article and Section related to Annual Work Plans and Budgets).
- 3. Counterpart matching funds should be secured and accounted in the AWPB (See related Loan Agreement, Article and Section related to Availability of Loan Proceeds and Other Resources).
- 4. In preparing the AWPB, narrative presentation should be concise and precise; spreadsheet tables and schemas should be used where needed to illustrate targets, achievements, costs and financing.
- 5. An AWPB primary consists of seven parties (chapters), which first update the past achievements with focus on the previous year's, then address the projections for the upcoming fiscal year:
 - (a) Update on past achievements:
 - (b) Narrative introduction
 - (c) Summary of physical and financial Achievements (N/A for PY1 AWPB)
 - (d) Projections for the upcoming fiscal year:
 - (e) Summarized presentation by components
 - (f) Detailed presentation by components
 - (g) Cost and financing
- 6. More details can be found in the Project Implementation Manual.
- 7. **M&E**. HARIIP will adopt the M&E framework introduced in the Country Programme in China. The provincial PMO will establish an effective and efficient Monitoring and Evaluation Framework (MEF) that is in line with IFAD's Results and Impact Management System (RIMS). Overall responsibility for monitoring and evaluation (M&E) will be vested in the M&E Specialist in the PMO at prefecture and county level. In order to undertake the key M&E functions the following activities should be carried out: a) the M&E start-up workshop in project year one, which will focus inter-alias on ensuring the M&E system monitors and evaluates income data, so that by mid-term reliable information will become available; b) regular review of M&E in line with the project reporting requirements; c) technical backstopping and continuous external support for the reporting system; d) training for PMO and IA staff to further develop their M&E skills; and e) ensure the M&E system systematically tracks the main types of enterprises (or modules) to determine whether their estimated budgets developed in the present PDR have in fact been realized.
- 8. The logical framework will form the basis for the overall system for measuring the project performance based on expected outputs, outcomes and impacts. The agreed measures of output/outcome/impact form the framework for reporting by implementing agencies and partners as well as for PMO progress reporting to the PLG and IFAD. An Annual Review Workshop will provide a forum for analyzing implications of the results/outputs achieved in the previous years with respect to outcome and overall goal.
- 9. *Monitoring* will concentrate on selected RIMS 1st level indicators and some 2nd level ones. This monitoring will feed into the annual performance report and help guide the project management in its decision making. Performance monitoring will include internal monitoring of implementation progress by each of the stakeholders involved in implementation as well as participatory M&E

activities conducted by the relevant stakeholder or by an external technical service provider.

- 10. Evaluation focuses on the outcome and impact levels of the Project. This impact evaluation would measure changes in the livelihoods of the beneficiaries, such as levels of incomes, asset ownership index, food security, and malnutrition, that relate to the implemented project activities. The impact evaluation will also attempt to reveal the relevance, sustainability and targeting performance of project activities. RIMS 2nd and key level indicators will contribute to such evaluation which will be undertaken through periodic surveys of RIMS and baselines three times for the Project, namely at beginning, midterm and completion. Meanwhile, self-assessment on expected outcomes will be undertaken by PMOs, as part of the annual progress report.
- 11. In addition, state of benefits and participation at the levels of households and individual beneficiaries will be undertaken through a grassroots recording and reporting by VIGs at village-level, complemented by regular recording and reporting of the involved implementing agencies. Special attention will be given to the effectiveness of targeting of the beneficiaries, disaggregated by well-being category and by gender where applicable. The results will help to further orient the targeting of related modules, which should be adaptable to maintain a sound targeting and avoiding possible deviation.
- 12. **Learning and knowledge management**. Key elements of the Project's knowledge management strategy include the following:
 - (a) Establishment of a M&E framework to provide information and analysis on progress achieved against logframe and AWPBs;
 - (b) Implementation of RIMS;
 - (c) Routine conduct of planning and review meetings and monitoring & evaluation ("lessons-learned") workshops at various levels;
 - (d) Participatory monitoring and evaluation by VIG, including evaluation of the targeting performance and reviewing the wealth ranking
 - (e) Production of regular news releases on the best practices and use of other mass media (TV) as a channel to share knowledge, experience and innovative initiatives and success; and
 - (f) Conduct of annual training and workshops to consolidate "lessons learnt", involving PMOs and IAs staff at all levels.
 - (g) In addition, PMOs will be responsible for sharing lessons learnt and to promote the approach publicly and through the country internet exchange platform of ENRAP. Cooperating agencies such as PAO and WF will be encouraged for sharing lessons learnt in the field of poverty alleviation, gender mainstreaming in their nationwide network and publicly.
- 13. HARIIP will participate actively in regional knowledge networking activities in areas relevant to the Project, including effectiveness of a) diversified and adaptive household-level farming models, b) development of farmers' cooperatives, c) improvement of technical service support systems in agriculture and rural development, d) enhanced targeting approaches on poverty reduction. Regular contributions to the country programme's data base of knowledge management will be expected and the project management will be encouraged to take part in exchanges and experience sharing related to poverty alleviation and agricultural and rural development in the regions of East Asia and South-East Asia.
- 14. The Project will actively take part in the South-South exchanges promoting Chinese poverty reduction success among developing countries and sharing experiences and lessons learnt. The future exchanges should not be limited in conducting study and exposure tours, but leading to follow-up technical assistance by China in the areas of poverty alleviation, agriculture and rural development in which the Chinese experience and expertise are broadly recognized as valuable.
- 15. **Possible innovations.** HARIIP incorporates a number of innovative features as following:
 - (a) Continued refinement of the modular approach, designed to give implementers increased flexibility to respond to changing conditions and beneficiary needs;
 - (b) Deepening of decentralised development approaches through refinement of village level

- representative structures and participatory planning processes, and further decentralisation of the management and maintenance of community-level assets;
- (c) Piloting the grassroots-level technical service support, with transformation from administrative coverage to service-driven targeting, which has the potential of becoming a reference of good practice and complementary approach to the conventional extension delivery system;
- (d) Building cohesive linkage among productive assets, sustainable on-farm and off-farm production, cooperative farming and marketing, and farmer-centred service support;
- (e) Promotion of diversified and niche-market production and marketing as an important income generation opportunity for poor households;
- (f) Promotion of water and soil conservation techniques, safe food, green food and GAP codes as a means of increasing consumer confidence in food safety and therefore protecting market access and returns;
- (g) Promotion of sustainable and household-based farming models that lead to increased income, reduced pressure for migration and to encourage the young generation for informed farming in improved natural and socio-economic conditions;
- (h) Formation of the farmers' cooperatives as a mechanism for mainstreaming the poor men and women into the value chain and building partnerships between producers and other value chain participants;
- (i) Farmers' cooperatives could also engage in pro-active marketing strategies, finding new market opportunities for their members, amongst which the poor are a major target group, and promote further integration of the supply chain, thereby smoothening possible frictions between the different layers within the supply chain;
- 16. Other goods and services will be procured following the local shopping or direct contracting processes as appropriate.
- 17. All bidding documents and contracts for the procurement of goods, works and services financed by IFAD loan will include a provision requiring contractors to:
 - (a) Allow full inspection by IFAD of all bid documentation and related records;
 - (b) Maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and
 - (c) Cooperate with agents or representatives of IFAD carrying out audit or investigation.
- 18. A procurement plan covering a period of 18 months will be prepared as part of the first AWPB to be reviewed by IFAD. The procurement plan will be based on the individual procurement plans prepared by each project county, the provincial PMO and the prefecture PMO of Xiangxi. The plan will provided information of goods disaggregated into different interventions of infrastructures, modules and management component.
- 19. The Project will follow the national and IFAD procurement requirements and maintain all relevant documents, bids, purchase orders and payment vouchers for post review by IFAD and for audit purpose.

FINANCIAL MANAGEMENT & DISBURSEMENT ARRANGEMENT

Financial management

- 1. Financial Reporting and Auditing. Article 9 of the General Conditions stipulates the need to maintain separate accounts for the project, the frequency of financial reporting and auditing requirements, the audit of the Special Account and the Statements of Expenditures and the need for a separate opinion by the auditor in respect of the statements of expenditure.
- 2. Financial Statement. As likely stipulated in the Loan Agreement, each province shall maintain separate accounts and records required by Section 9.01 (Financial Records) of the General Conditions, and thereafter prepare the financial statements of the operations, resources and expenditures related to the project required by Section 9.02 (Financial Statements) of the General Conditions in respect of each Fiscal Year until the loan closing date and such accounts and records shall be retained for at least ten years thereafter.
- 3. Audit Report. Audits should be submitted by "due date" (normally six months after end of borrowers/recipients fiscal year). If not submitted on time IFAD may engage an independent auditor to carry out work. If audit not received 180 days after "due date, loan/grant WILL be suspended.
- 4. Each province should appoint, with prior approval of IFAD, independent auditors acceptable to IFAD to audit the financial statements relating to the project/programme in each province for the each Fiscal Year.

Loan Administration

- 5. A Designated Account in USD will be opened by the DOF of Hunan Province in a bank acceptable to IFAD, through which all IFAD funding will be channelled. An initial deposit, approximately equal to projected eligible expenditures over the first six months of implementation, will be deposited into this account once the loan becomes effective, on the basis of a Withdrawal Application (WA) submitted by the Provincial PMO. Subsequent replenishments of the Designated Account will be effected through the submission of WAs and accompanying Statements of Expenditures (SOEs), in accordance with IFAD procedures as set out in the Loan Agreement. The initial deposit will constitute the 'authorized amount' of the Designated Account. All withdrawals must be in line with projected expenditures as detailed in the approved AWPBs.
- 6. Funds will flow from the provincial Designated Account to Project Accounts in CNY held by the county BOFs. For Xiangxi Prefecture, Funds will flow to the four project counties' Project Accounts via the prefecture BOF's Project Account in CNY. The provincial DOF will supervise that funds received at each level are transferred without delay. Provincial PMO, prefecture PMO of Xiangxi and all county PMOs will maintain separate Implementation Accounts in CNY; funds to support PMOs' activities related to implementation management and operations will be transferred from the DOF/BOF Project Accounts of respective levels.
- 7. Similarly, involved implementing agencies and service providers will open a separate Implementation Account in CNY to receive necessary funding from the county BOF's Project Account, in accordance with approved AWPBs and implementation progress.
- 8. Evidence of Authority to Sign Withdrawal Applications. Before withdrawal can commence (after the loan is declared effective), IFAD must receive from the Ministry of the Borrower responsible for Finance (the designated official representative of the Borrower in accordance with Section 8.01 of the Loan Agreement), a letter designating the person or persons authorized to sign withdrawal applications, together with their authenticated specimen signatures. (Please refer to the sample form of the authorization letter usually enclosed as Attachment in the LTB). To avoid possible delays in disbursements, such evidence should be furnished to IFAD, as soon as possible. If there are any changes in respect to the authorized signatories, a new letter of authorization should be sent to IFAD.
- 9. *Disbursement Procedures*. There are three standard procedures that can be used for withdrawing Loan funds. Details are usually included in the LTB as attachment 2.

- 10. Procedure I Reimbursement, should be used when eligible project expenditures reimbursable by IFAD have been pre-financed by the Borrower. For further details, please refer to Attachment 2A of the LTB.
- 11. Before submitting any application under this procedure, the Borrower should open a Project Account at a suitable bank on terms and conditions acceptable to IFAD. Therefore, name and address of the Bank as well as the number of the Project Account should be communicated to IFAD.
- 12. This procedure should also be used for replenishment to the Designated Account. For further details, please refer to related Attachment 2D of the LTB.
- 13. Procedure II Direct Payment, should be used for project expenditures to be paid directly by IFAD to the suppliers or contractors. For details, please refer to related Attachment 2B of the LTB.
- 14. Procedure III Special Commitment should be used for project expenditures related to items imported by Project Implementing Agencies under "Letter of Credit" (L/C) requiring guarantees for reimbursement. For details, please refer to related Attachment 2C of LTB.
- 15. Designated Account. Use of the Designated Account(s) is restricted to making payments for eligible expenditures under Categories specified in Schedule 2 of the related Loan Agreement. Funds under the Designated Account(s) should not be used for other purposes nor for collateral of any sort and should remain in US Dollars, until actually used for making payments for eligible items under the Loan Agreement, except for eligible local expenditures, for which a lump sum, equivalent to about X months of IFAD financed items should be transferred to the Project's operating Accounts, upon receipt of a written request from the PMO. Additional request for local currency financing should be made on a monthly basis, or from time to time as may be necessary. The rate of exchange for the conversion of the local currency payments into US Dollars should be the prevailing rate of exchange by the handling bank on the date of transfer of funds from the Designated Accounts to the Operating Accounts.
- 16. Accounts and Accounting. Separate and disaggregated Implementation Accounts will be maintained by the provincial PMO, prefecture PMO of Xiangxi, and county PMOs, in accordance with IFAD's requirements and internationally acceptable accounting standards. IAs at various levels will also maintain disaggregated Implementation Accounts for project-funded activities. County BOFs will be responsible for periodic review of county PMO and IA accounts so as to ensure their adherence to acceptable standards of transparency and accuracy.
- 17. Application for Deposit of the Authorized Allocations. The deposit of the Authorized Allocation to the Designated Account(s) should be applied for under Withdrawal Application Form 100. The full amount of the Authorized Allocation may be applied for under one application, or it may be applied for in smaller amounts up to the aggregate of amount to be specified by IFAD.
- 18. No documentation is required in support of the application for the Authorized Allocation; however, the application should be accompanied with:
 - (a) A copy of the agreement between the Borrower/the Implementing/Executing Agency and the bank holding the Designated Account(s), confirming the establishment of the Designated Accounts, providing the accounts numbers and the agreed procedures for the operation of the Accounts; and
 - (b) A list of the persons (names and functions) authorized to operate the Special Account(s).
- 19. Replenishment to the Designated Accounts Form 100. The withdrawal applications for replenishment to the Designated Account(s) should be denominated in US Dollars and should be submitted on a regular basis, provided that the expenditure made thereunder during the previous month (Reporting Period) was more than the equivalent of an amount in USD to be specified by IFAD for Designated Account(s). The reimbursement application for replenishment to the Designated Account(s) should be made under the Withdrawal Application Form 100, a sample copy of which is usually enclosed in Attachment 2A of the LTB.

- 20. In order to recoup the actual US Dollars (USD) that were withdrawn from the Designated Account(s), the local currency expenditures that were funded from the Designated Account(s) should be converted at the prevailing exchange rate at the time of the transfer of USD to the Project Operating Account(s) in local currency, and not at the prevailing exchange rate at the time of the preparation of the withdrawal applications. At any given time, the balance in the Designated Account(s) in the holding bank, plus the payment of the withdrawal applications that were submitted to IFAD but not yet deposited in the Designated Account(s), plus the estimated USD equivalent of the expenditures that are not yet claimed for replenishment, should always be approximately equal to the authorized allocation.
- 21. Each application for replenishment to the Designated Account(s) should be supported by a statement issued by the holding bank for the Designated Account(s) at the relevant month-ending (Reporting Period), showing all transactions under the Accounts during the Reporting Period, including:
 - (a) Opening balance;
 - (b) Each transaction during the Reporting Period, by currency and amount paid;
 - (c) Date of payment;
 - (d) Rate of exchange used;
 - (e) Deposit(s) by IFAD into the Designated Account(s) during the Reporting Period; and
 - (f) Closing balance at the end of the Reporting Period.
- 22. The statement of Accounts by the holding bank must be provided in US Dollars, with each transaction shown in the currency and amount of withdrawal made.
- 23. The initial deposits in USD to the Designated Account(s) are advance disbursements and no supporting documentation is required with the application for these deposits.
- 24. Any funds remaining in the Designated Accounts that are no longer required to cover further payments for eligible expenditures must be promptly refunded to IFAD, under notice, for crediting to the Loan Account. Any refund shall be made to IFAD in the currency used by IFAD for the purpose of withdrawal from the Loan Account.
- 25. Designated Account(s) shall be protected against set-off, seizure or attachment on terms and conditions proposed by the Borrower and accepted by IFAD.
- 26. Statement of Expenditure. Schedule 2 of the Loan Agreement provides the use of Statements of Expenditure (SOE) for withdrawals from the Loan Account for certain expenditures and categories. The details are generally explained in Attachment 2E of the LTB. For withdrawals from the loan account that are eligible under SOE, the relevant supporting documents need not be submitted to IFAD, but should be retained by the Borrower for periodic inspection by representatives of IFAD. As provided in Section 4.07 of the General Conditions, all records (purchase orders, invoices, evidence of payment and delivery and all other relevant documents) evidencing the expenditures shall be retained at the PMO Office until ten years after the closing date for withdrawals. In addition, Section 9.03(b) of the General Conditions provides that the SOE should be audited every fiscal year and the certified copy of the audit report in the English language should be furnished to IFAD not later than six months after the end of the fiscal year.
- 27. Withdrawal Application. Each withdrawal application (in the original form, and in the English language) duly completed as prescribed, together with all supporting documentation, should be sent to the Loan Section, IFAD.
- 28. The withdrawal application, (which should be numbered consecutively irrespective of the withdrawal procedure used) and the required supporting documentation will be reviewed and if found to be in order, approved by IFAD. Correct banking instructions should be indicated in the withdrawal application in order to avoid payment delays. The complete name and address of the payee bank and the account number of the beneficiary should be duly reflected in the spaces provided in the withdrawal application. Do not abbreviate the bank names and avoid the use of the acronyms. Upon completion of the payment process, IFAD will send a payment advice to the Borrower and the relevant Implementing Agency if applicable. The payment advice includes, among other things, the

value date of payment, the US Dollar, and SDR equivalents of the related withdrawal request, and the category (ies) charged. This information will enable to monitor loan withdrawals and determine the status of individual categories. To ensure receipt of payment advice, the Borrower is requested to provide IFAD the names and the complete addresses of the Borrower and the relevant Implementing Agency for the mailing list.

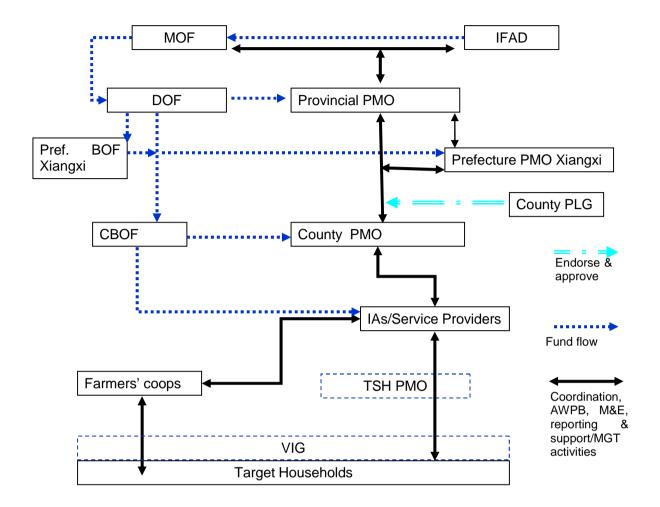
Project Completion and Loan Closing Dates

- 29. As provided in Section 7.18 of the General Conditions, the Project Parties shall complete the implementation of the Project by the project completion date. Please take note that only commitments made up to the completion date are eligible for financing under the loan.
- 30. The loan closing date or such other later date as IFAD shall establish, is the date after which IFAD can terminate the right of the Borrower to request withdrawals from the loan account. Up to the closing date, the Borrower may submit withdrawal applications for eligible project expenditures incurred (payments made or payments due) for commitments or contracts made up to the project completion date. Although IFAD can unilaterally extend the closing date, generally it prefers to obtain a formal request from the Ministry of the Borrower responsible for Finance (the authorized representative of the Borrower). After closing date, IFAD shall inform the Borrower on the formal closure of the loan account.

Auditing

- 31. In line with current practice for IFAD projects in China, the Provincial, Prefecture and County Audit Bureaux, which are constituted as independent bodies under the respective Government Offices, will be responsible for auditing accounts at provincial, prefecture and county levels on an annual basis. The Auditors will review withdrawals from the Project Accounts at various levels on the basis of SOEs, and provide an independent opinion on whether such expenditures fully comply with expenditures eligible for IFAD disbursements. The use of counterpart funds will be audited in a similar manner, with a corresponding audit report provided to IFAD for information. IFAD, as part of its supervision functions, will also inspect project accounts to ensure their adherence to acceptable standards.
- 32. The financial reporting and accounting practices currently followed by the DOF/BOF are acceptable to IFAD. The accounting sections of the PMOs at each level will be adequately staffed and trained to handle the accounting requirements of the Project.

Flow of Funds (Blue arrows)



PROCUREMENT

- 1. Goods and services financed through the proceeds of the loan will be procured in accordance with IFAD's procurement procedures, which are detailed in the IFAD Procurement Guidelines Manual. The procurement method to be applied in each particular case will depend on the nature of the expenditure and the estimated value of the contract. To the extent possible, the goods, works and consulting services financed by the IFAD loan shall be bulked into sizeable bid packages in such a manner so as to permit optimal use of competitive bidding. Under all circumstances, procurement of the project will have to be well documented for post review by IFAD and for audit purposes. Related guidelines will be detailed in the Loan Agreement. In view of the nature of and amount involved in the goods and services, vehicles (including motor cycles) are suggested to be procured following the local competitive bidding (LCB) process, and will be subject to prior review by IFAD. Other goods and services will be procured following the local shopping or direct contracting processes as appropriate (see Appendix 1, Table 1 for details of the procurements foreseen under HARIIP in all counties).
- 2. As stipulated in Section 7.05 (Procurement) of the General Conditions: All goods, civil works and services financed by the Loan shall be procured and engaged in accordance with the procedures specified in the Loan Agreement.
- 3. As stipulated in Section 7.06 (Use of Goods and Services) of the General Conditions: All goods, services and buildings financed by the Loan shall be used exclusively for the purposes of the Project.
- 4. Procurement of goods and civil works financed by the Loan shall be subject to the provisions of the "Guidelines for Procurement under Financial Assistance from the International Fund for Agricultural Development of 1982", as such guidelines may be amended from time to time by the Fund (the "Procurement Guidelines"). If any provision of the Procurement Guidelines is inconsistent with a provision of this Schedule, then the latter shall govern.
- 5. To the extent possible, the goods, civil works and services shall be bulked into sizeable bid packages in such a manner as to permit the optimal use of competitive bidding. Before the commencement of procurement, the Borrower shall furnish to IFAD for approval, (i) a list or lists of goods and services to be procured, (ii) the proposed grouping of these goods and services, and (iii) the proposed number and scope of civil works contracts to be awarded.
- 6. Procurement shall be undertaken only during the Programme Implementation Period.
- 7. No procurement shall be undertaken if it entails a payment to persons or entities, or an import of goods, prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. The Fund shall inform the Borrower of any such persons, entities or import.
- 8. The threshold amounts specified in the Schedule related to Procurement of the Loan Agreement include Taxes.
- 9. All bidding documents and contracts for the procurement of goods, works and services financed by IFAD loan will include a provision requiring contractors to:
- (a) Allow full inspection by IFAD of all bid documentation and related records;
- (b) Maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and
- (c) Cooperate with agents or representatives of IFAD carrying out audit or investigation.
- 10. A procurement plan covering a period of 18 months will be prepared as part of the first AWPB to be reviewed by IFAD. The procurement plan will be based on the individual procurement plans prepared by each project county, the provincial PMO and the prefecture PMO of Xiangxi. The plan will provide information on goods disaggregated into different interventions of infrastructures, modules and management component. A draft procurement plan for PY1 is provided as Appendix 2 for the

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PMO to further elaborate, on the basis of the detailed description goods and materials to be procured at PY1.

11. Details on procurement review by IFAD, including prior and post review, modifications, etc. are explained in Appendix I of the IFAD Procurement Guideline Manual. The Project will follow the national and IFAD procurement requirements and maintain all relevant documents, bids, purchase orders and payment vouchers for post review by IFAD and for audit purpose.

Appendix 1: Table 1 IFAD Loan Procurement Arrangements (USD '000) All Project Counties (Total Loan)

		F	rocurement Method				
	Local Competitive Bidding	Consulting Services: QCBS	Local Shopping	Direct Contracting	Community Participation in Procurement	N.B.F.	Total
A. Civil W orks	36,289,612	-	15,552,691	-	-	-	51,842,302
	(18,144,806)		(7,776,345)				(25,921,151)
B. Vehicles	438,396	-	-	-	-	=	438,396
	(320,029)						(320,029)
C. Equipment & Materials	1,437,150	-	-	-	-	-	1,437,150
	(1,045,775)						(1,045,775)
D. Training, Workshops, TA & Studies	260,902	1,303,380	2,938,556	1,303,380	-	-	5,806,218
	(234,812)	(1,046,090)	(2,354,150)	(1,046,090)			(4,681,142)
E. Agricultural Materials	-	-	-	25,647,883	-	-	25,647,883
				(14,032,216)			(14,032,216)
F. PMO Operating Costs	-	-	-	-	-	7,029,190	7,029,190
G. Community Infrastructures O&M	-	-	-	-	997,875	-	997,875
Total	38,426,060	1,303,380	18,491,247	26,951,262	997,875	7,029,190	93,199,013
	(19,745,421)	(1,046,090)	(10,130,495)	(15,078,306)	_		(46,000,313)

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Hunan Agriculture & Rural Infrastructure Improvement Project (HARIIP)												
					Pr	ocurement Plan (2012-June 2	013)					
				Project		Itation Agency: Project Manag						
						Design Report: Design Comple						
H			2012-		2012-					lm pl.		
		Review by	2013.6	Cost	2013.6 Cost							
	Unit	IFAD	QTY	(CNY	CNY'000	Description of Goods/works	Disb. Acct.	Fin. Rule	Proc. Method	Agency		
Community Infrastructure												
A. Irrigation Facilities & Training												
Canal Lining	Km	Prior/post	472	165	77 880	Canal Lining 40 *40 cm	CW_DA	IFAD (51.0575%)	FOR_ACCOUNT_PM (100%)	CPMO		
Water Pond Improvement	Set	Prior/post	96	85	8 160 983	Water Pond Improvement	CW_DA TRAIN_WTS_DA	IFAD (51.0575%)	FOR_ACCOUNT_PM (100%)	CPMO		
Irrigation Training Subtotal Irrigation Facilities & Training	Person	Post	49 162	0.02	87 023	Community Training	TRAIN_WTS_DA	IFAD (100%)	LCL_SHOPPING_PM (100%)	CPMO		
B. Drinking Water Supply												
Water Supply System Water Supply Training	Set Person	Prior/post Post	51 12 247	360 0.02	18 360 245	Drinking Water System Community/ O&M Training	CW_DA TRAIN_WTS_DA	IFAD (51.0575%) IFAD (100%)	FOR_ACCOUNT_PM (100%) LCL_SHOPPING_PM (100%)	CPMO		
Subtotal Drinking Water Supply					18 605	, ,		. ,	,			
C. Pavement of Village Roads /c Administrative Village Roads	km	Prior/post	209	325	67 925	Pavement of roads	CW DA	IFAD (51.0575%)	FOR ACCOUNT PM (100%)	CPMO		
Natural Village Roads	km	Post	155	180	27 900	Pavement of roads	CW_DA	IFAD (51.0575%)	FOR_ACCOUNT_PM (100%)	CPMO		
Subtotal Pavement of Village Roads D. Rural Grid Upgrading	Set	Prior/post	6	230	95 825 1 380	Upgrading of Grid	CW_DA	IFAD (51.0575%)	FOR_ACCOUNT_PM (100%)	CPMO		
I I I I I I I I I I I I I I I I I I I	061	тногрозс	·	230	1 300	opgrading or Orid	CIV_DA	#AD (31:03/3/6)	TOIC_ACCOUNT_TWI(TOU/W)	GI WO		
Total Investment Costs: Community Infras					202 833							
A. Module-1: Cash Crops/ Off-farm IGAs		_										
Agricultural inputs /a									DIS 201 PS 100			
Flanting materials Fertilizers	HH- Farm HH- Farm	Prior/Post Prior/Post	10 895 7 759	0.383 7.416	21 066 31 758	Agricultural Materials Agricultural Materials	AGRIC_MATERIALS_DA AGRIC_MATERIALS_DA		DIR_CONTRACT_PM (100%) DIR_CONTRACT_PM (100%)	CPMO CPMO		
IPM & other inputs	HH- Farm	Post	10 447	0.347	13 421	Agricultural Materials	AGRIC_MATERIALS_DA	IFAD (54.905%)	DIR_CONTRACT_PM (100%)	CPMO		
Subtotal Agricultural inputs 2. Training			-		66 245		 					
Beneficiary training	Beneficiar	Post	10 895	0.2	2 179	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Subtotal Module-1: Cash Crops/ Off-farm IGAs	y				68 424			,				
Module-2: Orchard-Poultry Integrated Farming Materials for Poultry	/b					Materials for Poultry						
Materials for poultry pen Poults	HH- Farm HH- Farm	Post Post	203 203	0.36 0.3	73 61	Materials for Poultry Materials for Poultry	AGRIC_MATERIALS_DA		DIR_CONTRACT_PM (100%) DIR_CONTRACT_PM (100%)	CPMO CPMO		
Feeds and medicines	HH- Farm	Prior/Post	203	6.375	1 294	Materials for Poultry	AGRIC_MATERIALS_DA AGRIC_MATERIALS_DA		DIR_CONTRACT_PM (100%)	CPMO		
Subtotal Materials for Poultry 2. Planting materials for Orchard					1 428							
Citrus Planting Materials	HH- Farm	Post	203	0.662	126	Agricultural Materials	AGRIC_MATERIALS_DA	IFAD (54.905%)	DIR_CONTRACT_PM (100%)	CPMO		
Fertilizers IPM & Other Inputs	HH- Farm HH- Farm	Post Post	176 203	3.614 0.42	697 64	Agricultural Materials Agricultural Materials	AGRIC_MATERIALS_DA AGRIC_MATERIALS_DA		DIR_CONTRACT_PM (100%) DIR_CONTRACT_PM (100%)	CPMO CPMO		
Subtotal Planting materials for Orchard					886				, ,			
Training/ Dissemination Beneficiary training	Beneficiar	Post	203	0.1	20	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Model dissemination	Beneficiar	Post	135	1.1	149	Demostration/training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Subtotal Training/ Dissemination Subtotal Module-2: Orchard-Poultry Integrated Fa					169 2 483							
C. Module-3: Agro-Forestry /c					2 403							
Agricultural inputs Planting materials	HH- Farm	Prior/Post	833	3.551	2 221	Agricultural Materials	AGRIC_MATERIALS_DA	IFAD (54.905%)	DIR_CONTRACT_PM (100%)	CPMO		
Fertilizers	HH- Farm	Prior/Post	547	5.244	2 366	Agricultural Materials	AGRIC_MATERIALS_DA	IFAD (54.905%)	DIR_CONTRACT_PM (100%)	CPMO		
Other inputs Subtotal Agricultural inputs	HH- Farm	Prior/Post	701	3.018	1 477 6 064	Agricultural Materials	AGRIC_MATERIALS_DA	IFAD (54.905%)	DIR_CONTRACT_PM (100%)	CPMO		
2. Training/ Dissemination	D	Deat	000			Technical technica	TOANI WEE DA	IEAD (OO CW) IEAD CDANE (O CW	LOL OLIOPPINO PAL(400%)	0010		
Beneficiary training Model dissemination	Beneficiar Beneficiar	Post	833 155	0.4	333 155	Technical training Demostration/training	TRAIN_WTS_DA TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8% IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%) LCL_SHOPPING_PM (100%)	CPMO		
Subtotal Training/ Dissemination	Deriencial	1001	133		488	Demostration/training	IIVIIV_WIG_DA	# AD (30.2%), # AD_GIVART (3.0%	EGE_GRIOT ING_T MI(10078)	CI WO		
Subtotal Module-3: Agro-Forestry					6 552							
Module-4: Support to Farmers' Cooperatives / 1. Equipment/ Facilities	4											
Office equipment	Lumpsum	Prior/Post		050	540	Office Equipment	EQUIP_DA	IFAD (85%)	LCB_PM (100%)	CPMO		
Facilities Subtotal Equipment/ Facilities	Lumpsum	Prior/Post	9	650	5 850 6 390	Agricultural Facilities	EQUIP_DA	IFAD (85%)	LCB_PM (100%)	CPMO		
2. Training	Lumpour	Post	18	15		Technical Training	TDAIN W/TS DA	IEAD (90 2%) IEAD OBANT (0 00/	LCL_SHOPPING_PM (100%)	CPMO		
Poor HH and w omen inclusion Access to new techniques & know how	Lumpsum	Post	9	31.5	270 284	Technical Training Technical Training	TRAIN_WTS_DA TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8% IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Institutional Strengthening of Cooperatives	Lumpsum	Prior/Post	9	69	621	Technical Training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Market linkage & trade promotion	Lumpsum	Prior/Post	18	50	900	Technical Training	TRAIN_WTS_DA	ÌFAD (90.2%), IFAD_GRANT (9.8%		CPMO		
Members training /e Subtotal Training	Training-	Post	1 350	0.2	270 2 345	Technical Training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Subtotal Module-4: Support to Farmers' Cooperat					8 735							
E. Module-5: Technical Services Support 1. Equipment and furniture												
Technical equipment	Lumpsum	Prior/Post			405	Technical equipment	EQUIP_DA	IFAD (85%)	LCB_PM (100%)	CPMO		
Motorbikes Funitures	Lumpsum Lumpsum	Prior/Post Prior/Post	-		162 270	Transport Equipment Office Equipment	EQUIP_DA EQUIP_DA	IFAD (85%) IFAD (85%)	LCB_PM(100%) LCB_PM(100%)	CPMO CPMO		
Subtotal Equipment and furniture 2. Training/ Demonstrations					837							
Staff training	Lumpsum	Post			30	Technical Training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Trials and demonstrations	Trials/Dem	Post	180	1	180	Demostration/training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMO		
Subtotal Training/ Demonstrations Subtotal Module-5: Technical Services Support					210 1 047							
F. Module-6: Root and Tuber Crops /f					1 047							
1. Agricultural inputs								E10 0011E	DID COLUMN OF THE	05		
Seeds/ Seedlings Fertilizers	HH- Farm HH- Farm	Prior/Post Prior/Post	1 232 682		842 526	Agricultural Materials Agricultural Materials	AGRIC_MATERIALS_DA AGRIC_MATERIALS_DA		DIR_CONTRACT_PM (100%) DIR_CONTRACT_PM (100%)	CPMO CPMO		
IPM & other inputs	HH- Farm	Prior/Post	1 232		416	Agricultural Materials	AGRIC_MATERIALS_DA		DIR_CONTRACT_PM (100%)	CPMO		
Subtotal Agricultural inputs 2. Irrigation	HH- Farm	Post	3		1 783 385	Agricultural Materials	AGRIC_MATERIALS_DA	IFAD_GRANT (100%)	DIR_CONTRACT_PM (100%)	CPMO		
3. Training Beneficiary training	Beneficiar	Post	1 232		246	Technical training	TRAIN_WTS_DA	IFAD_GRANT (100%)	DIR_CONTRACT_PM (50%), QCBS	CPMO		
	у	. 551	1 202						,, qcbc	S. 1010		
Subtotal Module-6: Root and Tuber Crops					2 414							
Total Investment Costs: Sustainable Agrice	ultural Man	agement			89 655							
L								.				

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. County PMO										
1. Vehicle /a	NI-	Prior/Post		250	0.050	Transport equipment	VEHICLES_DA	IFAD (000()	LOD DW 4000/	CPMC
Venicie /a Equipment /b	Lumpsum	Prior/Post	9	250		Office equipment	EQUIP_DA	IFAD (80%) IFAD (85%)	LCB_PM (100%) LCB_PM (100%)	CPIVIC
3. Workshop & Training /c	Lumpsum	Prior/Post	-		360	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMC
Gender Focus training	Lumpsum	Prior/Post	-		144	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMC
5. Training Modules for Extension Services	Lumpsum	Prior/Post	-		684	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMC
6. Monitoring & Evaluation	Lumpsum	Prior/Post	-		360	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMC
7. RIMS & Baseline survey	Lumpsum	Prior/Post	-		180	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMC
8. Innovation Enhancement	Lumpsum	Post	-		72	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	CPMC
Knowledge Management National Study tours			-		-)		CPMC
	Lumpsum	Post	1		180	Technical training	TRAIN_WTS_DA)	LCL_SHOPPING_PM (100%)	
Knowledge doc & sharing	Lumpsum	Post	-		108	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	CPMC
Subtotal Knowledge Management otal Investment Costs			-		288 4 878					
Recurrent Costs										
. CPMO 1. Staff Salaries /d	Year	Post	126	30	2 835	Project Management Operations	PMO DA	GOVT	NBF_PM (100%)	CPMC
2. Travel costs	Lumpsum	Post	-			Project Management Operations		GOVT	NBF_PM (100%)	CPMC
Office Operations	Lumpsum	Post	-		1 080	Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	CPMC
4. Vehicle O&M	Lumpsum	Post				Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	CPMC
ibtotal CPMO Township PMO /e			1	!	5 400					-
Office Operation & Travel Costs	Lumpsum	Post	194	30	4 365	Project Management Operations	PMO DA	GOVT	NBF_PM (100%)	CPM
Support to VIGs	Lumpsum	Post	.54	30	540	Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	CPM
otal Recurrent Costs					10 305				. ,	
otal Cost County: Project Management Of	fice				15 183					
Tall cost county. I Toject management of	i i ce				13 103					
Provincial PMO										
1. Vehicle	No		1	250	250	Transport Equipment	VEHICLES_DA	IFAD (80%)	LCB_PM (100%)	PPM
2. Office& Training equipment	Lumpsum	Prior/Post	-		80 300	Office Equipment Technical training	EQUIP_DA TRAIN_WTS_DA	IFAD (85%) IFAD (90.2%), IFAD_GRANT (9.8%	LCB_PM (100%) LCL_SHOPPING_PM (100%)	PPM
Management Workshop & Training	Lumpsum	FIIOI/FUSI			300	recrinical training)		
Gender Focus training	Lumpsum	Prior/Post			50	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPM
5. Monitoring & Evaluation	Lumpsum	Prior/Post	-		160	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPM
6. RIMS & baseline survey	Lumpsum	Prior/Post	-		80	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPM
7. Innovation Enhancement	Lumpsum	Prior/Post	-		60	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	PPMC
Know ledge management			-							
National study tours	Lumpsum	Prior/Post	1		140	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPM
Overseas study tours	Lumpsum	Prior/Post			200	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPM
Knowledge doc & sharing	Lumpsum	Prior/Post			110	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPMC
Subtotal Knowledge management			-		450					
ubtotal Provincial PMO			-		1 430					
Xiangxi Prefecture PMO 1. Vehicle	NI-	Prior/Post		250	250	Transport Frankrich	VEHICLES DA	IFAD (80%)	LOD DM (4000/)	PPMC
Office& Training equipment	Lumpsum	Post	- :	230	80	Transport Equipment Office Equipment	VEHICLES_DA EQUIP_DA	IFAD (85%)	LCB_PM (100%) LCB_PM (100%)	PPMC
Management Workshop & Training	Lumpsum	Post	-		20	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	PPM
Gender Focus training	Lumpsum	Post	-		10	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	PPM
5. Monitoring & Evaluation	Lumpsum	Post	-		40	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	PPMC
6. RIMS & baseline survey	Lumpsum	Post	-		20	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	PPMC
7. Innovation Enhancement	Lumpsum	Post	-		10	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%	LCL_SHOPPING_PM (100%)	PPMC
Know ledge management)		PPMC
National study tours	Lumpsum	Post			30	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPM
Knowledge doc & sharing	Lumpsum	Post			16	Technical training	TRAIN_WTS_DA	IFAD (90.2%), IFAD_GRANT (9.8%)	LCL_SHOPPING_PM (100%)	PPMC
Subtotal Knowledge management ubtotal Xiangxi Prefecture PMO					46 476					
otal Investment Costs			-		1 906					
Recurrent Costs Operating Costs - Provincial PMO										
1. Staff Salaries	Year	Post	10	50	375	Project Management Operations	PMO DA	GOVT	NBF_PM (100%)	PPM
2. Travel costs	Lumpsum	Post			413	Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	PPM
Office operations	Lumpsum	Post			375	Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	PPM
4. Vehicle O&M btotal Operating Costs - Provincial PMO	Lumpsum	Post	1	 	120 1 283	Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	PPIV
Operating Costs - Frovincial PMO	0				1 203			1		1
Staff Salaries	Year	Post	10	40	300	Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	PPIV
2. Travel costs 3. Office operations	Lumpsum	Post Post			135 75	Project Management Operations	PMO_DA PMO_DA	GOVT	NBF_PM (100%) NBF_PM (100%)	PPIV
4. Vehicle O&M	Lumpsum	Post		l		Project Management Operations Project Management Operations	PMO_DA	GOVT	NBF_PM (100%)	PPM
btotal Operating Costs - Xiangxi Prefecti	_anpodiii	1000			600					
tal Recurrent Costs					1 883					
tal Cost: PPMO				1	3 789					-
			1	-	3 709					+

PROJECT COSTS AND FINANCING

I. INTRODUCTION

- 1. Hunan Agricultural and Rural Infrastructure Improvement Project (HARIIP) aims to contribute to rural poverty reduction in the targeted areas of Hunan Province by enabling rural poor men and women to sustainably benefit from economic growth, improve their agricultural production and food security, raise their incomes and strengthen their resilience through innovative and replicable approaches. While HARIIP specific objective is to strengthen the economic and self-development capacities of the rural poor women and men to help them to fully exploit the available resources opportunities, and services.
- 2. This Working Paper describes the Project costs and the financing plan for HARIIP. It also describes the assumptions underlying the cost estimations, the modular approach, and sets out the basis and details of the estimated Project costs.

II. PROJECT COSTS AND FINANCING

Main Assumptions

- 3. The HARIIP Project would include three components namely; (i) Community Infrastructure, (ii) Sustainable Agriculture and Market Access, and (iii) Project Management Office (PMO).
- 4. The Community Infrastructure Component would have four main activities: (i) Irrigation Facilities, (ii) Drinking Water Supply, (iii) Pavement of Village Roads, and (iv) Rural Grid Upgrading. While the Sustainable Agriculture and Market Access Component would have five module activities that include: (i) Cash crops/ Income Generating Activities, (ii) Orchard-Poultry Integrated Farming, (iii) Agro-forestry, (iv) Support to Farmers Cooperatives, (v) Technical Services Support; (vi) Root and Tuber Crop Module. The Project Management Office Component would cover the: (i) Provincial and Xiangxi Prefecture PMO, and (ii) County Project Management Office (CPMO).
- 5. HARIIP Project would be implemented in ninety seven townships of the nine selected Project counties which are: Lingxiang, Yueyang, Taoyuan, Shaodong, Longshan, Guzhan, Luxi, Fenghuang and Jingzhou. The Project would be financed over a period of five years starting in 2013. All costs have been estimated on the basis of prices prevailing during Project formulation in June 2011.
- 6. **Physical and Price Contingencies.** Physical contingency of less than 1% and has been applied on civil works to account for the uncertainty regarding the exact implementation quantities. Price contingencies have been applied on all costs.
- 7. **Inflation.** Over the period 1994 to 2010, the average inflation rate in China was 4.25%, reaching too historical records of 27.7% in 1994 and -2.2% in 1999. However, inflation has rebounded in May 2011 to its highest level in nearly three years at 5.5%, but still remained above the government's full year target of 4%. This has been pushed up by high food prices, despite the interest rate increases and other control measures are cooling the overheated economy. In line with estimates of the Economist Intelligence Unit (EIU) of July 2011, and for the purpose of this analysis, the annual local and foreign inflation rates are shown in Table 1 below. Both local and foreign inflation rates have been compounded at mid-year.

Table 1: Inflation Rates

Inflation Rates (%)	PY 1	PY 2	PY 3	PY 4	PY 5
	2012	2013	2014	2015	2016
Annual					
Local	4.30	4.20	3.90	3.90	3.90
Foreign	2.50	2.80	2.80	2.80	2.80
Compound					
Local	2.20	6.50	10.80	15.10	19.60
Foreign	1.30	3.90	06.80	09.80	12.90

8. **Exchange Rate.** The Chinese Yuan (CNY) is traded freely, and has been appreciating recently in line with the changes in purchasing power of the major international currencies and local inflation. The exchange rate used for this analysis is the CCP Rates; Table 2 below presents the resulting exchange rates actually used.

Exchange Rate CNY to USD	Up to Project start-up	Mid PY 1 2013	Mid PY 2 2014	Mid PY 3 2015	Mid PY 4 2016	Mid PY5 2017
Rates actually used	6.40	6.50	6.60	6.60	6.70	6.80
CPP Rates	6.40	6.50	6.60	6.60	6.70	6.80
% Deviations	0.0	0.00	0.0	0.0	0.0	0.0

Table 2: Exchange Rates

- 9. **Taxes under HARIIP.** Tax rates for the project items vary considerably. All domestically purchased items are subject to national and local taxes of different types, and VAT of 17% is applied to costs of all transactions, where appropriate. Technical assistance, studies, training and workshops would be outsourced and contractors are responsible for their national/ local tax liabilities. Taxes for civil works contracts are about 5%, while for vehicles it is 27%. Office equipment and furniture are subject to VAT. Staff salaries attract variable tax, averaging to 14.5%, but staff salaries are fully financed by the government. Civil works for irrigation canals, farm inputs such as chemicals and fertilisers are not taxed. Farm incomes from tea, fruits, agro-forestry, etc newly cultivated and developed area, areas facing labour shortages and that belonging to ethnic minority nationalities are exempted from taxes. The Government of China would either waive off the cost of all taxes and duties under the Project or finance it from its own funds.
- 10. **Cost Estimation**. Unit Costs for vehicles, equipment and materials have been quoted in CNY, for prices prevailing during project formulation, in June 2011 and confirmed in November 2011 by the DCM. Estimates for vehicles and equipment were based on recent data available from IFAD financed projects or respective agents. The foreign exchange for vehicles, equipment, goods and materials reflects the fact that most of these goods are imported. The Mission estimated the unit costs and training activities (and under respective modules) with reference to expenditure and disbursement levels for training activities under other IFAD funded projects in China. For each course, duration, numbers of participants, tuition, cost of venue, per diems, travel and course materials have been estimated.
- 11. **Project Modules Cost Structure**. As per other IFAD financed projects in China, the modular approach allows a greater degree of flexibility in planning, costing and implementing project activities. A module is defined as a small-scale set of inter-related activities aimed at achieving a specific objective that can easily be up-scaled or replicated. Each module includes all costs required for proper implementation of the activity concerned. The size of a module would range from a single household, a group of households to a single village, while the model implementation period could range from one to two or more years, depending on the type of activities. The cost structure is reflective of the model's schedule
- 12. HARIIP activities have been planned with flexibility to leave participating counties some degree of freedom to decide on their development priorities and to allow Project Management Offices to respond to demand as articulated by the target group. The costs for all major project investment have thus been structured on the basis of modular and activity-based approaches which break the investments down into implementation units that will be combined, similar to building blocks, to make up the overall project. Flexibility for adjustment is built in the modules themselves, and in the combination of the modules in the overall mix of project activities. Project interventions and the individual modules used in estimating project costs are summarised in Table 3 below, while further details are presented in the relevant Working Papers.

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 $^{^{7}}$ Domestically produced/ assembled cars attract purchase tax of 10% and 17% VAT.

Table 3: Project Interventions and Modules

Components	Project Interventions	Project Modules
	- Irrigation Facilities	
I. Community Infrastructure	- Drinking Water Supply	
-	- Pavement of Village Roads	
	- Rural Grid Upgrading	
II. Sustainable Agriculture	 Value Enhancement 	Module 1: Cash crops/ off-farm IGA
and Market Access	- Integrated Farming	Module 2: Orchard-poultry integrated
		farming
	 Value Enhancement 	Module 3: Agro-forestry
	 Market Access/ Linkages 	Module 2:Farmers cooperatives support
	 Access to new technology 	
	 Institutional Support 	Module 5: Technical services support
	- Value Enhancement	Module 6: Root and Tuber Module
III. Project Management Office	- Provincial PMO	
	- County PMO	

- 13. The detailed cost tables, which are the basis for the summary cost tables, have been built up by assembling the number of modules estimated to be appropriate for each participating county and the combination of other interventions such as in community infrastructure, institutional support, market access, market linkages and county PMO. These estimates were prepared using data and information obtained from the respective county and the mission's field assessment, including local production and marketing potential. The number of modules and their cost estimates are indicative, their mix, phasing and content will be annually fine-tuned within each Annual Work Plan and Budget.
- 14. **Other Project Interventions**. In addition to modules, Project costs also include investments that are not packaged into modules as these are geographic specific and their level of implementation is fixed and thus not proportional to the number of modules that will be implemented under specific components. These investments are mainly related to community infrastructures interventions such as irrigation facilities, drinking water supply, pavement of village roads, rural grid upgrading, and institutional support for market access and agencies involved in implementation.
- 15. Cost tables were defined and generated for each Project county by Project component, namely (i) Community Infrastructure, (ii) Sustainable Agriculture and Market Access, and (iii) Project Management Office. For the latter, two separate PMO tables were created: one for the Provincial and Xiangxi Prefecture while the other for each project county. Project Summary Cost Tables are presented in Appendix 1 of Working Paper (WP) 6; and the Selected Summary and detailed cost tables for Provincial and Xiangxi Prefecture Project Management Office are presented in Appendix 2 of the same working paper.

A. PROJECT COSTS

- 16. The total Project costs including physical and price contingencies are estimated at USD 93.2 million or CNY 613.6 million over five years of the Project implementation period with expected start within 2012. The foreign exchange component amounts only to USD 0.145 million or CNY 0.926 million of the total base costs mainly for expenditures related to PPMO overseas study tours. Physical and price contingencies account for about USD 4.8 million or 5.15 % of total project base costs. The investment costs amount to USD 81.5 million or CNY 522 million representing 92% of the total base cost. While the recurrent costs amount to USD 6.87 million or CNY 43.97 million representing 8% of the total base costs. Project costs by components are summarized in Table 3, while a complete set of project summary tables and detailed costs tables by county and component are presented in Appendix 1-3 of Working Paper 6.
- 17. **Allocation of Project Funds**. Project resources would be allocated to the respective Project Counties on the basis of local poverty incidence taking into account the local income generation potentials and the number of vulnerable (women, men, and ethnic minorities) and socio-economically marginalised groups. Detailed summary and cost tables for each of the Project counties are presented in Appendix 3 of Working Paper 6.

18. **Project Costs by Components.** Project investments are organized into three major components. The Community Infrastructures Component accounting for 66% of the total base costs followed by the Sustainable Agriculture and Market Access Component (25%) and the Project Management Office for about 9% of the total base costs. A summary breakdown of the Project costs by components with local and foreign exchange costs is shown below in Table 3.

Table 3: Project Costs Summary by Components

		(CNY '000)			(US\$ 7000)		% Foreign	%Total Base
	Local	Foreign	Total	Local	Foreign	Total	Exchange	Costs
A Community Infrastructure	372,042	-	372,042	58,132	-	58,132	-	66
B. Sustainable Agriculture & Marketing Access	141,387	-	141,387	22,092	-	22,092	-	25
C. Project Management Office (PMO)								
 Provincial & Xiangxi Prefecture PMO 	9,623	721	10,344	1,504	113	1,616	7	2
2. County PMO	41,730	225	41,955	6,520	35	6,555	1	7
Subtotal Project Management Office (PMO)	51,353	946	52,299	8,024	148	8,172	2	9
Total BASELINE COSTS	564,782	946	565,728	88,247	148	88,395		100
Physical Contingencies	1,781	-	1,781	278	-	278	-	-
Price Contingencies	46,044	92	46,136	4,516	9	4,525	-	5
Total PROJECT COSTS	612,607	1,038	613,645	93,042	157	93,199		105

19. **Project Costs by Expenditure Categories.** The Civil Works represents the largest Project expenditure category at 65% of the total Project costs, followed by Agricultural Materials (22%); the Incremental Operation and Maintenance Costs (7%), the Training, Workshops, TA and Studies category (4%), Equipment and Materials (1%) and Vehicles (0.5%). Project costs expenditure categories are presented in Table 4 and Appendix 1 of Working Paper 6.

Table 4: Project Costs by Expenditure Categories

		(CNY '000)			(US\$'000)		% Foreign	% Total Base
	Local	Foreign	Total	Local	Foreign	Total	Exchange	Costs
I. Investment Costs								
A. Civil Works	366,480	-	366,480	57, 263	-	57,263	-	65
B. Vehicles	2,475	275	2,750	387	43	430	10	-
C. Equipment & Materials	8,216	11	8,227	1, 284	2	1,285	-	1
D. Training, Workshops, TA & Studies	19,181	640	19,821	2,997	100	3,097	3	4
E. Agricultural Materials	124,476	-	124,476	19, 449	-	19,449	-	22
Total Investment Costs	520,828	926	521,754	81,379	145	81,524		92
II. Recurrent Costs								
A. PMO Operating Costs	40,570	20	40,590	6, 339	3	6,342	-	7
B. Community Infrastructures O&M	3,384	-	3,384	529	-	529	-	1
Total Recurrent Costs	43,954	20	43,974	6,868	3	6,871		8
Total BASELINE COSTS	564,782	946	565,728	88, 247	148	88,395	-	100
Physical Contingencies	1,781	-	1,781	278		278	-	
Price Contingencies	46,044	92	46,136	4,516	9	4,525	-	5
Total PROJECT COSTS	612,607	1,038	613,645	93, 042	157	93,199		105

B. PROJECT FINANCING

20. The overall project costs of USD 93.2 million would be financed by an IFAD loan of USD 46 million and an IFAD grant of USD 1 million, both representing 49.4% and 1.1% respectively of total costs. The Government of China would provide USD 45.6 million or 48.9% of total Project costs. Both IFAD and Government funds would be used to jointly finance Project investments for community infrastructures and the agricultural inputs related to the various Project modules. In addition IFAD would finance the costs of vehicles, equipment and materials, as well as the cost of workshops, training, technical assistance and studies. The Project Beneficiaries would contribute USD 0.58 million or 0.6% of total Project costs, and their contribution would mainly finance the operation and maintenance of the community infrastructures. The proposed financing plan is summarized in Table 5 below.

- 21. **Financing of PMO Incremental Operating Costs**. The Government would fully finance the Provincial and Xiangxi Prefecture PMO incremental operating costs, including the nine county PMOs, ninety seven township offices and support for the village implementation groups. The recurrent cost implications beyond the Project life, however, would be minimal for Government.
- 22. **Financing of Taxes**. Overall taxes and duties are estimated to amount USD 4.1 million or 4.4% of total Project costs. The Government would either waive or finance the cost of all taxes and duties under the various Project activities.

Local IFAD IFADGat Æd. Duties& TheGovernment Beneficiaries Total For. % Anourt Anourt Anourt Anourt Exch Taes) Taxes Amount A Community Infrætructure 31,182 508 29589 482 598 1.0 61,359 658 58320 3039 B.Sustainable/Agriculture&Marketimg/Access 13265 57.1 881 38 9094 391 23240 249 23043 197 C Project Nanacement Office (PMD) 1. Provincial & Xangxi Prefecture PMD 599 1.069 620 1.449 347 56 33 1,725 19 121 154 2 County FMD 1,047 953 139 5859 852 68/5 7.4 36 5792 ങ 09

14

1.1

6928

45611

806

489

5338

8600

93199

06

92

1000

157

7.241

88604

1202

4437

Table 5: Components Financing Plan (USD '000)

C. DISBURSEMENTS AND PROCUREMENT ARRANGEMENTS

- 23. **Disbursements.** The IFAD loan and grant would be disbursed over a period of five years. The estimated disbursement schedule for the IFAD financing is shown in Table 5 below. Disbursements by IFAD for items costing less than USD 50 000 or equivalent would be made against certified Statements of Expenditures (SOEs). The responsibility for the financial management of the Project would rest with the PPMO and CPMOs which will retain the relevant documents and make them readily available for inspection and review by IFAD supervision missions and the auditors. PPMO would ensure recruitment of qualified and competent Project staff as well as appropriate financial management and accounting system for loan and grant accounts and respective expenditures. No taxes and duties would be financed from the IFAD loan proceeds.
- 24. The project disbursement by semester is summarized in Table 6.

1552

46000

180

494

119

1,000

Subtotal Project Management Office (PMD)

Total PROJECT COSTS

Table 6: Disbursements by Semester (USD '000)

Costs to

		Financing	g Available		Costs to be		
		IFAD			Financed	The Gov	ernment
	IFA D	G rant	Be ne fi ciari es		Project		Cumulative
	Amount	Amount	Amount	Total	Costs	Cash Flow	Cash Flow
1	4,769	98	-	4,867	9,349	-4,482	-4,482
2	4,769	98	-	4,867	9,349	-4,482	-8,963
3	8,256	164	-	8,421	16,093	-7,672	-16,635
4	8, 256	164	-	8,421	16,093	-7,672	-24,307
5	7,516	163	34	7,713	15,007	-7 ,29 5	-31,602
6	7,516	163	34	7,713	15,007	-7,295	-38,897
7	2,322	59	96	2,477	5,115	-2,638	-41,534
8	2,322	59	96	2,477	5,115	-2,638	-44,172
9	137	15	164	3 16	1,036	-720	-44,892
10	137	15	164	3 16	1,036	-720	-45,612
Total	46,000	1,000	588	47,587	93,199	-45,612	-45,612

- 25. **Procurement**. HARIIP procurement would be carried in line with IFADs Procurement guidelines approved by EB in September 2010 and the provisions of the General Conditions. Procurement of goods, works and services financed by IFAD loan should be carried out in accordance with the provisions of the borrower's procurement regulations, to the extent consistent with these guidelines.
- The procurement of civil works, goods and services to be financed from the proceeds of IFAD financing would be carried out in accordance with IFAD procurement guidelines, taking into considerations the following principles: (i) Procurement would be carried out in accordance with the Financing Agreement and any duly agreed amendments thereto; (ii) Procurement would be conducted within the project implementation period, except as provided under Article 4.10(a)(ii) of IFAD's General conditions for Agricultural Development Financing; (iii) Cost of the procurement is not to exceed the availability of duly allocated funds as per Financing Agreement unless otherwise agreed in accordance with amendments to the Loan agreement; (iv) Procurement is to be consistent with the duly approved AWPB including a procurement plan for at least 18 months; and (v) Procurement is to result in the best value for money.
- 27. Procurement of civil works under the community infrastructures would be procured under Force Account with the respective implementation agencies and the counties specialised bureaux. Procurement of vehicles, equipment and materials would be bulked together, to the extent possible, and carried out by the PPMO or where necessary by the CPMOs.
- 28. Procurement of services would follow methods described in the IFAD procurement guidelines. Contracts for the provision of training services and service contracts would be procured under Quality and Cost Based Selection (QCBS), direct purchase or single tender, depending on the requirements, the amount of contract and the availability of local or regional agencies with requisite expertise. Direct purchase or contracting procedures would be adopted for procurement of items or services amounting to less than USD 15,000 and for fixed budget procedures, subject to IFAD's prior review. Technical assistance, reviews and studies would be done through direct contracting on the basis of short lists and terms of reference acceptable to IFAD.
- 29. All bidding documents and contracts for the procurement of services financed by IFAD loan and grant should include a provision requiring bidders, suppliers, contractors, sub-contractors and consultants to permit IFAD to inspect their accounts, records or other documents relating to the bid submission and contract performance and to have them audited by IFAD-appointed auditors and investigators, as appropriate.

30. Project procurement arrangements for IFAD financing are summarized in Table 7 below.

Table 7: Procurement Arrangements for IFAD Financing (USD)

			Procureme	ent Method				
	Local Competitive Bidding	Consulting Services: QCBS	Local Shopping	Direct Confracting	Force Account	Community Participation in Procurement	NBF.	Total
A Civil Works	-	-			60,421	-	-	60,421
					(30,849)			(30,849)
B. Vehides	435	-	-	-	-	-	-	435
	(318)							(318)
C Equipment & Materials	1,321	-	-	-	-	-	-	1,321
	(1,096)							(1,096)
D. Training, Workshops, TA& Studies	-	37	3,200	37	-	-	-	3,274
			(2,904)					(2,904)
E Agricultural Materials	-	-	-	20,377	-	-	-	20,377
				(10,832)				(10,832)
F. PMD Operating Costs	-	-	-	-	-	-	6,783	6,783
G Community Infrætructures O&M	-	-	-	-	-	588	-	588
Total	1,756	37	3,200	20,413	60,421	588	6,783	93, 199
	(1,414)	_	(2,904)	(10,832)	(30,849)	_	_	(46,000)

PROJECT FINANCIAL AND ECONOMIC ANALYSIS

I. INTRODUCTION

- 1. Agriculture under HARIIP Project area is mostly based on smallholder farming with traditional and extensive techniques. Poor households continue to cultivate grain crops for food security with limited diversification of agricultural activities despite the great potentials. Cropping is the main sources of living for most of the households
- 2. HARIIP Project would contribute to the reduction of rural poverty in targeted areas of Hunan Province by enabling rural poor men and women to sustainably improve their agricultural production and food security while also increasing their incomes and resilience through innovative and replicable approaches. The Project would adopt an inclusive targeting strategy through addressing the specific needs of the different vulnerable women, men, ethnic minorities and socio-economically marginalised groups.
- 3. On the basis of the information collected during the field visits in June 2011, detailed crop budgets and farm models were developed to determine the incremental incomes at farm level and consequently the Project impact on individual smallholder farmers. These models however, are indicative and aim to illustrate the potentials of profitability for the various activities.
- 4. Design Completion Mission (DCM) Team verified the crops, their yields, inputs and the corresponding prices of the outputs and inputs during the field visits. PPMO also provided the PDCM Team the list of the crops, number of target beneficiaries and areas to be covered by the project in nine counties. Based on this list and information gathered from the field visits, the crop and farm models were modified. Crop and farm models were developed for the specific crop(s), number of farm/household beneficiaries and project areas for each county. Farm sizes and number of farm-beneficiaries were limited by project funds available for the component/county. The farm models were grouped into the Project's four crop modules to enable analysis by module. The models were used for the financial and economic analysis as well as for the preparation of the project costing and financing. While the models were made using project data/information, they remain indicative and the project will have to cater to the actual needs of the beneficiaries in their particular circumstances during implementation.
- 5. Vital part of the HARIIP is also the community infrastructure improvement component. This component will be the basis for expanded and improved agricultural production, decreased physical isolation and thus improved integration into the market value chains, and improved productive and daily-life assets for the sake of the rural community and the households in the project area. Support is provided for irrigation facilities, village roads, drinking water supply facilities, and rural electricity grid upgrading. These activities will be critical for the project area to strengthen the community resilience to frequently-occurring climatic calamities, improve the access of rural poor to markets, information and technical services, increase of net-income, and develop commercialized production of agriculture, which are regarded as effective measures for rural development and poverty reduction at the current stage and for drastically improvement of the living conditions.
- 6. Project interventions under this component would include: (i) improvement of irrigation facilities, mainly the lining of old existing earthen irrigation canals including the necessary water intake, the water outlets and the flood protection measures; (ii) paving of village roads with a concrete slab, connecting to administrative villages and their constituent natural (smaller and scattered) villages with non-paved gravel roads. (iii) construction of community supply facilities of safe drinking water; (iv) upgrading the rural electricity grid, especially for those that the efficiency has fallen under the state's technical standards. General training of beneficiaries and specific training for the operation and maintenance and bookkeeping of the project-built civil works will also be supported by the project.

II. FINANCIAL ANALYSIS

7. The financial analysis aims: (i) to assess the financial viability of the interventions proposed under HARIIP for the smallholder farmers and their households and; (ii) to examine the impact of Project interventions on cash flow and household incomes, and hence determine if Project interventions at farm level would offer sufficient financial incentives to attract target group households and smallholder farmers; and finally (iii) to establish a framework for the economic analysis. Indicative crop budgets have been prepared, and combined in the farm models, presenting the situation of "with"

and "without" project scenarios. Farmod version 4.02 was used to derive the incremental changes in the cash flow for smallholder farmers. The individual crop models are presented in Appendix 1 of Working Paper 7.

- 8. **Key Assumptions** The exchange rate used in the analysis is CNY 6.40 to USD 1.0. The financial prices for project inputs and products were based on information obtained in June 2011 during the field visits, discussions with farmers and government staff from Agricultural Statistics and the Agricultural Bureau at the provincial, county and township levels. Information on labour requirements for various production models, prevailing wage rates, yields, input use, farm gate and market prices for products and input were collected in interviews with farmers and respective government staff from Agricultural Bureaux at the county level. These prices were confirmed by the DCM in November 2011. The financial prices used in the analysis are conservative⁸ and represent estimates of the average seasonal prices. Price assumptions are presented in Working Paper (WP) 7, Annex 1. It is assumed that farm labour is provided by the households or hired labour is used in conjunction with family labour, at an average daily rate for rural skilled labour of CNY 80 (or USD 12.50).
- 9. **Cropping Patterns.** The crops that will be supported by the Project are bamboo, citrus, Chinese day lily, grapes, vegetables through greenhouses, vegetables, kiwi, fragrant Solomonseal rhizomes (medicinal herbs), oil camellia (or tea oil), Plum (or Red bayberry), poplar, potato, sweet potato, Tuckahoe and walnut. A few crops may be supported under two or three of the four modules, like the citrus and oil camellia which are supported under cash crop, orchard–poultry and/or agroforestry module. Farm models were developed to include only the crops that will be supported directly by the Project. Farm model for each module per county was prepared on the specific crop(s), target number of farm-beneficiaries and expected farm size. Crop and farm models, their production, inputs, crop budgets and cropping patterns are presented in Appendix 1 and 2 of WP 7. Distributions of farms participating in the Project over the project period by module are presented in Appendix 3. Twenty percent of the target farm-households are expected to participate in the first year; 35% in the second and third year; and, the remaining 10% in the fourth year.
- 10. **Family Labour.** The Project does not intend to introduce labour intensive agricultural practices. A household is assumed to comprise two members who would provide an equivalent of 300 person-days of family labour. Project would only marginally increase the demand for labour, which would be provided from hired labour or surplus household labour. Labour requirements have been included in the estimation of inputs required.

A Project Benefits and Beneficiaries

- 11. **Project Area.** The Project would be implemented in nine counties of Hunan Province, namely: Lingxiang and Yueyang of Yueyang prefecture, Taoyuan of Chengde prefecture, Shaodong of Shaoyang prefecture, Longshan, Guzhang, Luxi, and Fenghuang of Xiangxi prefecture, and Jingzhou of Huaihua prefecture. Within these nine selected counties, implementation would initially be extended to 97 townships and 589 administrative villages. The Project's targeting strategy would be adapted to the changing dynamics of rural poverty with focus on community-level assets of collective nature, improving access to income generating opportunities, sustainable support services and strengthening the target groups' resilience.
- 12. **Project Beneficiaries.** The overall target group universe includes the total population of the 589 target villages estimated at 759,606 people or 181,656 households. The Project would adopt the inclusive targeting strategy by addressing the specific needs of the different vulnerable groups, especially the poor women and men, the ethnic minorities and other possibly socio-economically marginalized groups, which are estimated to be about 35% of the total population. Thereby within the Project villages, the economically active poor men and women, the vulnerable ethnic minorities would be identified and served on a priority basis.
- 13. HARIIP would adopt the geographic targeting strategy of the Government in identifying the pockets of rural poverty in economically disadvantaged areas, and would continue to apply the differentiated targeting and support model to complement the Government's poor village and poor household-based approach.

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⁸ Farm gate prices are mostly 15% lower than market prices.

- 14. Households or people in the target areas would benefit from the Project in varying degrees depending on their participation in the different Project activities. Beneficiaries can be classified as those (a) farmers who would directly and actively participate in the Project's agricultural productive modules by adopting the cropping patterns in their farms and participating in the tailored training for these crops; (b) households of members of cooperatives which will be strengthened through training and institutional strengthening activities for better market access; (c) farmers/households who will be exposed to new or upgraded technologies through better organized and strengthened extension services; (e) farmers who will directly and indirectly benefit from irrigation facilities that will be rehabilitated or constructed under the community infrastructure component; (f) the farmers and traders who would incur less transportation costs, hence better price to the farmers, with the improved village roads; (g) households, particularly women members, who will be more productive with more time to work because of better health and less time spent to access drinking water with the establishment of drinking water systems; (h) households who can have better quality of life and enjoy the conveniences brought about by the upgraded electrical grid; (k) workers who will be employed during the construction as well as for operation and maintenance of the infrastructure subprojects: and, (i) in general, all members of the community, currently residing or returning members, who will enjoy and benefit from more economic and social activities because easier access with the paved village roads.
- 15. **Project Benefits.** The Project would be expected to generate substantial benefits. The increased agricultural production and incomes, under the various farm models, would be accomplished through introduction of improved irrigation practices, tailored training, demonstration and up scaling, better agronomic practices, improved production quality, better access to markets and efficient agricultural extension..
- 16. The other community infrastructures subprojects such as drinking water supply system, pavement of village roads and rural grid upgrading would significantly contribute to better quality of life, save time for women, provide access to quality farm inputs and better prices for farm produce, beside contributing to other health and social benefits. The better crop quality produced by irrigation can increase price to the farmers by 200% to 300%. While the easy access of farmers to market or of traders to the farmers that will be provided by the village roads can result in better prices to the farmers by as much as 30% to 50% of they now get. While these benefits are not translated in the prices or costs used in the model (since average market prices and not farm-gate prices are used) these benefits will be directly experienced by the beneficiaries.

B Project Production Models

- 17. Production models were prepared for the crops identified by the counties and submitted to PDCM by the PPMO using FARMOD version 4.02 and the data gathered from the field and verified in pertinent literature as deemed necessary. The crop budgets compare the situations of "with Project" to the anticipated "without Project" for each type of cultivation. The major assumptions underlying the "without Project" situation are: (i) poor access to irrigation water and increased drought risk, (ii) inefficient technologies and poor quality farm management systems, (iii) inappropriate use of inputs, (iv) poor access roads, weak marketing skills, knowledge and information access, and (iv) high transaction costs triggered by absence of economies of scale.
- 18. The "with Project" situation is based on the assumptions that yields and income are expected to increase due to: (i) improved access to irrigation water, (ii) better quality and volume of production through improved inputs and tailored agronomic practices, (iii) specific training for smallholder farmers to effectively respond to market signals and improve their capacity for profitable and commercially oriented production, (iv) improved access to markets, information and market linkages, and (v) reduction of production costs through collective marketing from HARIIP support to farmer cooperatives. Table 1 summarises the yields and incomes in the "with" and "without" Project situations for the various crops, while detailed physical and financial budgets are presented in Appendix 1 of Working Paper 7.

C Farm Models

19. Farm models were developed for each module for the participating counties considering their specific crops, target areas and beneficiaries. Hence, a model represents the crop(s) for the size of farm that is particular to the participating county. Farm size for each crop was determined by the

PR CHINA: HUNAN AGRICULTURAL AND RURAL INFRASTRUCTURE IMPROVEMENT PROJECT PROGRAMME/PROJECT DESIGN REPORT – ANNEX 10

target number of beneficiaries and area that would be supported by Project. Further details on these farm models, including description and rationale, are presented in WP-2 and WP-3. These models assess the degree of incentive for target group households and estimate the benefits accruing to poor farmers participating in Project activities. These models show smallholder farmers levels of financial returns in relation to their labour, inputs and financial investments. While no attempt has been made to quantify additional non-farm sources of income.

- 20. **Household Income.** Analysis of the farm models therefore, shows that Project interventions are financially attractive for participating households and could exert a considerable positive effect on their incomes, as net farm incomes are predicted to increase substantially. Household income will be derived from labor and the net proceeds of production.
- 21. **Module or Subproject Models.** The farm models were grouped according to the Project's SAMA modules, namely a) Cash Crops, b) Integrated Orchards-Poultry, c) Agro-forestry and d) Root and Tuber to enable analysis by modules. Farm distributions, the phase or pattern of the farmers or households uptake or expected participation during Project implementation period, for each module is presented in Appendix 3. Production and Inputs by module is presented in Appendix 4 and the Economic Budgets by Module and for the whole Project is presented in Appendix 5 of WP 7.

Table 1: Crop Budgets: Yields and Income Assumptions (per Mu)

									our our	
							Change	Changein		enent
	Yield	(Kg)		Income (after labour cost		_	inYidd	Incone	perso	ndays
Crops	WOP	WP	CNY	USD	CNY	USD	%	%	WOP	WP
Bantico/a	400	500	34	5	44	7	25.0	29.4	8	10
Otrus	1,300	1,700	573	90	959	150	30.8	67.3	15	18
Chinese Lily	190	220	2,240	350	2,840	411	158	268	20	20
Gapes	680	850	1,613	252	3,165	495	25.0	962	25	21
Geertrause(vegstables)	2,000	3,000	833	130	3,936	610	50.0	369.2	21	26
Kiwi	-	1,100		-	10,717	1,675			0	26
Fiagrant Schonomeed Rhizome	1,100	1,500	(23)	(4)	2,871	449	364	12,580.9	14	15
Ol Camellia	40	80	(400)	(63)	(270)	(42)	100.0	325	15	16
Rum/b	200	250	(1,337)	(209)	(866)	(135)	250	35.2	25	30
Poplar (MII) /b	4	6	(558)	(89)	578	90	50.0	201.7	19	20
Potato	1,000	1,500	(243)	323	566	88	50.0	332.7	13	13
Sweet Potati	1,000	1,250	(123)	(19)	231	36	25.0	287.8	10	10
Tea/b	50	70	6632	1,036	9,186	1,435	40.0	38.5	26	34
Tukahoe	1,500	4,000	(2,173)	(339)	6,238	975	1667	387.1	81	87
Vegetables	1,300	1,500	2,461	385	3,106	485	154	262	12	12
Walnut	200	300	(655)	(102)	298	46	50.0	1454	38	41
Poultry	-	170	-	-	626	98			15	15
/ a Average requirement										
/b 5year-full fruit yield period										

Table 2: Farm Models Financial Return

						Financial Cash Flow						
Module: County Farm Model		Сф				Without Project Returns (After Labor)		With Project Returns (After Labor)				
				Number	Farm size (Mu)	CNY	USD	CNY	USD	% Change	FIRR (%)	ERR(%)
Cash (Crop Module											
1	Lingxiang	GreenHouse Ve	getable	24	2							
		Теа		231	9							
		Vegetable		152	3							
			Total	407		68,737	10,740	99,804	15,594	45	59.5	109.1
2	Yueyang	Tea		700	4	26,528	4,145	36,744	5,741	39	28.7	35.4
3	Taoyuan	Otrus		2,004	7							
	,	Tea		645	7							
		Vegetables		831	7							
			Total	3,480		67,664	10,573	92,755	14,493	37	60.6	173.4
4	Shacdong	Day Lily		500	2							
	,	Grapes		600	2							
		Fragrant Solomor Rhizome	seal	500	2							
		Vegetables		300	2							
			Total	1,900		12,584	1,966	23,963	3,744	55	none	nane
5	Longshan	Day Lily		2,326	7	15,680	2,450	19,880	3,106	34	none	nane
6	Guzhan	Tea		2,500	5	33,160	5,181	45,930	7,177	39	28.7	35.4
7	LLXi	Citrus		1,200	7							
		Tea		1,100	5							
			Total	2,300		2,011	314	5,361	838	167	23.4	589
8	Fenghuang	Kiwi		1,500	26							
		Oil Camellia		900	2							
			Total	2,400		(800)	(125)	27,325	4,269	3,516	61.5	75.3
9	Jingzhou	Plum		500	7							
		Tuckahoe		82	25							
		Vegetables		132	3							
		Walnut		620	7							
			Total	1,334		(11,991)	(1,874)	20,930	3,270	275	none	none
	Total Farms			17,347								

Table 2: Farm Models Financial Returns (Continued)

					Financial Cash Flow							
Module: County Farm Model						Without Project Labo		With Project Returns (After Labor)				
		Стф		Number of Farms	Farm size (Mu)	CINY	USD	CINY	USD	% Change	FIRR (%)	EIRR(%)
Orchar	d-Poultry											
1	Lingxiang	Citrus		210	7	4,011	627	7,337	1,146	205	46.8	nane
2	Yueyang	Oil Camellia		30	5	(2,000)	(313)	(723)	(113)	64	2.7	6.6
3	Taoyuan	Citrus		20	4	2,292	358	4,461	697	95	29.7	nane
4	Shacdong	Citrus		17	4	2,292	358	4,461	697	95	29.7	nane
5	Longshan	Otrus		20	4	2,292	358	4,461	697	95	29.7	nane
6	Guzhan	Citrus		20	4	2,292	358	4,461	697	95	29.7	nane
7	Luxi	Citrus		20	4	2,292	358	4,461	697	95	29.7	nane
8	Fenghuang	Oil Camellia		20	4	(1,600)	(250)	(454)	(71)	72	3.20	8.6
9	Jingzhou	Citrus		10	4	2,292	358	4,461	697	95	29.7	none
	Total Farms			367								
Agrofo	restry											
1	Lingxiang	Bamboo		200	7							
1	Dignalg	Plum		250	4							
		Poplar		200	4							
		Горга	Total	650	-	(7,382)	(1,153)	(847)	(132)	56	15.1	182
2	Yueyang	Bamboo		240	5	170	27	220	34	29	(60)	(11.6)
3	Taoyuan	Bamboo		100	3	102	16	132	21	29	(60)	(11.6)
4	Shaodong	Bamboo		40	3	102	16	132	21	29	(60)	(11.6)
5	Longshan	Oil Camellia		81	3	(1,200)	(188)	(810)	(127)	56	(16)	(24)
6	Guzhan	Oil Camellia		100	3	(1,200)	(188)	(810)	(127)	56	(16)	(24)
7	Luxi	Otrus		100	3	1,719	269	2,876	449	67	none	nane
8	Fenghuang	Kiwi		40	3			7				
	, and and	Oil Camellia		60	3							
			Total	100		(1,200)	(188)	31,342	4,897	2,712	59.0	72.7
9	Jingzhou	Oil Camellia		100	3	(1,200)	(188)	(810)	(127)	33	(16)	(2.4)
	Total Farms			1,511								
				,								
Root &	Tuber											
1	Longshan	Potato		150	3							
		Sweet Potato		167	3							
			Total	317		(1,098)	(172)	1,661	259	251	none	nane
2	Guzhan	Potato		600	2	(486)	(76)	645	101	233	none	nane
3	Luxi	Potato		400	3	(729)	(114)	968	151	233	none	nane
4	Fenghuang	Potato		100	3							
		Sweet Potato		325	3							
			Total	425		(1,098)	(172)	1,661	259	251	none	nane
5	Jingzhou	Sweet Potato		500	3	(369)	(58)	693	108	288	none	nane
	Total Farms			2,242								

III. ECONOMIC ANALYSIS

22. The physical inputs and productions established in the financial analysis provided the basis to determine the viability of the project investment in terms of opportunity costs and quantifiable benefits to the economy as a whole. The economic analysis aims: (i) to examine the overall Project viability, where aggregated economic benefits are compared with total outlays; (ii) to assess the Project's impact and the overall economic internal rate of return (EIRR); and (iii) perform sensitivity analyses.

A Main Assumptions

- 23. The estimate of the likely economic returns from HARIIP interventions are based on the following assumptions:
- HARIIP Costs. HARIIP Costs. Project base costs include community infrastructures, productive and non-productive modules, technical, institutional and back-stopping support for productive modules, and Project management at provincial and county level. The assumptions used to calculate the Project financial costs are presented in WP-6. Project costs and financing. These costs have been converted to economic values by some adjustments that included removal of price contingencies, taxes and duties. By the end of Project implementation period no residual values for capital investment items have been assumed and Project investments would be integrated either into household and community structure or existing institutions. While additional recurrent costs for operation and maintenance of irrigation facilities and village roads, beyond project duration, are considered and these would be covered by Project beneficiaries. The total economic costs of the Project amount to about USD 83.96 million. Total economic Project costs excluding agricultural materials, investment in drinking water system and the recurrent cost for Operations and Maintenance is USD 63.4 million, the other project costs used for the analysis. Beneficiaries' contribution in terms of labour cost for the implementation of respective Project modules is not considered as it is less quantifiable and more subjective. However, all costs associated with incremental production are included in the production models.
- 25. **Project Life.** A 20-year Project life has been assumed for the economic analysis to account for the phasing of the Project costs and benefits. Benefits of the models from year six onwards refer to the average estimates of year five.
- 26. **Project Inputs/ Outputs.** Project inputs and outputs traded are valued at their respective market prices, and agricultural goods are expected to move freely within the project area in response to market demand. Project area is also active in inter-provincial and regional trade but with limited proportion. Thus, current market prices of both inputs and outputs reflect the actual export and import parity prices for identical products. Consequently, financial prices are used as proxies for economic prices.
- 27. **Standard Conversion Factor (SCF).** Standard conversion factor of 1.0 was used in economic analysis to adjust the local content of costs and goods assumed to be traded and non-traded.
- 28. **Opportunity Cost of Capital and Farm Labour.** For opportunity cost of capital, an economic discount rate of 8% has been used to reflect the current and forecast financial market situation. While for opportunity cost of unskilled labour the financial wage rate is taken to reflect the value of the marginal product of agricultural labour. An SCF of 1.0 is assumed to adjust this price.
- 29. **Project Benefits.** The analysis attempts to identify quantifiable benefits and costs that relate directly to the activities undertaken following implementation of critical activities under community infrastructure such as irrigation facilities, pavement of village roads as well as from the various productive modules under sustainable agriculture and marketing support components. The main quantifiable benefits arising from improved agricultural productivity resulting from sustainably oriented production and market linkages, improved agronomic practices and better use of farm inputs are simulated based on the production patterns over the Project life. Other economic benefits derived from the Project interventions comprise pavement of village roads, rural grid upgrading, rural jobs and social benefits. These benefits were partly not quantified (rural jobs, social benefits, general well-being) and partly reflected in the analysis through the increase in production because of better yields.

Improved prices, for instance because of roads improvement, were not considered as the prices used are market prices and not farm-gate prices.

- 30. Drinking water system is expected to cause great benefits in terms of time savings, productivity gains and higher savings from health care cost. A study by WHO in 2007 on the "economic and health effects of effects of increasing coverage of low cost household drinking-water supply and sanitation intervention to countries off-track to meet MDG target 10" indicated a benefit-cost ratio of 6.9 per US dollar of investment for East Asia & Pacific Region for achieving MDG targets for water; and 6.6 universal access to water. If the lower ratio (6.6) is applied to the investment on drinking water (amounting to CNY 37.9 million or USD 0.6 million), annual benefits will average CNY 1.7 billion and generate a 660% EIRR. Including this benefit in project EIRR computation will generate a 366.67 % EIRR. This stream of benefits can easily justify investments in drinking water system or even for the whole HARIIP where it accounts for only 6.7% of the total project base cost. Hence for purposes of Project EIRR and Sensitivity Analysis, the costs and benefits of the investment in drinking water system are excluded to limit that analysis to the agricultural modules.
- 31. HARIIP's incremental benefits stream comprises the economic net value of crop production. Incremental benefits from the various models have been aggregated based on the phasing of the households uptake during the Project implementation period. The phasing was based on the rate at which new smallholder farmers are expected to participate in the Project activities. Separate adoption rates have been considered for each farm model depending on the number of expected farm households participating by Project County. WP 7 -Appendix 3 presents the number of participating farms which would benefit from the Project support and the incremental physical production and inputs at full project development. Appendix 3 presents the distribution of participating farm by module while Appendix 4 presents the detailed Production and Inputs by module. Appendix 5 of WP 7 shows the Economic Budget by module as well as the overall project budget.

B Project EIRR and Sensitivity Analysis

- The overall EIRR of the Project is estimated at 28.58% for the base case. Project net present value (NPV) of the net benefit stream, discounted at 8%, is USD 193.2 million or CNY 1,205 million. The summary of economic analysis is presented in Appendix 5 of WP 7.
- 33. **Sensitivity Analysis.** The analysis assesses the effect of variations in Project benefits and costs and for various lags in realisation of benefits. The EIRR was subject to sensitivity analysis to measure variations in the EIRR due to unforeseen factors.
- 34. For instance, an increase in total Project costs by 10% would reduce the EIRR to about 27.1% and a 20% cost over-run would reduce EIRR to 25.8%. While a 10% decrease in overall Project benefits would reduce the EIRR to 27.0% and a 20% decrease in project benefit would bring EIRR to 25.2%. A 20% costs over-run coupled with a 20% decrease in Project benefits would reduce the EIRR to 22.6%.
- 35. Furthermore, a one year delay in Project benefits would only reduce the EIRR to 25.08% while a two year lag would reduce the Project EIRR to 21.73%. The sensitivity analysis therefore, indicates that the Project is relatively robust and will remain economically viable under most foreseeable adverse conditions.

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⁹ WHO 2007 (Public Health and the Environment), Economic and health effects of increasing coverage of low cost household drinking-water supply and sanitation intervention to countries off-track to meet MDG target 10, Background document to the "Human Development Report 2006"

Table 3. Sensitivity Analysis

	Benefits					
ಕ್ಷ	_	-20%	-10%	0%	10%	20%
roject	-20%	28.6%	30.4%	32.0%	33.5%	34.9%
S D	-10%	26.8%	28.6%	30.2%	31.7%	33.1%
Change in Cost	0%	25.2%	27.0%	28.6%	30.0%	31.4%
Jan	10%	23.9%	25.6%	27.1%	28.6%	29.9%
$\dot{\upsilon}$	20%	22.6%	24.3%	25.8%	27.3%	28.5%
	_					<u>.</u>

DRAFT PROJECT IMPLEMENTATION MANUAL

I. INTRODUCTION

- 1. **Purpose of the manual**. The Manual is formulated to provide an additional common reference for all stakeholders during the implementation period. With a common reference that is based on the primary documents of the Project (Related Loan Agreement Appraisal Report, Letter to the Borrower (LTB)), it is expected that a common understanding of the Project would be attained and in cases of possible confusions, in the future, the Manual would serve as a clarification instrument in search of guidance and solutions in order to minimize delays in Project implementation.
- 2. The Manual is also intended to facilitate the planning, monitoring and evaluation processes at various levels and stages of the Project. Being a complementary part of Final Design Report and in accordance with the Loan Agreement, and disseminated to stakeholders and implementing partners, the Manual would also enhance the transparency of the Project operations.
- 3. This Manual should be used in conjunction with the project logical framework, which highlights all the project's key interventions with expected results quantified in terms of indicators.
- 4. **Scope and limitation**. Expectedly, not all information and references can be contained in the Manual for practical purposes. As such the Manual covers critical steps and procedures unique to the Project. Implementation of project components generally will not be highlighted in the Manual as related details are described in the related Appraisal Report. Some Government Forms, particularly on finance and administration are also not included as intended users are generally familiar with them. Some references are also too voluminous (various laws and related guidelines) to be included in the Manual.

II. PORJECT DESCRIPTIONS

- 5. **Project area**. The Project will be implemented in nine counties under four prefectures, namely: Lingxiang and Yueyang of Yueyang prefecture, Taoyuan of Chengde prefecture, Shaodong of Shaoyang prefecture, Longshan, Guzhang, Luxi and Fenghuang of Xiangxi prefecture, and Jingzhou of Huaihua prefecture. Among them four are nationally-defined poverty counties (Longshan, Guzhang, Luxi, Fenghuang), the others are identified by the province as counties with persistent pockets of poor that require additional development support. Five are the ethnic autonomous counties (Jingzhou, Longshan, Guzhang, Luxi, Fenghuang).
- 6. **Target group**. In principle, all the rural households in the project area, totalling about 511,704 households or 1,943,442 inhabitants, would be eligible to broadly benefit from the project intervention. However, households in more remote villages which are poorer than those nearer the main roads would receive top priority, as they are assumedly selected as target villages (589 villages). Within the project villages, encouragement will be given to the lower end of the category of average households to take part in most of the project activities. However, priority would be given to the households classified under the category of poor, who are economically active, and physically able and capable to participate in project activities. That suggests this primary group would receive priority in a number of project activities directly related to households and individual farmers, such as training, provision of technical service, support of productive module, and inclusive mainstreaming of cooperative strengthening. Women and minorities will be a major part of the target group and they will receive special attention as they are either socio-economically or structurally disadvantaged due to their particular living conditions and background.
- 7. The total population of the 589 villages to be targeted by the Project is 759,606, reportedly representing 181,656 households. Some 50% of these group will be women. If measured by USD 1.25 per day per person, or equivalently an income per capita of CNY 3,000, total poverty population in target villages reportedly represents around 45% of the total population and households in the 589 target villages.

- 8. **Targeting strategy**. The Project will adopt the inclusive targeting strategy, addressing the specific needs of the different vulnerable groups, especially the poor women and men, ethnic minority groups and other possibly socio-economically marginalized groups.
- 9. The project's targeting strategy will be adapted to the changing dynamics of rural poverty in the project areas, focus on strengthening community-level assets of collective nature, improving access to income generating opportunities, and strengthening sustainable service support services, and strengthening the target groups' resilience. It will adopt the geographic targeting strategy of the Government in identifying the pockets of rural poverty in economically disadvantaged areas, and it will continue to apply the differentiated targeting and support model to complement the Government's poor village and poor household-based approach. This suggests that within the project villages, the economically active poor and women, the vulnerable ethnic minorities would be identified and served on a priority basis.
- 10. Well Being Ranking. People living in the same community have different level and status both in terms of social and economic. Those differences are related to their livelihood system. Well-being ranking is one of the PRA tools, to know the different level and status of each family in the community and their different sources of income at the same time. It is also important to know how people perceive their well being as a whole, it might be different than one community to another. They might have different types of indicators to differentiate their level and status. In some villages, people have other social indicators than only the economic indicators.

Box 1: The Well Being Ranking

Purpose	a.	To identify the marginalized groups in the village in order to carry out the marginalized group focus programs.
	b.	To know the perception of the community on their economic situation
	c.	To know and analyse the indicators of 'well being' of the particular community
Materials	d.	Name list of each household of particular village
	e.	Cards
	f.	Markers
Process	g.	Step 1:
(one of the popular processes)	h. i.	Firstly, the focused group with whom the discussion is being done should be identified. Village leaders, VAC members, VDC members, teachers, shopkeepers and respected elders (includes men and women) from the same village are the reliable sources to discuss about every family's level and status. Generally, it is assumed that above mentioned people know the details of each household living in the village. Step 2:
	j.	Before the discussion, head of family's names with number should be written in a piece of paper or a card.
	k.	Inform the focused group what you are going to do and why and how;
	I.	Read the name list of each family (hh head), make sure whether the group know the listed family. Some people in the group might know them if not everyone.
	m. n.	Step 3: Start the discussion asking with low standard/level family or household among the names listed in the cards. While in the discussion, do not use the word "rich". This kind of word might lead to a difficult situation during the discussion.
	О.	Put the name card told by group member at the right side.
	p. q.	Then ask the name of family who has good standard or level among the names listed in the cards, put the name said by group member at the left side. Step 4:
	r.	Now read the name cards one by one asking the group which family falls in which standard, or compare with first two categorized family. While group members were answering the facilitators question, they also tell the indicators of being in low level or high level, if not ask why the family falls under certain category, note down any kind of indicators group members provide. Continue asking the same

- questions and compare with other families. While ranking it is better to cross check in between. In this way, categorize the family with the participation of each group member.
- s. Step 5:
- t. Once the categorizing is over, cross check once again with group members reading the name card. Ask the indicators of the family again why it is under that particular category.
- u. Note down the indicators and number jotted down in the name card.

Notes for facilitator

- v. Well-being ranking is a sensitive issue, facilitator has to be very careful using certain words such as rich, poor and so on, people sometimes feel humiliated for putting themselves in poor category. In some cases, it is also found that all the members want to put themselves in poor category, as they do not like to be left out from the facilities and services receiving from the project.
- w. Facilitators should be neutral and their task is only to facilitate, not to speak for villagers. Even if you know about the village or family, do not make your own judgement, let the group member speak themselves about their situation.
- x. Facilitator should see whether all the group members are participating in the discussion. Sometimes it is dominating by only some members who are mostly powerful and wealthy.
- 11. **Project goal**. The goal of the Project is to contribute to rural poverty reduction in targeted areas of Hunan Province by enabling rural poor men and women to benefit sustainably from economic growth, improve their agricultural production and food security, raise their incomes and strengthen their resilience through innovative and replicable approaches.
- 12. **Project objective**. The specific objective is to strengthen the economic and self-development capacities of the poor women and men to help them take full advantage of opportunities, resources and services in the project area.
- 13. **Implementation modalities**. Project design is based on the implementation of a number of standard 'modules', and the conventional activity-wise approach, depending on the nature of interventions.
- 14. *Modular approach*. The modular approach allows a greater degree of flexibility in planning, costing and implementing programme activities. A module is defined as a small-scale set of interrelated activities aimed at achieving a specific objective that can be easily replicated in other areas. Each module includes all costs required for proper implementation of the activity concerned. The size of a module ranges from a household, a group of households to a single village. The implementation period ranges from one to several years, depending on the type of activities involved. Annual work plans and budgets will be prepared at county level using the modules as the basic building blocks, based on beneficiary demand. Standard modules may be adjusted within agreed limits by the County PMOs to reflect local conditions.
- 15. Implementation of infrastructure and project management will be based on the conventional intervention, which is expressed on an activity and cost-wise manner.
- 16. **Project components**. HARIIP will have three components: A) Community infrastructure improvement; B) Sustainable agricultural development and market access support; C) Project Management.

Component A - Community infrastructure improvement

17. This component will be the basis for expanded and improved agricultural production, decreased physical isolation and thus improved integration into the market value chains, and improved productive and daily-life assets for the sake of the rural community and the households in the project area. Support is provided for irrigation facilities, village roads, drinking water supply facilities, and rural electricity grid upgrading. These activities will be critical for the project area to

strengthen the community resilience to frequently-occurring climatic calamities, improve the access of rural poor to markets, information and technical services, increase of net-income, and develop commercialized production of agriculture, which are regarded as effective measures for rural development and poverty reduction at the current stage and for drastically improvement of the living conditions

18. Project interventions under this component would include: (i) improvement of irrigation facilities, mainly the lining of old existing earthen irrigation canals including the necessary water intake, the water outlets and the flood protection measures; (ii) paving of village roads with a concrete slab, connecting to administrative villages and their constituent natural (smaller and scattered) villages with non-paved gravel roads. (iii) construction of community supply facilities of safe drinking water; (iv) upgrading the rural electricity grid, especially for those that the efficiency has fallen under the state's technical standards. General training of beneficiaries and specific training for the operation and maintenance and bookkeeping of the project-built civil works will also be supported by the project.

Component A – Community infrastructure improvement: detailed implementation processes and implementation arrangements

A. IRRIGATION FACILITIES

- 19. Justification. Most irrigation schemes in the area are relatively small irrigation schemes ranging between 5 to 40 hectares. These are simple schemes with an intake of a river or a water pond, a main canal and secondary canals and sometimes tertiary canals. A major constraint for these small canal irrigation systems is the low efficiency of the existing small irrigation systems and especially the canals. Many of the canals are earthen structures, or lined over 30 to 40 years ago, in poor repair and cannot meet the original design performance requirements. In some cases the canal is broken or flooded so that irrigation is no longer possible from the point of destruction. In their present condition, these facilities are inefficient, water-wasting from leakage and incapable of supporting reliable water supply for high-yield grain production. The irrigation coefficients of the irrigation systems are low (0.40 for a canal system that covers almost the whole command area or much less if the canal only reaches half of the command area) and consequently they are unable to cover the full irrigation area in the original design. The adoption of anti-seepage measures for irrigation canals would reduce water loss by 70% - 80% in the improved sections of the canal. This will increase water utilization coefficient by about 0.2 to about 0.55 or 0.60. This is a fairly good level of water efficiency for surface irrigation schemes.
- The most important effect of lined channel is that water reaches the whole command area. This, of course, is under the assumption that sufficient water is available in the water source, be it a small river or water ponds. It is estimated during the field visits of the DCM that only about 50 % of original command area can be irrigated. During the rainy season (mostly paddy rice production) it means, that only the upper half of the command area is protected against drought periods and the lower half is threatened by drought periods. It is estimated that this results in lower yields in the lower half of the command area of on average 50 %. This means that during rainy season the average production in the total command area is reduced by 25 % due to lack of lined channels. During the dry and winter season mostly vegetables and potatoes are cultivated in irrigated areas. Currently, with the irrigation system in deterioration this means that only the upper half the command area can be irrigated, meaning a loss of production in dry season in the lower part of the command area of 50 % (in relation to the total command area). Since the availability of the water source is not guaranteed during winter (water ponds may become empty), it is also estimated by the DCM that on average also the upper half of the command area reaches only 50 % of the production of its possibilities, resulting in a production loss of 25 % (in relation to the total command area). Brief: the total loss in production of paddy rice in rain season is 25 % and the total loss in dry/winter season is 75 %. In other terms, the production of paddy in the rainy season can be improved due to canal lining and/or pond improvement with 33 % in the total command area and the production of vegetables and potato can be improved due to canal lining and or pond improvement with 300 % in the total command area.
- 21. Most of the existing ponds are also 30 to 40 years old. Problems with water ponds are caused by (sometimes huge) water losses from seepage and caused by sedimentation in the pond reducing capacity. Unstable dams may also result in a sudden dam burst provoking flooding and therefore severely safety problems downstream. Furthermore, the diversion structures including water culvert and pumping facilities are often in a very poor condition and not functioning anymore. The ponds

need rehabilitation and improvement by the making of a new intake (from the pond to the irrigated area), by reducing the leakage and by stabilising the dam. Downstream of the water pond, canal lining will ensure water-saving in the irrigated area.

- 22. Currently it is not clear who is responsible of operation and maintenance of the system. In the visited villages by the DCM a proper organisation such as a WUA was lacking. It is essential that such an organisation exist for sustainable development. The latter meaning proper O&M of the irrigation systems and proper repair of the infrastructure if needed. The introduction of water fees is important as is the training of some members of the WUAs in maintenance and repair. It is not needed to provide training on water distribution. The farmers have a lot of experience with this.
- 23. **Targeting Strategy:** Targeting strategy would reflect the demand of poor, ethnic minorities' and remote villages first, which means that, within a project county, the project townships and villages should be those that are poorest part and with high proportion of poor people. As stated earlier, the selection of villagers is already implemented by the county and townships PMOs. Within the selected project villages, the supported activities should be those that meet the community prioritisation. With respect to irrigation and other investments which benefit a number of households, areas with the largest number of poorest households with the smallest land holdings should be given priority. Currently priorities have been set per village by the VIG and locations for canal lining and pond improvement are known. Where irrigation is a top priority of the VIG, this activity is mostly part of the HARIIP.
- 24. **Objectives.** The irrigation activities will aim to increase the total effective irrigation area in the project villages by improving small irrigation facilities. It will support small-scale irrigation and water conservancy works where these are prioritised of the VIG and assist in meeting the household demands. Also through training on O&M, community-based management will be enhanced for the sustainable use of the irrigation infrastructure.
- 25. **Target group.** The command area to be improved is shared by individual households of one or more natural villages. Service of the improved irrigation facilities will be inclusive and equally benefited by all of the households, including the poor and other vulnerable households.
- 26. **Intervention Activities**: The intervention activities of irrigation facility will be designed as four activities: the implementation process (including training), intake improvement, canal lining and water pond improvement. **Implementation process for irrigation facilities.** The following implementation process is adopted for the implementation of irrigation facilities. It is based on the existing implementation process as explained by the staff of the BoW in the different counties with some additional steps included by the DCM. These steps are based on the assumption that the proposed irrigation projects are already selected as confirmed with the county PMOs. The first part of the steps is the steps at management level and the second part is steps at field level.
- 27. <u>Implementation process for irrigation facilities at management level.</u> These are part of the general project management activities that will be executed simultaneously with the other project activities and further described in the main report.
 - (a) Establish an overall planning per county of the irrigation projects in 4 years in relation to the other projects in the county. Train all involved staff in planning and monitoring.
 - (b) Develop a short practical hand book during the first 2 months of the project of all the implementation steps for irrigation facilities.
 - (c) Develop a short practical hand book during the first 2 months of the project on training of designated farmers in maintenance and financial management of irrigation facilities.
 - (d) Translate in the first 4 months of the project all the relevant Design and Construction Manuals into English in order to facilitate supervision by IFAD.

- (e) Implement a one or two days training for all involved staff (provincial, county and township PMOs, Engineers of county BoW) in social organising of village groups and WUAs in the first 2 month of the project.
- (f) Implement a one or two days training for all involved staff (provincial, county and township PMOs, Engineers of county BoW) in all the implementation steps of the irrigation facilities in the third and fourth month of the project.

28. Implementation process for irrigation facilities: a 12 step process.

- (a) Perform in a rapid appraisal a water resources study to assess the availability of the water source the whole year around and to ensure that the water intake to the command area does not have a negative impact on down streams located other water use activities (i.e. other irrigation schemes).
- (b) Establish an official Water Users Association in line with official Government policies: A WUA will have a Committee of 3 to 6 members to lead the WUAs with a Chairman, a treasurer and members. It is important that, equal to the VIG, poor farmers, women, and farmers from each part of the command area are included in the Committee. A meeting will be organised with all the farmers in the command area to explain the need of a WUA and explain all the following steps of implementation process to the farmers including their participation. A Committee is selected and the WUA should be officially recognised. The VIG of the administrative village will assist in the forming of the WUAs.
- (c) The BoW staff will perform a topographic survey on the proposed command area and make a design of the new scheme in Autocad. Also a calculation is made by BoW of the proper cost recovery level for maintenance of the irrigation scheme. In the meantime the WUA-Committee and other interested farmers of the WUA will be invited for an excursion to an existing scheme to discuss issues as design, operation and management, crop production with farmers of the recipient scheme.
- (d) The design of the irrigation scheme is discussed with the WUA-committee and all the farmers in the command area. The explanation is followed by a walk through the command area to explain more in detail the design and location of structures. Comments raised by the WUA-members are discussed with the BoW Engineers and if technically and financially feasible, adapted in the design. The issues of operation and maintenance and the need for water fees (based on the recovery cost for maintenance) and its transparent use are discussed with the WUA-members. Also the participation and responsibilities of the Committee during the construction process are discussed (being quality control and monitoring of progress).
- (e) A formal agreement is made between BoW and the WUA-Committee on the implementation activities and the responsibilities of BoW and the Committee during the construction. Also it is made clear by the Committee who will be the responsible farmer(s) for maintenance and financial management of the water fees. The WUA may also sub-contracting the maintenance to an experienced person but the size of the scheme (small scale) does not require such a formal arrangement.
- (f) The BoW tenders the construction of the irrigation facilities to a contractor.

- (g) During the construction the WUA-Committee (or farmers of the WUAs designated by the Committee) supervise the quality and the progress of the works. If problems occur the BoW is informed.
- (h) During the construction period the WUA-Committee organises a meeting with the farmers in the command area to discuss and finalise their internal rules and regulations. These rules and regulations are specifically for operation and maintenance of the scheme and the setting of the water fee per mu for maintenance. Also farmers are designated for O&M and for fee collection. The salary of the "maintenance farmer" is also discussed and fixed. In this meeting staff of the County PMO and BoW provide some assistance and guidance. The internal rules are put to paper and all farmers sign the document. The designated farmer(s) for maintenance and fee collection will receive training from the BoW in O&M and in financial management.
- (i) After completion of the construction the WUA-Committee and the BoW perform together a joint check of the constructed scheme and formally accept it, if it is properly built. An official document is signed by the three parties (BoW, Committee and contractor) that the scheme has been built according the design and the quality of the work is good. On this day, the whole WUA is invited and the working of the irrigation system explained.
- (j) During the first year, as soon as possible after the completion of the scheme, an agricultural extension programme will start in the irrigated area in order to rapidly maximize the production of agricultural products including cash crops.
- (k) After about one year, in a general meeting of the WUA, the functioning of the scheme is discussed. In this meeting staff of the County PMO and BoW provide some assistance and guidance. After that, another combined check is performed with the BoW, the Committee and the contractor to analyse the functioning of the scheme before the final payment is made to the contractor.
- (I) If the final payment is made to the contractor and thus the scheme is well functioning, then an official handing over ceremony is held where the BoW and the WUAs Committee sign an official handing over paper. From that date, only the WUAs is responsible for O&M
- 29. **Intake improvement.** A proper intake is important to ensure proper distribution of water and to avoid overflowing of the canals in the irrigation system down streams and as such reducing maintenance cost. If the intake is not working properly, it should be improved, whether it is an intake from a small river or from a water pond. If necessary a silt-removal structure should be put in place, but due to the (relatively) steep slopes of the surface, it is expected that these are not necessary. The construction will be done according the Design Manual for Irrigation and Drainage canals of the Ministry of Water Resources Conservation.
- 30. **Canal lining.** Most of the canals in selected irrigation systems will be lined with site-cast or prefabricated U-shape concrete, stone masonry structures may also be used in a few cases for canal lining. The cross-sectional of the canals is designed as either rectangular/square shape in the mountainous area or U-shaped and occasionally trapezoidal in the plain area. As the cross-sectional internal sizes are relatively small, ranging from 0.3 m x 0.3 m to 0.6 m x 0.6 m (width x height) with 0.4 m x 0.4 m most frequent, occasionally up to 0.8 x 0.8 m, depending on the location and water flow required, all canals are classified into one category as field water distribution canals. Small canal structures associated, such as outlets to field, crossing road structures are to be included in the design. Also, flood control structures (with a capacity to rain fall of 1 in 10 years), are to be included in the design and properly implemented, where necessary. The construction will be done according the Design Manual for Irrigation and Drainage canals of the Ministry of Water Resources Conservation.

- 31. **Water pond improvement.** The water pond improvement includes activities of dredging, dam strengthening, bank protection, outlet structure and spillway improvement, etc. to restore their capacity, safety and normal functioning. The original designed capacity of each of the water ponds to be supported by this project is required to be less than 100,000 m3, ranging from 10,000 m3 to 50,000 m3 for most of them.
- 32. Cost estimates. For the irrigation facilities, the estimated unit cost for each of the activities is worked out for each of the project counties based on the information provided during the DCM and after consultation with the provincial PMO. Then the weighted average unit costs across the counties were calculated and adopted. The unit costs are CNY 165,000/km (for a 40*40cm canal) including labour cost for canal lining; water pond improvement costs CNY 85,000 per set and training CNY 20 per person. The quantity and cost of the activities are shown in Appendix 1 for the whole project and in Appendix 2 to Appendix 10 for the individual counties. However, the total cost estimated would be provisional and subject to further adjustment whereby the use of contingencies can be adopted. Also pond improvement may costs sometimes more than is in the budget of HARIIP. Canal lining: The total length of lined canals is 865 km at the unit cost of CNY 165,000/km, so the total cost for canal lining is CNY 142,725,000. Water pond improvement: The number of water pond to be improved is 179 sets at the unit cost is CNY 85,000/set, so the total cost for water pond improvement is CNY 15,215,000. Technical Training: In the implementation process meetings are described that are seen as the training for the WUA-members. The trainees are about 86,236 (one representative from each benefited household) at the unit cost of CNY 20 per person for training in the village, so the total training cost is CNY 1,724,720. This includes also the special training to the maintenance manager for small repair and financial management. The cost includes training materials, trainers' fee, transportation cost and other necessary cost.

B. RURAL DRINKING WATER SUPPLY

- 33. **Justification.** There are 8,635 natural villages, out of the total 20,828 and a population of 1,171,656 in the project areas that do not have safe drinking water, due to either poor water quality or carrying water with buckets for a long distance or both. These people experience this hardship even more during drought and flooding seasons. Support under the project for the construction of new drinking water supply systems (WSS) with pipelines for distribution to the households to improve the villagers' livelihoods and health situation is obviously more than justified. This activity is critical to reduce villagers' labour loads and water-borne disease caused by unsafe drinking water, to increase the health level of women and children in particular. This is further strengthened with the training of beneficiaries in order to ensure sustainable use of these schemes.
- 34. **Targeting strategy.** Villages facing most severe difficulties in access to safe drinking water will be selected first and give priorities to the social and economically vulnerable communities. As stated earlier, the selection of villages in the HARIIP is already done by the county and townships PMOs (the selection process is described by the DCM elsewhere in this design report). Priorities have been set per village (by the VIGs). Where drinking water supply systems is a top priority of the village, this activity is mostly part of the HARIIP. In some areas already water sources are identified as source for the WSS. Technically, preference would be given for the construction of collective water supply system with good quality spring water by gravity. Even if the capital input for such a system is higher than a system with pump (or a system with simple water treatment), it is preferable to implement the gravity spring water system with the higher capital input. By doing so, the cost of O&M in future will be low and thus low water price can be ensured. This is particularly important for the poor and remote villages. Only if no other clean sources are available, groundwater can be applied since the unit costs and O&M costs of tube well systems is high.
- 35. Water pricing is essential for sustainable use of a WSS; therefore water meters are to be included in the design. Water pricing will include pro-poor arrangements to ensure that the poorest households can equally benefit from the services. The proposed pro-poor arrangement for HARIIP is the rising block tariffs (two-step water price as called locally). With a low consumption the prize of water of the consumption of the first X m3/month of water used, with an increasing price for higher consumption levels. Generally the poor use less water than the rich; the two-step water pricing let richer households pay more than the poorer households. The Bureau of Heath of each county will be involved in the project to ensure the qualitative perspective (chemical/biological water quality) of WSS including the periodic quality monitoring of water sources and to provide continuously follow-up assistance after the project is finished.

- 36. **Objectives.** The objectives of this activity is (1) to provide the selected villages with safe drinking water through newly built drinking water schemes, (2) to reduce men and women labour loads and time for obtained the drinking water faraway, (3) to reduce water-borne disease and to improve the health conditions, (4) to improve the living condition of the villagers, particularly of women and children, and (5) to reduce costs for health care.
- 37. **Target Group.** Service of the project-built village level drinking water schemes will be inclusive; this means that all households in the covered area will be connected if demanded. This also means that the VC will be responsible for the WSS, its maintenance and its sustainable use for a large number of years.
- 38. **Project Intervention**. The rural drinking water supply system contains of a (1) water source (captured spring, tube well but preferably not a water pond) (2) a water reservoir that receives water either by gravity from a spring of by pump from a well (3) a distribution system of pipes, household connections with meters or sometimes communal taps. In few cases filtration and disinfection facilities can be added in the case of the use of large water ponds as water source. The cost of household connections will be borne by the villagers themselves. The intervention activities of WSS facility will be described in the below-mentioned implementation process that includes training. This implementation process is for the implementation of WSS facilities. It is based on the existing implementation process as explained by the staff of the BoW in the different counties with some additional steps included by the DCM. The steps are based on the assumption that the proposed WSS projects are already selected as confirmed with the county PMOs. The first part of the steps are the steps at management level and the second part are steps at the field level.
- 39. **Implementation process** for WSS facilities at management level. These are part of the general project management activities that will be executed simultaneously with the other project activities and further described in the Project Design Report.
 - (a) Establish an overall planning per county of the WSS projects in 4 years in relation to the other projects in the county. Train all involved staff in planning and monitoring
 - (b) Develop a short practical hand book during the first 2 months of the project of all the implementation steps for WSS facilities.
 - (c) Develop a short practical hand book during the first 2 months of the project on training of designated villagers "the WSS-manager" in maintenance (and operation), repair and financial management of WSS facilities.
 - (d) Translate in the first 4 months of the project all the relevant Design and Construction Manuals into English in order to facilitate supervision by IFAD.
 - (e) Implement a one or two days training for all involved staff (provincial, county and township PMOs, Engineers of county BoW and BoH) social organising of village groups in the first 2 month of the project.
 - (f) Implement a one or two days training for all involved staff (provincial, county and township PMOs, Engineers of county BoW) in all the implementation steps of the WSS facilities in the third and fourth month of the project.
- 40. **Implementation process for Water Supply and Sanitation (WSS) facilities**: an 11 step process.
 - (a) Perform a water resources study to assess the availability of the drinking water source the whole year around in terms of quantity and quality. This assessment is a combined activity of BoW and BoH.
 - (b) The Village Committee will be managing the WSS since the whole village is included. It is advised to include current members of the VIG (poor farmers and, women) in the VC. All households will be invited for a general meeting to explain all the following steps of

- implementation process to the farmers. The staff of PMO county level, BoW and BoH assist the VC in the discussion.
- (c) The BoW staff will perform a topographic survey on the proposed command area and make a design of the new scheme. Also a calculation is made by BoW of the proper cost recovery level for maintenance of the WSS scheme. In the meantime the VC and other interested villagers will be invited for an excursion to an existing WSS to discuss issues as design, operation and management, water fees, repair, etcetera with villagers of the existing scheme. The technical standards as developed by the National Patriotic Health Campaign Committee (NPHCC) under the Ministry of Health (MOH) will be used where relevant by the local implementing agencies to ensure adequate standards for technical design (see footnote Error! Bookmark not defined.).
- (d) The design of the WSS is discussed with the VC and all interested villagers. The explanation is followed by a walk through the village to explain more in detail the design and location of pipes, reservoirs, pump house (if needed) and taps. Comments raised by the villagers are discussed with the BoW Engineers and if technically and financially feasible, adapted in the design. The issues of O&M and the need for water fees (two-step pricing and based on the recovery cost for maintenance) and its transparent use are discussed with the VC and the villagers. Also the participation and responsibilities of the VC during the construction process are discussed (being quality control and monitoring of progress).
- (e) A formal agreement is made between BoW and the VC on the implementation activities for the WSS and the responsibilities of BoW and the VC during the construction.
- (f) The BoW tenders the construction of the WSS facilities to a contractor.
- (g) During the construction the VC (or villagers designated by the VC) supervise the quality and the progress of the works. If problems occur the BoW is informed.
- (h) During the construction period the VC organises a meeting with the villagers to establish the internal rules and regulations related to WSS. These rules and regulations are specifically for operation and maintenance of the scheme and the setting of the two steps water fees for maintenance and repair. Also it is decided who will be the responsible villager(s) for maintenance, repair and financial management of the water fees. The VC may also sub-contracting the maintenance to an experienced person but the size of the scheme (small scale) does not require such a formal arrangement. The salary of the "wss-manager" is also discussed and fixed. In this meeting staff of the County PMO and BoW provide some assistance and guidance. The internal rules are put to paper and all households sign the document. The designated wss-manager will receive a training from the BoW in O&M and in financial management.
- (i) After completion of the construction the VC and the BoW and BoH perform together a joint check of the constructed scheme and formally accept it, if it is properly built. An official document is signed by the four parties (BoW, BoH, VC and contractor) that the scheme has been built according the design and the quality of the work is good. On this day, the whole village is invited and the working of the wss explained. The BoH monitors the water quality at the start and then according to their normal frequency.

- (j) After about one year, in a general meeting of the village, the functioning of the scheme is discussed. In this meeting staff of the County PMO and BoW provide some assistance and guidance. After that, another combined check is performed with the BoW, the Committee and the contractor to analyse the functioning of the scheme before the final payment is made to the contractor.
- (k) If the final payment is made to the contractor and thus the scheme is well functioning, then an official handing over ceremony is held where the BoW and the VC sign an official handing over paper. From that date, only the VC is responsible for O&M. The BoH will continue to provide monitoring assistance.
- Cost Estimates. The construction costs of a WSS vary of course with the required capacity. Generally the budget for a WSS is between 500 and 700 CNY/per person (on average 2400 CNY/household) at the village level. Based on information from the project counties and after consultation with the provincial PMO by the DCM, a weighted unit cost for drinking water schemes is estimated as 360,000 CNY per set (not including the cost of the household connections but including the labour cost). This means that the investment cost cover for a village of 150 households. The unit cost for the training is CNY 20 per trainee. The quantity and cost of the activities are shown in Appendix 1 for the whole project and in Appendix 2 to Appendix 10 for the individual counties. However, the total cost estimated would be provisional and subject to further adjustment. **Drinking** water schemes: The number of drinking water supply schemes to be supported is 104 sets at the unit cost of CNY 360,000 per set, so the total base cost is CNY 37,440,000, **Technical training**: In the implementation process meetings are described that are seen as the training for the villagers. 22.650 trainees are estimated (one household one person) at the unit cost of CNY20 per person for training in the village, so the total training cost is CNY 453,000. This includes also the special training of the wss manager for O&M and small repair and financial management. The cost include training materials, trainers' fee, transportation cost and other necessary cost

C. VILLAGE ROADS

- 42. **Justification.** It is recorded from the provincial PMO that some 7,034km administrative village roads are not paved, 7,625 natural villages do not have access to the main road network. Farmers residing in those villages have to use poor earthen roads or footpaths, which during the rainy season is difficult to use. As a result, farmers living in those areas have little access to markets, information and technical services but also reaching their own fields is difficult and the use of (small) machinery is not possible. Young men are leaving the village because there is not enough income that can be generated in the village and they need funds to be able to marry. Not only funds are important for this but also good living conditions and footpaths or lengthy bad earthen roads (and thus lengthy travel time to townships) score very negative on the aspect of living conditions.
- 43. The improved road network enhances the chance of increasing their incomes due to selling cash crops at a higher price. The increase in price is due to several factors: (1) the products can be sold when the prices are high. (2) Farmers can bring their products or liberate their products at the time that is convenient to them and not have to wait till buyers are coming. (3) Buyers with trucks will first go to villages with a good road. (4) The time between harvesting and selling reduces, which has a positive effect on the quality some of the products and thus a higher pricing. Another benefit is the reduced costs of agricultural inputs since the transportation costs towards the village will be reduced. By having a proper access road to the village (and all the farmers along the road), the price of cash crops will rise at least by 50 %.
- 44. **Targeting strategy**. Improving the village roads and connecting them to main road is the first priority of many villages in the project area. Priorities should be given to the communities that are poor, remote and minorities with poor connectivity (as stated before by the DCM: this selection already has been done).

Objectives. The objective of this activity is to improve the village roads and field roads to facilitate farmers' access to local market and services, and to reduce the production cost and to strongly increase the living conditions.

45. **Target Group.** For the selected villages, the layout of road should be made not only based on the local natural conditions but also on the equally-benefited base for all households, particularly for

women and poor households. The VC will be responsible for the road and the road maintenance and its sustainable use for a large number of years.

- 46. **Project Intervention**. The project intervention includes paved roads from the District road to the administrative villages and unpaved access roads to the natural villages in all 9 project counties. The intervention activities of a road facility will be described in the below-mentioned implementation process to be used under the HARIIP. It is based on the existing implementation process as explained by the staff of the BoT in the different counties with some additional steps included by the DCM.
- 47. **Implementation process** for road facilities at management level. These are part of the general project management activities that will be executed simultaneously with the other project activities and further described in the Project Design report.
 - (a) Establish an overall planning per county of the road projects in 4 years in relation to the other projects in the county. Train all involved staff in planning and monitoring.
 - (b) Develop a short practical hand book during the first 2 months of the project of all the implementation steps for road facilities.
 - (c) Develop a short practical hand book during the first 2 months of the project on training of designated villagers "the road-manager" in maintenance and repair of road facilities.
 - (d) Translate in the first 4 months of the project all the relevant Design and Construction Manuals into English in order to facilitate supervision by IFAD.
 - (e) Implement a one or two days training for all involved staff (provincial, county and township PMOs, Engineers of county BoT) in social organising of village groups in the first 2 month of the project.
 - (f) Implement a one or two days training for all involved staff (provincial, county and township PMOs, Engineers of county BoT) in all the implementation steps of the road facilities in the third and fourth month of the project.
- 48. **Implementation process for road facilities**: a 10 step process.
 - (a) The Village Committee will be managing the village road since the whole village is benefiting of the road. It is advised to include current members of the VIG (poor farmers and, women) in the VC. All households will be invited for a general meeting to explain all the following steps of implementation process to the villagers. The staff of PMO county level, BoT assist the VC in the discussion.
 - (b) The BoT staff will perform a topographic survey for the proposed road and make a design. Also a calculation is made by BoT of the proper cost recovery level for maintenance of the road. The official manual(s) of the Ministry of Transport are used to ensure adequate standards for technical design, procurement and construction management. In the meantime the VC and other interested villagers will be invited for an excursion to a village with an existing new village road. They will discuss issues as design, maintenance, maintenance fees, repair, etcetera with the villagers of the village with the existing new village road.
 - (c) The design of the new road is discussed with the VC and all interested villagers. The explanation is followed by a walk through the village to explain more in detail the design and the location of the new roads and additional structures. Comments raised by the villagers are discussed with the BoT Engineers and if technically and financially feasible, adapted in the design. The issues of maintenance and repair and the need for road

- maintenance fees (based on the recovery cost for maintenance) and its transparent use are discussed with the VC and the villagers. Also the participation and responsibilities of the VC during the construction process are discussed (being quality control and monitoring of progress).
- (d) A formal agreement is made between BoT and the VC on the implementation activities for the road and the responsibilities of BoT and the VC during the construction.
- (e) The BoT tenders the construction of the road facilities to a contractor.
- (f) During the construction the VC (or villagers designated by the VC) supervise the quality and the progress of the works. If problems occur the BoT is informed.
- (g) During the construction period the VC organises a meeting with the villagers to establish the internal rules related to the new road. These rules are specifically for maintenance and repair of the road and the setting of the road maintenance fee for maintenance and repair. Also it is decided who will be the responsible villager(s) for maintenance and repair and financial management of the road maintenance fees: the road manager. The VC may also sub-contracting the maintenance to an experienced person. The salary of the "road-manager" is also discussed and fixed. In this meeting staff of the County PMO and BoT provide assistance and guidance. The internal rules are put to paper and all households sign the document. The designated road-manager will receive a training from the Bot in maintenance, repair and in financial management.
- (h) After completion of the construction the VC and the BoT perform together a joint check of the constructed road and formally accept it, if it is properly built. An official document is signed by the three parties (BoW, VC and contractor) that the road has been built according the design and the quality of the work is good.
- (i) After about one year, in a general meeting of the village, the functioning, the maintenance and repair activities of the road are discussed. In this meeting staff of the County PMO and BoT provide some assistance and guidance. After that, another combined check is performed with the BoT, the Committee and the contractor to analyse the functioning of the road before the final payment is made to the contractor.
- (j) If the final payment is made to the contractor and thus the road is well functioning, then an official handing over ceremony is held where the BoT and the VC sign an official handing over paper. From that date, only the VC is responsible for repair and maintenance accept for big damages caused by large floods and other natural disasters.
- 49. **Paved road to administrative village** The paved roads are to improve the existing gravel roads (from the District road to the village) into concrete paved roads. Specifications: 4.5 m wide foundation, 3.5 m wide and 0.2 m thick concrete surface over a 0.15 m thick gravel sub-base. Road drainage facilities and road slope protection works should be properly designed and installed wherever necessary. **Unpaved roads to natural villages.** The unpaved roads are to improve the existing earthen roads. Specifications: 4.5 m wide compacted and leveled earthen foundation, 3.5 m wide and 0.2 m thick rock or gravel sub-base, and 0.1 m thick of coarse sand and gravel surface. Road drainage facilities and side slope protection works should be properly installed wherever necessary.
- 50. **Cost estimates.** Based on information from the project counties and after consultation with the provincial PMO, the unit cost for village roads were estimated during the Design Mission in June as CNY325,000/km for concrete 3.5 m wide paved village roads with a 4.5 m wide basement. The investment cost for village gravel roads of 4.5 m wide are CNY 180,000/km. The quantity and cost of the activities are shown in Appendix 1 for the whole project and in Appendix 2 to Appendix 10 for the

individual counties. However, the total cost estimated would be provisional and subject to further adjustment. **Paved roads:** The total length of concrete paved administrative village roads is 378 km at the unit cost of CNY 325,000/km, so the total cost is CNY 122,850,000. **Unpaved roads.** The total length of the gravel natural village roads (including field roads) is 254 km at the unit cost of CNY 180,000/km, so the total cost is CNY 45,720,000.

D. RURAL GRID UPGRADING

- 51. **Justification.** Although the rural electricity grid have been largely improved by domestic projects during the last decade in China, a number of remote and poor villages in some of the project counties, such as in Guzhang and Yueyang counties, are still not covered and served with reliable electricity. This situation has resulted in poor quality of electricity supply to these communities, such as lower than rated voltage, frequently-occurring power failure, high losses along the lines resulting in high electricity price burdened by the framers. This has impeded their electricity use for domestic and production purposes. Therefore, the rural grid to these villages needs to be upgraded to improve their life and production conditions.
- 52. **Targeting Strategy.** The priority should be given to reflect the needs of social and ecumenically vulnerable communities and in line with the overall rural grid plan of the county. Those villages, where the poor electricity grid facilities have seriously impeded the agricultural production and farmers' income generation, would be also considered in priority. As stated before by the DCM: this selection of villages already has been done and the total of number of electrical grip upgrading projects is relatively low (only 11) as compared to the other infrastructural projects.
- 53. **Objectives.** The objective of this activity is to improve or replace the existing rural electricity grid stations to increase the quality and reliability of electricity supply to the households of the selected project communities. This will improve their life and production conditions and benefit the increase of their income.
- 54. **Target groups.** The beneficiaries of the rural grid upgrading works are all the households covered by the systems, meaning all households will be connected. This also means that the VC will be responsible for the electrical upgraded grid and its sustainable use for a large number of years. This refers to general aspects as cutting the trees to avoid touching the lines but of course not to the maintenance of the system itself which remains a responsibility of Bureau of Electricity Grid (BoEG).
- 55. **Project Intervention.** This subcomponent includes one activity to upgrade the existing grid facilities of the selected rural areas. In the project area, one set of rural electricity grid station serves a number of villages according to the overall rural grid planning. The grid station includes a transformer, the auxiliaries of control and safety devices, electricity transmission lines, and household connections. The cost of household connections will be borne by villagers themselves. The intervention activities of a upgrading of the electrical grid facility will be described in the below-mentioned implementation process to be used in the HARIIP. It is based on the existing implementation process as explained by the staff of the BoEG with some additional steps included by the DCM.
- 56. **Implementation process** for road facilities at management level. These are part of the general project management activities that will be executed simultaneously with the other project activities and further described in the main report.
 - (a) Establish an overall planning per county of the grid upgrading projects in 4 years in relation to the other projects in the county. Train all involved staff in planning and monitoring
 - (b) Develop a short practical hand book during the first 2 months of the project of all the implementation steps for grid upgrade facilities.
 - (c) Translate in the first 4 months of the project all the relevant Design and Construction Manuals into English in order to facilitate supervision by IFAD.
 - (d) Implement a one or two days training for all involved staff (provincial, county and township PMOs, Engineers of county BoEl) in social organising of village groups in the first 2 month of the project.

(e) Implement a one days training for all involved staff (provincial, county and township PMOs, Engineers of county BoEl) in all the implementation steps of the grid upgrade facilities in the third and fourth month of the project.

Implementation process for road facilities: a 9 step process.

- (a) The Village Committee will be managing the upgraded grid since the whole village is benefiting of the upgraded grid. It is advised to include current members of the VIG (poor farmers and, women) in the VC. All households will be invited for a general meeting to explain all the following steps of implementation process to the villagers. The staff of PMO county level and BoEG assist the VC in the discussion.
- (b) The BoEl staff will perform a survey for the proposed upgrade of the grid and make a design of it. The official manuals of the State Electrical Grid are used to ensure adequate standards for technical design, procurement and construction management.
- (c) The design of the new upgraded grid is discussed with the VC and all interested villagers. Also all kinds of specific measures such as tree cutting, space for distribution house and location of poles are discussed. The explanation is followed by a walk through the village to explain more in detail the design and the location of the structures. Comments raised by the villagers are discussed with the BoEl Engineers and if technically and financially feasible, adapted in the design. The issues of electricity rates are discussed with the VC and the villagers. Also the participation and responsibilities of the VC during the construction process are discussed (being for instance the monitoring of progress).
- (d) A formal agreement is made between BoEl and the VC on the implementation activities for the upgrading of the electrical grid and the responsibilities of BoEl and the VC during the construction.
- (e) The BoEG tenders the construction of the grid upgrading facilities to a contractor or execute the work by themselves.
- (f) During the construction the VC (or villagers designated by the VC) supervise the progress of the works. If problems occur the BoEG is informed.
- (g) After completion of the construction the VC and the BoEG perform together a joint check of the constructed upgraded electrical grid and formally accept it, if it is properly built. An official document is signed by the three parties (BoEG, VC and contractor) that the upgrading was done built according the design and the quality of the work is good.
- (h) After about one year, in a general meeting of the village, the functioning of the electrical grid is discussed. In this meeting staff of the County PMO and BoEG provide some assistance and guidance. After that, another combined check is performed with the BoEG, the Committee and the contractor to analyse the functioning of the electrical grid before the final payment is made to the contractor.
- (i) If the final payment is made to the contractor and thus the electrical grid is well functioning, then an official handing over ceremony is held, where the BoEG and the VC sign an official handing over paper. From that date, only the VC is responsible for taken care of supporting maintenance activities (such as regular tree cutting) accept for the electrical system itself that remains with BoEG.

57. **Cost Estimates.** Based on information from the project counties and after consultation with the provincial PMO, the unit cost for the rural grid upgrading is estimated as CNY 230,000 per set. The total cost of 11 upgraded stations at this unit cost is CNY 2,530,000. The quantity and cost of the activities are shown in Appendix 1 for the whole project and in Appendix 2 to Appendix 10 for the individual counties. However, the total cost estimated would be provisional and subject to further adjustment.

Component B - Sustainable agriculture development and market access support

- 58. This component aims to support the sustainable development of diversified and adaptive agriculture at the levels of production and service support. The modular approach will be adopted for the component, while the concepts and techniques of sustainable development and environment protection will be integrated within all project activities. The production modules are designed to help strengthen the farmers' resilience and adaptability to uncertainties, mainly caused by climate change and market transformation. This will be achieved through income generation diversification and adaptive farming system at household level to orient it towards making farming a business and profitable for the poor farmer by using techniques such as eco-farming and niche-market production benefitting from timely market information systems. Mainstreaming the target farmers into the market value chain and production specialisation or diversification will be achieved through the support to farmers' cooperatives. The above mentioned modular interventions would be complemented by the module of technical service support, which intervenes at the supply side. On the assumption of successful implementation, the sustainable production model that the related module applies will be extended to the other farmers within and outside of the project area.
- 59. Module 1: Cash crop/off-farm IGA. Based on local available resources and market opportunities, the module aims at increasing and diversifying farmers' income sources in the project area through the development of cash crops; it also provides a compatible tool to the beneficiary farmers to engage in off-farm income generation activities so that their resilience to natural calamities and market shocks will be further strengthened. Activities under the module will include: (a) provision of seeds or seedlings or other inputs required to start up off-farm IGAs; (b) fertilizers required for cash crop production or other miscellaneous inputs needed for IGAs; and (iii) beneficiary training to further strengthen the farmers' technical capacity. The support package is tailored particularly to the needs and capability of the rural poor men and women, in conjunction with the availability of diversified income opportunities mostly based on the needs of the local consumer market. Priority consideration for the implementation of the module will be given to the poor and vulnerable households, as well as the female-headed households, but the better-off households will not be excluded. Farmers in the project villages will be encouraged to engage themselves in production specialization or organized farming but on individual household basis, in order to achieve sufficient economies of scale collectively without increasing the associated co-variant risk.
- 60. Module 2: Orchard-poultry integrated farming. There are large areas of fruit orchards and non-timber forest in the project area, which can also be linked to the production of poultry. The module attempts to achieve more effective and efficient use of limited available land resources and production optimization by combining poultry production with short-term and quick returns with the production of fruits and non-timber forest products with long-term benefits. It is also conducive to the recycled use of farm wastes and nutrients and soil conservation, leading to the reduced use of chemical fertilizer at the same time. Project support will include the improvement of poultry sheds and provision of chicks, feedstuff and medicines and beneficiary training. This module aims to introduce an optimal integrated farming model at smallholder level, which should be disseminated and replicated within and outside the project area once it is proven successful. Similarly to module 1, the implementation will focus on the poor and vulnerable households and the female-headed households, although the relatively better-off households will not be excluded.
- 61. *Module 3: Agro-forestry*. This household-based agro-forestry development module follows the overall project strategy of paying close attention to rural poverty issue by means of an assorted approach. The module is to sustainably explore the income generation potential of diverse economic trees, while maintaining a sound balance in forestry conservation and protection. Project support includes planting materials, fertilizer, other inputs, on-farm facilities, beneficiary training and model dissemination. The module promotes introduction of improved varieties of economic forest species, improvement of existing low-yield economic forests, including lily, oil camellia tree, bamboo, kiwi fruit tree, orange tree, grapevine, tea, and other suitable economic trees in the project area. Intercropping

of young seedlings with cash crops will be encouraged where applicable. Similar to module 2, this module aims to introduce an adaptive farming system, which should be disseminated and replicated within and outside the project area once it has proven successful. The implementation will give priority to the poor and vulnerable households, and the female-headed households although the better-off households will not be excluded.

- 62. Module 4: Support to farmers cooperatives. The project will provide assistance in the form of a module to support the development of farmers' cooperatives. Under this module, eligible existing or newly established cooperatives will follow the proposed modular implementation guidelines to strengthen their capacities in improving the members' connectivity with appropriate value chains. The economically active poor households and female-headed households will be systematically mainstreamed into the cooperatives and thereby benefit from the collective bargaining power in organized production, marketing, and other enhanced services for members. Support will be provided to the cooperatives under the activities foreseen to strengthen inclusion of poor households and women, access to new techniques and know-how, marketing linkage and trade promotion, and by provision of some office equipment and essential equipment required for the improvement of production and marketing. The expected outcomes should be highlighted by members' increased premium share in the value chain, cooperatives' sustainable service capacities in technical support and market information.
- 63. The following steps should be followed in selecting sustainable cooperatives with sufficient potential.

Module activities: a step wise process towards sustainable co-operatives.

- 64. This following step-wise process is applied by BOA for developing sustainable cooperatives where poor households and women will be included as members
 - 1: Inventory and selection of potential co-operatives. As a first step in each county staff members of BOA will perform a research to assess which cooperatives meet the above-mentioned selection criteria. If it is a new to be established cooperative, it will be more difficult to select this cooperative, but in that case, it will i.a. depend on the appearance of the management of this cooperative and the eagerness of farmers to participate and the future plans, strategy and ambitions will be important to consider. A specific check list will be made by the provincial PMO and in all project areas in all counties the potential cooperatives will be visited to discuss the criteria and their willingness to accept them. Based on the results an overall list of eligible cooperatives will be made. The provincial PMO decides how many cooperatives per county can be in the programme; the county PMO selects the most promising cooperatives. All visited cooperatives will receive a BOA delegation to explain the outcome of this selection process.

In an area strong market potentials without existing cooperative that meets the recipient criteria as described under the section of target group, the county BOA should work with the local VIGs to establish a new cooperative among beneficiary households or groups that have been receiving support from the project's production modules. Same conditions and criteria of eligibility will apply for the new cooperative; the exercise of targeting of the poor as described above will be part of the cooperative start-up.

2: In-depth analysis of the current state of the cooperatives and inclusion of poor farmers and women. The staff of BOA holds a meeting with the management of the Cooperative and afterwards a general meeting with the members to discuss the purpose of the project/programme and to assess the current state, objective, working methods and the future expectations of the cooperative. Also during the general meeting the current members agree to include poor farmers, minorities and women into the cooperative and also in the management of the Cooperative. A next meeting is held with the potential new members of the cooperative to explain the purpose of the programme, the objectives of the cooperative, understand the rules and regulations of the cooperative, to express their willingness in participation in cooperative marketing and thus to payments of membership and service fees, and to their involvement in the management.

Based on the meetings with the current and new members, the management of the cooperative should draft (new) internal rules and regulations that include members of poor households, minorities and women into the main activities of the cooperative. In view

of the latter's vulnerable economic situation, concrete bonus regulations may be included so that the poor households can join the cooperative, if the membership fee is prohibitively high: examples of such regulations are: reduced or no-fee membership, free attendance to IGA skill training for members, and utilization of other member services at discount rate. The staff of BoA will assist the management in this drafting of the new regulations.

- 3: Training needs assessment. A training needs assessment will be executed by BOA to assess the management capacities of the cooperative and their market knowledge & knowledge on the specific market features (market types, number of suppliers and demanders, price developments), but also knowledge on strategy development and PR . Also a general inventory is made of the training needs of the farmers in the village. This is not only needed to strengthen capacities of management, but also I in preparation of the strategic plan (see under n° 4).
- **4: Development of a strategic plan**. In this strategic plan an assessment is made on the promising markets, new developments, new opportunities and strategies to enter those markets, as well as strong market linkage potentials that may be promising for the cooperative . The BOA will therefore organize exposure tours for the cooperative leaders (if possible of several cooperative together) to learn from the best practices of other cooperative enhancement in the country. Similar exposures will be arranged for the poor household members of the cooperative for different relevant purposes, such as quality farm processing, storage techniques, off-season production and marketing, and so on. The strategic plan finalizes with an Action Plan including a detailed budget.
- 5: Agreement on new cooperative and strategic plan. In a general meeting with current and new members, new internal rules and regulations (if needed) are presented, amended and adopted. From now on, the poor households and women are an integral part of the cooperative. Secondly the market strategy and the action plan and budget are proposed to the general meeting. After adoption of the plan, the management will start its execution. Two-monthly meetings will be held to check whether farmers still support the strategies that were chosen and see whether famers are satisfied with the efforts of management. These meetings will also be useful, to interact with and between the farmers: what bothers them, what kind of difficulties they encounter and what are their main worries.
- **6: Execution of activities.** The management will execute the activities proposed in the strategic plan and the action plan with support of the BOA. Some examples of these activities are listed below. It is advised to include some of these activities in the strategic plan. Project funds are released to support most of the activities. The management will take care of proper administration of the received funds and the activities performed. If needed, a special bookkeeping training is provided by the BOA. The management of the cooperative and BOA are responsible to ensure that poor households see a value added in participating in the cooperative activities. The members should have support in the following fields:
 - Member training. Members of the cooperatives can receive specific technical training in subject matters related to their production activities under the HARIIP. Training will include best practices of crop and animal farming, IMP and waste management, etc. These training sessions will be provided by the extension services which are have gained experiences in the execution of the modules.
 - Coaching: The cooperative will assist the new members in drawing and achieving
 an annual plan of income generation. Successful members with strong IGA skills
 will be designated on a person to person basis to technically coach the new
 members in their farm enterprise to improve quality and quantity of the production.
 Those farmer coaches should be preferably living in the neighbourhood of the new
 members and undertake similar IGAs. At the first stage, focus should be given on
 farm production and primary processing; later on, coaching should extend to
 processing, storage, packing and packaging, transport, sales and other
 applications.

- Access to new techniques and know-how. At present cooperatives are mostly set up on the basis of monotype product or activity. Product specialization is crucial in achieving sound performance in production and then marketing. The cooperative should give emphasis on bringing advanced techniques and know-how to improve members' skills. Techniques and methods of high efficiency should be acquired through training, exposure, technical transfer or franchise. This touches also upon the role of the extension services and there should be a close interaction between the cooperative, the farmers and the extension services.
- Increase the profit margin along the value chain. This can be done by applying techniques and methods of quality production and processing at farm level through efforts of standardization and certification. The cooperative will work with related quality control agencies, the extension services and leading buyers and wholesalers to introduce certified farming, if possible and needed. Agenda should be set with those agencies and among members regarding future certification of green products or organic products where applicable. In addition to the abovementioned actions and activities, the project support will cover related fees of certification and costs of introducing and applying procedures of standardizations.
- Product diversification. Moving towards production diversification in order to reduce the co-variant risk of cooperatively handling a monotype product. The cooperative will promote diversified IGAs based on local customs and circumstances.
- IPM. The cooperative will organize the IPM activities, including the whole purchase
 of the insecticides, application for the spraying the insecticides and herbicides, and
 professional consulting for their members. Again these activities should be closely
 coordinated with the extension services and their expertise should be used.
- Market linkage and trade promotion. The cooperative may call in the BOA (an thus the project) to undertake a market study on members' existing and prospective IGAs. Market trends, assessment of major competitors and their strategies should be reviewed, efficiency of the channels of distribution revisited and profiles of target customers defined to help establish a strategic marketing plan for the cooperative. Based on the results of such marketing plan the cooperative will try to translate these marketing opportunities into concrete actions for its members; improve the market access, establish value chain linkages with the other actors, likely the businesses engaged in product transformation, wholesale and retail at the upstream of value chain.
- Develop formal or informal arrangements with networks of distribution or retail.
 Contract farming could be an option to explore, if it is profitable for its members.
 Once the cooperative is able to ensure a steady supply of quality products through its cooperative farming by the members, it should explore the opportunity of diversifying markets, regularly attending sector trade fairs to promote members' products. The cooperative may need to establish business alliance with other cooperatives, private or state-owned enterprises, consulting firms or government agencies to promote its products and services in existing and new business opportunities.
- 7: Value-added activities: after approval of the strategic plan, the cooperative will do what is necessary to execute this plan. The cooperative should be ambitious, but not over ambitious but acquiring facilities such as processing, storage, packing and packaging and marketing equipment. Step-by-step, the needed actions should be implemented and investments should be done carefully.
- 8: Meetings during the first 2 years of the (new) cooperative: every 3 month the staff of BOA discusses with the management the progress on the activities of the strategic plan and to assess whether the results are satisfactory and/or that adjustments are needed. Management will organise two-monthly meetings with its members to evaluate the activities so far and to discuss the functioning of the cooperative itself. Staff of BOA may assist in moderating these discussions. However, the first assessment of the

success of the cooperative lies with the member farmers; they have to be satisfied with the activities of the cooperative and the role of management.

- **9**: **Monitoring.** During the project lifetime 2 yearly monitoring activities will be executed by the HARIIP in collaboration with BOA, the extension services and the management of the cooperative in order to assess the functioning of the cooperative, to assess the proper use of funds and to assess whether the objectives of the programme with respect to cooperates are successful and to assess the need for programme adjustments. They will also discuss with the members of the cooperative how they assess the functioning of the cooperative. In particular will be assessed whether the programme is beneficial for the target groups and whether the cooperative can increase its positive economic effect for the farmers in the village.
- 65. The total costs of the strengthening of cooperatives are CNY 620,000, or CNY 69,000 per county. This is financed through the budget of module C, via a reduction of the budget items access to new technologies and HH and women inclusion.
- 66. One of the monitoring criteria to monitor progress in the professionalization of the cooperatives is for example the total number of members trained in post-production, processing and marketing by gender and by HH origin category. A further elaboration is given in WP2.
- 67. Module 5: Technical service support. The objective of this module is to improve the grassroots agro-technical service network and enhance the effectiveness of service delivery therefore create an enabling environment for farmer-to-farmer extension. As a result, rural women and men would gain improved access to novelties in farm production in a timelier manner. Module activities include support to the provision of essential equipment, tools and transport means, staff training and trial and demonstration activities. Capacity building of the township extension agents is particularly pronounced in the module in order to improve their skills in delivering services through participatory and hands-on approaches. Training would include, among others, farming practices that would reduce the use of chemical pesticides and fertilizers, such as integrated pest management (IPM) and, where available, the use of the by-products of biogas anaerobic fermentation process as both pesticides and farm manure. Trial and demonstration aim at building improved technical and crop variety reserves for scaling up. Due consideration will be given to the coping strategy for local farm production in relationship with the climate change.
- 68. Module 6: Root and tuber crop. The module aims at increasing and diversifying farmers' income sources in the project counties of Fenghuang, Guzhang, Longshan, Luxi and Jingzhou through the development of root and tuber crops, so that their resilience to food price fluctuation, natural calamities and market shocks will be further strengthened. Activities under the module will include: (a) provision of seeds; (b) fertilizers required for production enhancement; (c) irrigation, and (d) beneficiary training to further strengthen the farmers' technical capacity. The support package is tailored particularly to the needs and capability of the rural poor men and women; priority consideration for the implementation of the module will be given to the poor and vulnerable households, as well as the female-headed households, but the better-off households will not be excluded. This module will be co-financed by the IFAD grant. Implementation responsibility of the module, related technical services provision and the organisation of possible inputs supply will remain with the Bureau of Agriculture at county level.
- 69. The Project will also support the PPMO of Hunan Province to forge partnership with the research institutions to carry out targeted research, introduction of new varieties, experimenting new farming techniques of root and tuber, and trials and popularization of varieties tested successful. Particular attention will be given to such technical options that will increase farmers' capacity to cope with climate change and food sufficiency uncertainty, including the introduction and screening of crop varieties resistant to climate adversities and farming techniques that can mitigate the adverse effect of climate change. IFAD grant proceeds will support the introduction and experiments of new varieties, study on methodologies of virus-free micro tuber production and the establishment of propagation facilities; this will be achieved mainly through the support of research enhancement and M&E under the provincial PMO.
- 70. The implementation of activities in partnership enhancement will contribute to effective implementation of the project, the attainment of project objectives and sustainable agricultural development of the project counties in the long-run, through building genetic and technical reserves for farm production of the project area.

Component C - Project management

- 71. This component will make provision to cover the cost for the coordination, management, monitoring and evaluation of the Project. This involves the establishment of an effective management structure comprising a Provincial Project Management Office (PPMO) in Changsha, one Prefecture PMO (Prefecture PMO) in Jishou for the prefecture of Xiangxi that has the direct responsibility of overseeing administratively and financially the counties under its jurisdiction, including four project counties, and County PMOs (CPMOs) in each of the nine counties where HARRIP will be implemented. Operations will be substantially decentralised to the CPMOs, with the PPMO and prefecture PMO in Xiangxi performing overarching functions of planning, coordination and monitoring. Support will also be provided for small Township Project Management Offices (TPMOs) in each project township, utilising existing staff and facilities of the Township Governments.
- 72. Village Implementation Groups (VIGs) HARIIP will support the establishment of a VIG in each of the project administrative villages. The VIG will be composed with representatives of village committee, ACWF agent, and households of all categories. Women, poor households and ethnic minorities' representation is compulsory with equitable share and equal right of leadership, decision making and participation. The VIG will act as an interface between the project and target communities, and will be responsible for the following tasks. First, they will inform villages and households on project opportunities and access to support. Second, they will facilitate the annual participatory household well-being ranking as a monitoring tool. Based on the ranking, the VIG will identify eligible households for every module in full coordination with the respective service providers. Third, the VIG will assist the coordination of priorities and the modules for specific villages with the different service providers and in design of their annual plan later

III. IMPLEMENTATION ARRANGEMENT

73. The Hunan Provincial PMO are responsible for the overall programming, planning and organization of the project, for management, guidance and training of county PMOs, and for organization and structuring of annual reports and the related works. The county PMOs for the 9 participating counties are responsible for the daily management of the project, including the preparation of the infrastructures implementation, execution of the implementation processes of the checking construction progress and quality, organizing civil works, bidding and purchasing goods, inspecting financial management, coordinating and solving problems encountered in the process of implementing the works. Township PMOs are established within the township government, utilising existing facilities and staff on a part-time basis. Designated staff of Township PMOs will provide support to the county PMOs and implementing agencies (IAs) for implementation of project activities at village level on an as-required basis. The VIGs and WUAs will participate in construction of civil works in terms of coordinating and solving local issues encountered related to village and household levels and, monitoring the construction quality.

The county PMOs will coordinate the IAs for civil works' implementation. Responsibilities for the implementation of irrigation facilities and the drinking water supply schemes rests with the county Bureau of Water Resources (for drinking water supply schemes also with the Bureau of Health), and that of the village roads rests with the county Bureau of Transportation, while the Bureaus of Electrical Grid are responsible for the implementation of rural grid upgrading works.

Training for Community infrastructure

74. Training support will be provided during the preparatory phase, to provide project management, planning & supervision training to the PMO's, to provide social organising training to PMO's and IAs staffing participatory processes at VIG's and villagers level and to provide operations & maintenance and operations' training to the VIG's or users' associations that will become responsible for the maintenance of the facilities. These training sessions will also include training in participatory processes for VIGs so as to be able to properly retrieve views and opinions from villagers. During the Design Completion Mission, these training requests were frequently ventilated by the PMO's and VIG's interviewed. It is important to start providing training to VIG's or users groups on how to maintain and operate systems already in the preparation phase and during the first implementation phase. It will increase their commitment & ownership and will also result in a critical attitude during the construction phase. Also, project management, planning & supervision training to PMO's should be given in the preparatory phase. These training courses in the preparatory phase are funded under the current budget lines for project management and training support for infrastructure.

- 75. Training of PMO staff is essential for a successful HARIIP. The training courses of the staff will consist of three parts: (1) preparation of training materials based on 'training the trainers' principle, (2) training on the implementation aspects of the project and (3) the training of users' associations.
- First of all, training modules for farmers on O&M and financial management and manuals for the step-wise implementation processes for infrastructure will be made at the beginning of the project during the first 2 months of the project. These modules and manuals are firstly needed for the training of the relevant staff and secondly for use for training of WUAs, VIGs and VCs and designated persons for O&M and financial management. For the latter, use can be made of existing training materials relating to WUA and community-based O&M from other projects. e.g. with the World Bank supported project in China¹⁰ SOCAD has produced a series of training and operational manuals to promote the adoption and functioning of WUAs¹¹ and with a DFID funded project ¹² MOWR has produced a manual for community-based management of piped rural water supply. The manuals include steps or components of community mobilisation from the very beginning. WUA set-up and capacity building. Training must be practical rather than theoretical to provide useful skills and knowhow with the core purpose of equal and sustainable use of the schemes built. With respect to making the manuals for staff and training modules for farmers the input of Technical Assistance (TA) is required (taken from the overall training budget of HARIIP). The manuals will be made by national (1 person for 2 month) and international TA (1 person for 4 weeks) together with 6 designated PMO staff (with English speaking capabilities). These 6 designated PMO staff will become the trainers of the CPMO staff and the relevant staff of IAs in the 9 counties. They will be guided and assisted by the TA according the 'train the trainer 'principle. The cost for TA is for preparing the training modules is CNY 345,600. The training materials themselves will cost about CNY 20,000.
- 77. The second part of the training courses concentrates on training of the staff on the implementation aspects of HARIIP between the third and the sixth month of the project. Training is needed at PPMO and CPMO and on Implementing Agencies levels (counties). On PMOs level it is needed to provide training in project management, planning & supervision. For CPMO staff and relevant staff of the IA, training should be given in the stepwise participatory implementation processes for infrastructure development components as described in this Working Paper 1 in Chapter V (and repeated in Annex 11 of the Main Report). Also it is needed to provide training in social organising on interaction between VC, VIG's, WUAs to staff of CPMO and relevant staff of the IAs. These training courses should be given in the in the preparatory phase of the HARIIP project. The sequence of training courses consist of three sets of training courses: (1) training to strengthen the knowledge on management issues for PMO and relevant IA staff and, (2), training of PMO and relevant IA staff for social organizing aspects of village groups and the training to designated persons of VC and water users' associations on how to operate, manage and maintain systems, (3) training in the step-wise implementation processes. It is envisaged that some 60 staff per county will be trained (in maximum 20 per classroom, meaning 3 sessions of all 3 trainings per county) for in total 5 days of training: 2 days for supervision & management, 2 days for social organising and for training farmers and 1 days for the step-wise implementation processes (all in one week, meaning 3 weeks is needed to provide these kind of training per county). The designated PMO trainers will work in pairs of 2. This means that 6 trainers can cover 9 counties in about 3 months. The designated PMO training staff will first receive one week training by the TA staff. The TA staff will assist the PMO training staff also for 6 weeks (national) and 4 weeks (international) during the training sessions in the counties. Total costs are estimated to be CNY 358,400 for TA and additional cost CNY 40,000.
- 78. The third batch of training courses is field support to field staff. Field support during the many project activities is needed to put theory into practice. Therefore the TA staff and the 6 designated PMO trainers will continue to assist CPMO staff and IA staff in the field during the meetings with the different village groups to improve the training skills of these staff. In each county a one-day come back day is organized for all trained staff to reflect on the results. Total costs are estimated to be CNY 364,800 for TA and additional cost CNY 10,000. All interventions under this

¹⁰ World Bank, 2005, the Irrigated Agriculture Intensification Project II (IAIP II). People's Republic China.

¹¹ Including (i) Self-Managed Irrigation District Training Material (October 2001); (ii) WUA Theory and Practice (June 2005); and (iii) Manual for WUA Establishment and Operation, Capacity Building on Rural Women Participating in WUA Activities.

Activities.

Activities.

Activities.

Republic China, supported by the Department for International Development (DFID) of UK. 2005.

component are expected to be completed during the first four project years. The budget comes from the Project Management budget ¹³.

Training for sustainable agricultural development (Component B)

- 79. Before the implementation of the modules (cash crops/off farm IGA, Orchard Poultry, Root & Tuber) can start it is important that training will be provided to the institutions that will be involved in and responsible for the implementation of the modules, i.e. the extension services and the BOA. There is a need for general training to relevant staff of the extension services on for instance IPM on how to use alternatives for chemicals and how to optimise the use of pesticides during the different phases in the cropping seasons. But there is also a need for training of staff in participatory processes for the extension services on how to involve farmers in the implementation processes. Here it is essential to achieve an active participation of farmers, so as to maximise learning effects. It is also important not to capture only the most active and most prominent farmers, but to have a genuine representation of all farmers involved in the modules. The training sessions should also pay attention on how to approach the different target groups: poor, women and minorities, such as for women through a dedicated gender focus training. Each of these groups needs a different approach and different arguments will have to be used. It is also important that staff of the extension services learn to check and learn to recognize whether the message conveyed to these target groups is indeed received. Like with the infrastructure component, it is important that the relevant staff of the implementing agencies will be trained in the very beginning of the HARIIP, in the preparatory phase, before the actual implementation of the modules take place.
- 80. Besides the general training, there is also a need to train the staff on the specifics of the different modules itself, as there are, for instances, differences in use of fertilisers, different planting and harvesting methods, different irrigation frequencies. These training sessions should be given also in the preparatory phase of the project, before implementation of the modules. Because the number of modules and the number of people of the implementing agencies is limited, these two types of training sessions could be given together, to be followed by a short refresher course if the implementation in a particular county will be later in the HARIIP.
- 81. The training sessions can be divided into three: (1) preparation of training materials based on 'training the trainers' principle, (2) training on the implementation aspects of the project, and (3) training of the farmers.
- First of all, training modules for farmers on the technical aspects of the different modules should be drafted and manuals for the step-wise implementation processes for the modules will be made at the beginning of the project during the first 2 months of the project. These modules and manuals are firstly needed for the training of the relevant staff and secondly for use for training of the extension services and the BOAs at the township level. For the latter, use can be made of existing training materials relating to community-based social interactions from other projects. The manuals include steps or components of community involvement from the very beginning. Training must be practical rather than theoretical to provide useful skills and know-how with the core purpose of equal and sustainable use of the modules implemented. With respect to making the manuals for staff and training modules for farmers the input of Technical Assistance (TA) is required (taken from the overall training budget of HARIIP). The manuals will be made by national (1 person for 1 month) and international TA (1 person for 2 weeks) together with 6 designated extension services and BOA staff (with English speaking capabilities). These 6 designated staff will become the trainers of the extension services in the 9 counties. They will be guided and assisted by the TA according the 'train the trainer 'principle. The cost for TA is for preparing the training modules is CNY 172,800. The training materials themselves will cost about CNY 20,000.
- 83. The **second part of the training courses** concentrates on training of the staff on the implementation aspects of the modules between the third and the sixth month of the project. Training is needed at county level (extension services and on BOA) and they should learn how to train extension services staff at township level how to implement the modules. Training should be given in the technical aspects of the modules and the stepwise implementation processes for those modules as described in this Working Paper (and repeated in Annex 11 of the Main Report). Also it is needed to provide training on participatory processes and social interaction between farmers and relevant staff of the extension services and the BOAs. These training courses should be given in the

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¹³ Total costs for training of PPMOs & PMOs, is CNY 1,138,000. The budget comes from the following budget items of PPMO and the Xiangshi Prefecture PMO: management workshops & training, innovation enhancement, knowledge docs & sharing

preparatory phase of the HARIIP project. The sequence of training courses consist of two sets of training courses: (1), training of staff of extension services and BOAs on participatory processes and social interactions with farmers, (2) training in the technicalities of the modules. It is envisaged that some 30 staff per county (3 per township) will be trained for in total 4 days of training: 2 days for participatory processes and social interaction and for training farmers and 2 days for the technicalities of the modules and the step-wise implementation processes. The *designated extension services'* trainers will work in pairs of 2. This means that 6 trainers can cover 9 counties in about 1.5 months. The designated PMO training staff will first receive one week training by the TA staff. The TA staff will assist the training staff also for 6 weeks (national) and 3 weeks (international) during the training sessions in the counties. Total costs are estimated to be CNY 268,800 for TA and additional cost CNY 30,000.

- 84. The third batch of training courses is field support to field staff. Field support during the many project activities is needed to put theory into practice. Therefore the TA staff and the 6 designated extension services trainers will continue to assist extension services staff in the field during the meetings with the different village groups to improve the training skills of these staff. In each county a one-day come back day is organized for all trained staff to reflect on the results. Total costs are estimated to be CNY 182,400 for TA and additional cost CNY 10,000. All interventions under this component are expected to be completed during the first four project years.
- 85. It is very important that the training of the extension services and BOA is closely coordinated with the training efforts under the module D, the Technical Service Support Module. Training under this module has a more generic character, but there will be close links with the training modules that will be given to the extension services, specifically targeted to implement the modules on cash crops, orchard-poultry and root & tuber. PPMO has to check that both training courses are indeed complementary and do not overlap. The costs of the training of the extension services are CNY 684,000, or CNY 76,000 per county and will fall under the county budget 14.
- 86. **Project leadership**. The project leadership will be assumed by the Project Leading Groups (PLGs) established by respective governments. PLGs should be led by a senior official of the local government and composed of representatives from local BOFs, DRCs and line agencies such as Bureaux of Agriculture, Forestry, Water Resources, Transport, State Grid, Environment Protection, Auditors, and technical partners such as Women Federation and Poverty Alleviation Office. PLGs are responsible for the following: (i) overall supervision of PMO operations, (ii) coordination of the government bureaux and agencies involved in project implementation, (iii) review and endorse AWPBs and annual progress reports, and (iv) coordination of counterpart resources.
- 87. **The Department/Bureaus of Finance (DOF/BOFs)** at the provincial and county levels, and in the prefecture of Xiangxi, respectively will be responsible for the following: (i) opening and management of the Project Accounts; (ii) administering the project resources including the IFAD loan and counterpart funds; (iii) review and approval of the financing needs of project implementation; (iv) overseeing the use of project resources; (v) ensuring effective flow of funds for project implementation; (vi) providing appropriate training to the financial officers of PMOs in terms of financial management; and (vii) preparing Withdrawal Applications (WAs) and reimbursement of eligible project expenditures on a timely basis.
- 88. **PMOs** will assume the actual project management and coordination. They focus on planning, coordinating, monitoring and reporting of the project. Implementation of project activities will be delegated to the IAs at county level (Table X), under the coordination of CPMOs. The main IAs and their roles are as follows.
- 89. **Implementing Agencies (IAs)** Operational implementation of project activities will be delegated to the IAs at county level under the coordination of CPMOs. The main IAs and their implementation responsibilities are as summarized in the following table..

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¹⁴ Total cost for extension services is CNY 684,000, or CNY 76,000 per county, to be financed from reduction of the SAMA budget items HH & women inclusion and access to new technologies and know how. The total allocation to the county remains the same

Table 1: Implementation arrangement and responsibilities

Components Modules	Implementing agencies	Responsibilities
Irrigation	BOWR	 Identification of eligible villages with given criteria for carrying out the activity, within the list of selected villages confirmed by CPMO; Detail design of the works by site; Organize implementation of the activity; Facilitate the formation of interest group for the operation and maintenance of project works; and Report to CPMO on the progress and results of implementation.
Drinking water supply	BOWR & BOH	 Identification of eligible villages with given criteria for carrying out the activity, within the list of selected villages confirmed by CPMO; Site reconnaissance and detail design of the works by site; Organize implementation of the activity; Facilitate the formation of interest group for the operation and maintenance of project works; and Report to CPMO on the progress and results of implementation Ensure good quality drinking water in the design phase and regular monitoring of the water quality after the project
Village roads	вот	 Identification of eligible villages with given criteria for carrying out the activity, within the list of selected villages confirmed by CPMO; Detail design of the works by site; Organize implementation of road construction; Report to CPMO on the progress and results of implementation.
Rural electricity grid upgrading	SEG	 Identification of eligible villages with given criteria for carrying out the activity, within the list of selected villages confirmed by CPMO; Detail design of the works by site; Organize the upgrading of rural electricity grid stations; Report to CPMO on the progress and results of implementation.
Cash crops/off- farm IGA	воа	 Identification of eligible villages within the list of selected villages confirmed by CPMO; identification of target households for carrying out the modules, together with VIGs; Beneficiary training on new techniques or nichemarket products; Adjustment of the modules to fit local conditions in line with given criteria; Technical support and follow-up services to beneficiaries on module activities; Facilitate the formation of beneficiary group by trade and link them with relevant farmer cooperatives, or facilitate the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries, if needed; and Report to CPMO on the progress and results of implementation.

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Orchard- poultry integrated farming	BOL	 Identification of eligible villages within the list of selected villages confirmed by CPMO; identification of target households for carrying out the modules, together with VIGs; Beneficiary training on integrated farming techniques; disease prevention, optimal combination of integrated farming and environmental friendly practices; Facilitate and support the farming model dissemination and replication once successful; Adjustment of the modules to fit local conditions in line with given criteria; Technical support and follow-up services to beneficiaries on module activities; Facilitate the formation of beneficiary group by trade and link them with relevant farmer cooperatives, or facilitate the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries, if needed; and Report to CPMO on the progress and results of implementation.
Agro-forestry	BOA of BOSFA	 Identification of eligible villages within the list of selected villages confirmed by CPMO; identification of target households for carrying out the modules, together with VIGs; Beneficiary training on balanced exploitation of economic trees, with protection and conservation concepts and techniques introduced; Facilitate and support this household-based agroforestry model's dissemination and replication once successful; Adjustment of the modules to fit local conditions in line with given criteria; Technical support and follow-up services to beneficiaries on module activities; Facilitate the formation of beneficiary group by trade and link them with relevant farmer cooperatives, or facilitate the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries, if needed; and Report to CPMO on the progress and results of implementation.
Support to farmers' cooperatives	воа	 Identification of eligible farmers' cooperatives to be supported by the project, with given criteria; Ensure the services of recipient cooperatives to be inclusive towards project target groups; Facilitate the cooperatives' market access, assist the latter's first efforts of organized farming, cooperative marketing and trade promotion; Facilitate cooperatives to enhance their capability of internal management and services.
Technical service support	воа	 Organize the provision of equipment and materials for the recipient township stations;; Organize trainings for technical staff and village technicians with updated technologies; Introduction of new crop varieties and technologies and organization of related experiments; Organize extension of new crop varieties and

		technologies.
Root and tuber	воа	 Identification of eligible villages within the list of selected villages confirmed by CPMO in the five counties for the module; identification of target households for carrying out the modules, together with VIGs; Beneficiary training on new techniques or nichemarket products; Adjustment of the modules to fit local conditions in line with given criteria; Technical support and follow-up services to beneficiaries on module activities; Facilitate the formation of beneficiary group by trade and link them with relevant farmer cooperatives, or facilitate the establishment and operation of new farmer cooperatives wherever no cooperative is reachable by the beneficiaries, if needed; and Report to CPMO on the progress and results of implementation.

- 90. **Village Implementation Group**. HARIIP will support the establishment of a Village Implementation Groups (VIGs) in each of the project administrative villages. The VIG will be composed with representatives of village committee, ACWF agent, and households of all categories. Women, poor households and ethnic minorities' representation is compulsory with equitable share and equal right of leadership, decision making and participation. The VIG will act as an interface between the project and target communities, and will be responsible for the following tasks. First, they will inform villages and households on project opportunities and access to support. Second, they will facilitate the annual participatory household well-being ranking as a monitoring tool. Based on the ranking, the VIG will identify eligible households for every module in full coordination with the respective service providers. Third, the VIG will assist the coordination of priorities and the modules for specific villages with the different service providers and in design of their annual plan later
- 91. **Operations and maintenance (O&M) mechanism**. IFAD funded-projects encourage community-governed operations and maintenance (O&M) mechanisms that require the active participation of beneficiaries. The following outlines for establishing O&M framework can be used by PMOs or implementing agencies as procedural guidelines, if the latter are not familiar with such community-based mechanisms.
- 92. IFAD supports the community development through a number of investments, usually in grassroots facilities and services. Those investments should not be valued only by their physical installations, but also through the participatory process by beneficiaries and related stakeholders, and the continuity of sustainable operations ensured by an effective O&M framework.
- 93. The O&M framework in this context therefore include at least:
 - (a) A facility or a service established, such as an irrigation scheme, a drinking water supplay schemes, an unpaved or a paved village road and an electrical grid.
 - (b) Target beneficiaries or users of facilities or services, such as households in a village for a community road built, user households of a water source for drinking purpose, water users for irrigation facilities and households for an electrical grid
 - (c) Community-based and governed O&M legal entity, usually established in the form of WUAs (in de the case of an irrigation scheme) or a Village Committee (in the case of road building, drinking water supply and electrical grid) with equitable representation for all interest groups or targeted well-being categories, and elected in a transparent and participatory manner
 - (d) Established managerial and operational procedures with functions and responsibilities well defined. This includes (1) the designation of trained and (preferably paid) O&M managers such as road managers, wss managers and irrigation managers and often responsible for O&M and fund collection (2) financial arrangements to ensure O&M cost

- based on cost recovery with clear scheme or perspective of self-sufficiency (3) internal rules to ensure sustainable use of the facility or service.
- (e) Integration or inter-linkage with government support services and other technical providers including emergency assistance of the government in the case of natural disasters.
- 94. Defining the nature of facility. It is important to define the nature of facility or service in question, as the latter will help identify the minimum requirements of O&M framework to be established. Usually, physical facility requires input of labour and civil work that need to be supported by clear operational procedures and maintenance mechanism. In many cases, there would be need of facility integration or linkage with the overall community or government service network. In the case of services related to funds and capitals, effective operational procedures and beneficiary-elected committee are under the magnifier of management.
- 95. In short, the project should identify the need of continued service or maintenance and start laying out a schema of technical support and management correspondently before or at the same time of physical installation of facility or creation of service.
- 96. Defining the targeting coverage. Since the project adopts an inclusive targeting approach and broad or collective targeting is applied in community infrastructure improvement, that means the benefits of project investments are inclusive toward all people or households living in the target village. However, equitable access and benefit of the most vulnerable groups should be safeguarded. Depending on the extent of projected benefits and beneficiary outreach, the PMO and IA should define the coverage of direct beneficiaries by order of priority unless when it is exclusive targeting. This will also have an implication in further cost analysis.
- 97. Establishing O&M committee. After identifying the nature and core beneficiaries of the investments, PMO or IA should help create a participatory platform for establishing an O&M committee. That can be done through the project advocacy training with specific awareness building on the facility or service in question; active participation of ALL households is crucial and a transparent process with equal rights usually leads to an effective M&M committee respected and trusted by all villagers.
- 98. In the context of IFAD projects in China, the village committees and/or the village implementing groups or their key members usually participate in the establishment of different O&M committees, as those members are mostly persons well respected in the communities and with proven talent or experience in managing and coordinating businesses within the community in question. It is good to have the village committee or village implementing group being involved but a total or majority occupation by their members are definitely to be avoided. Remember the main tasks of M&M committee are very much different from those of the village committee or village implementing group; they constitute of ensuring fair-play process, equitable access and technical efficiency of the facility or service in question.
- 99. To ensure the fair-play process, the best option is a democratic election of the O&M committee members by anonymous vote of all concerned households. The PMO or IA should help adopt such practice, monitoring its application and if necessary, guide the village through the related process.
- 100. Equitable access would not remain in theory only, but it should be first ensured through equitable representation. IFAD target groups such as poor households and women should have their seats and voices in the O&M committees, and their implication in decision making should not be symbolic, but a medium for groups and interests they represent. This can be made through certain mechanism, such as specifying clearly their weigh of vote or veto in related bylaws.
- 101. Operation and maintenance of most facilities and services require continue technical support. The best way is to select and train a person stably living in the same community. The project may invest in establishing such technical self-sufficiency at the beginning but its long-lasting service should be supported by direct users and beneficiaries' contributions such as annual membership or service fees.
- 102. A plan outlining routine maintenance and repairs should be prepared and accepted by the community, preferably before the project completion.

- 103. Management and maintenance of the service or facility in question should be the primary continuing responsibility of the O&M committee.
- 104. Cost analysis and funding resources. It is important to run a straightforward cost analysis for the services or facilities established, and identify its most likely available funding sources.
- 105. In most cases, establishment of related service and facility is funded and completed by the project. However, it would be interesting to know the building cost at least in accounting term; this may help to define the internal return rate one day. For the time being, costs of management and maintenance need to be identified and quantified.
- 106. Examples of management costs:
 - (a) Service fees or salaries of O&M committee members, if applicable,
 - (b) Office location fee, if applicable,
 - (c) Equipment and stationeries
 - (d) Electricity and communication
 - (e) Quality evaluation
 - (f) Monitoring and reporting
 - (g) Training
 - (h) External technical assistance
 - (i) Repairs
 - (j) Materials
 - (k) Technician fees or salaries
 - (I) Routine maintenance charges and relevant materials, equipment
- 107. Possible funding sources:
 - (a) Financial support from project (short-term)
 - (b) Grants, government programme aid
 - (c) Membership fees
 - (d) Service charges
 - (e) Sales (resources such as water, irrigation service, by-products or produce of members' productions)
- 108. Attention should be drawn to ensure that regular resources such as membership fees and service charges can cover the basic maintenance costs, such as repairs, materials (of replacement) and technician fees. Related management costs should be minimized and they can be reduced through rotational voluntary work by members.
- 109. In preference, a fund of maintenance should start during the project life by collecting membership contributions or cumulate other resources therefore the O&M scheme will have already some financial soundness at the project completion.
- 110. Drafting managerial and operational procedures. Responsibility for the continuing management and operation of the service or facility established will be with the community, most likely through the O&M committee. The project and its partners should ensure that the community understands that, unless it accepts this responsibility long-term, sustainability of the system is not possible.
- 111. The community and its O&M committee will probably need technical and advisory assistance for some time following implementation of the project. The project and its partners should be prepared to provide minor levels of assistance for a limited and determined period, as may be needed, depending on the type of the scheme, the level of awareness of the committee, accessibility to the network of public services, etc.

- 112. Nevertheless, related procedural guidelines related to management and operations need to be drafted, probably with assistance from the project or related technical agencies, but definitely through representative participation of different interest groups or household categories.
- 113. Procedural guidelines may vary depending on the nature of service or facility in question. However, management framework should detail the duty descriptions of the key officials of the O&M committee, the committee's mandate, its decision-making procedure and the limits of service terms and mandates. Those need to be adopted by the majority of the relevant interest groups or beneficiaries of different categories duly represented.
- 114. Operational procedures need to be technically consistent, detailed in step-by-step operations without unnecessary rigidness. The operational procedures should foresee available and realistic alternatives if uncertainty takes place, such as change of technician in charge, or price fluctuation either for service or for related materials. Either managerial or operational procedures should be submitted to possible review and revision periodically by the general meeting of users and beneficiaries.
- 115. Networking with existing technical service support. A number of the services or facilities are supported or created by IFAD-assisted project because of the supply gap in the project area, especially in the remote and poor villages where access to public resources or services is more difficult or irregular.
- 116. However, managing and maintaining the established service or facility often have some minimum technical requirements; technical service agencies are usually available at the county level and they may have some technical extensions or outlets at township level. It is therefore important to build a constructive linking with those service providers at the moment the project creates a new service or facility in the project village, trying to work out a long-term service mechanism from the related technical agencies in support of the project-established services or facilities.
- 117. In addition, some of those services and facilities need to be integrated into the overall service network to be effective and efficient; the project should not create stand-alone services or facilities, when a whole network has been laid out around and functioning properly. Integration and complementarity are key for long-term sustainability.
- 118. The project should help the village in question to establish and maintain the necessary close working relationships with local governments and technical bureaux; the project should envisage financially assist this process with all appropriate measures.
- 119. Regular networking with related technical service providers is also part of the exit strategy, which should be defined and executed before the project completion. Due guidelines should be therefore issued by the project management to related IAs and villages with services and facilities assisted by the project. Some post-project plans may be suggested depending on the nature of service or facility in question.
- 120. **Location, phasing and linkage of interventions and modules** will be guided by the following:
 - (a) Selection of module/s for a particular village will be determined by beneficiary demand, together with general feasibility and resource suitability considerations;
 - (b) In some situations it will be necessary or desirable for certain interventions or modules to be implemented in association with the others. For example, the interventions for improved irrigation and village roads may have a better and immediate leverage effect if being implemented in association with the cash crop module; and the module of support to farmers' cooperatives may enjoy some better foundations when it is associated with modules leading to organized or contract farming and IGAs, such as module of agroforestry. Possible module associations have been indicated in relevant WPs. Final determination of module associations will rely heavily on informed guidance being provided by the PMOs;
 - (c) Where modules are implemented in association with each other, careful attention should be paid to ensure that implementation of the modules is appropriately phased;
 - (d) While the *potential* number of project villages is 1,197, it is likely that some of these villages will have low potential for implementation of any of the modules;

- (e) In the final allocation of resources, it is more important to follow general criteria of effectiveness and efficiency than it is to try and cover all villages. A reasonable balance should also be sought between spreading resources so thinly that impact becomes too dissipated; and concentrating them too heavily in too few locations.
- 121. **Budget adjustment rules**. The design of each intervention and module has been based on the 'typical' situation and 'average' costs, and annual budgets for each County have been calculated based on 'best estimates' of potential demand. An inherent feature of the modular approach is that it facilitates programming adjustments to reflect real situations and needs. General guidelines for adjusting the design of each module are provided in the relevant WPs. Global budget allocations are permitted to vary from the final design estimates to reflect design adjustments, and taking into account beneficiary demand that is different from that projected, subject to the following general rules:
 - (a) The standard unit cost of individual modules can be adjusted by up to 25% by the CPMO on the approval of the PPMO, to take into account local conditions. The aggregate of all adjustments made in a county must remain within the original budget allocation for that year, as detailed in the Final Design cost tables;
 - (b) From PY2 on, the total allocation for any one county for any one year can be adjusted by up to 25% on the approval of IFAD, to reflect changes in module unit costs and levels of demand. The aggregate of all adjustments made must remain within the original aggregate budget allocation for each county for the overall project, as detailed in the Final Design cost tables.
- 122. Similarly, actual prices or costs will be applied for infrastructures at the moment of implementation. Unit cost adjustment is possible when actual market prices vary from the design estimates. For adjustments of investments priorities, implementation should be carried out in accordance with the investment or expenditure categories that the design propose at PY1; adjustments can be considered at PY2, with due justifications well presented included in the AWPB submitted to IFAD for approval. In case of such adjustments, at least two infrastructure categories need to be included in the AWPB for implementation, or no investment in a single infrastructure should occur in any case.

IV. PROJECT MANAGEMENT

123. The Annual Work Plan and Budget (AWPB)

- 124. The Annual Work Plan and Budget (AWPB) is an important management tool and its process should be completed through participatory exercise from the village level to avoid top-down planning. AWPB is also a core document that is closely related to further progress reporting and M&E exercises. The annual work planning and budgeting process should also capture the assessment of the training efforts of last year and assess progress realised and further actions to be taken to fill possible training gaps
- 125. In preparing the first AWPB, the Project Management should be aware of available budget and the amount of Initial Deposit released in order to prioritize critical investments identified. It would be necessary to prepare the following project year's budget to avoid shortage of funds available for the succeeding year. Project Management at different levels should assume the timely undertaking of AWPB and submit it to IFAD for approval (See related Loan Agreement, Article and Section related to Annual Work Plans and Budgets).
- 126. Counterpart matching funds should be secured and accounted in the AWPB (See related Loan Agreement, Article and Section related to Availability of Loan Proceeds and Other Resources).
- 127. In preparing the AWPB, narrative presentation should be concise and precise; spreadsheet tables and schemas should be used where needed to illustrate targets, achievements, costs and financing.
- 128. An AWPB primary consists of seven parties (chapters), which first update the past achievements with focus on the previous year's, then address the projections for the upcoming fiscal year:

- (a) Update on past achievements:
- (b) Narrative introduction
- (c) Summary of physical and financial Achievements (N/A for PY1 AWPB)
- (d) Projections for the upcoming fiscal year:
- (e) Summarized presentation by components
- (f) Detailed presentation by components
- (g) Cost and financing
- 129. Narrative Introduction. This Chapter should indicate briefly the most important developments in the previous period in the project implementation environment and the expected evolution for the planning period (in the context of the AWPB for the first year, developments since final design can be mentioned). The following elements should be discussed.
 - (a) Government policies. Indicate any change or new policies relevant to the project implementation and their possible impacts;
 - (b) Institutional framework. Discuss any constraints, changes in the organization and/or staffing in the Implementing Agencies and the project management units. Evaluate the impact on implementation capacities.
 - (c) Any other major determining factor of the implementation environment
- 130. Summary of physical and financial achievements (N/A for PY1 AWPB). The Chapter should present the main achievements, issues and constraints of the previous period, including the main recommendations of supervision, progress review, MTR, spontaneous support missions and the state of related follow-ups, as well as an appreciation of the impact of the project on the poverty and gender situation. Most of the related information should be found in the previous annual progress report with minor adjustments or updates. Bullet-point highlights should outline:
 - (a) Physical results: Highlight the implementation strategy and describe the main physical results obtained so far, indicate positive results as well as implementation problems and the reasons for them, and the latter's impact on next year's plan and implementation. Refer to the detailed and summary AWPB tables.
 - (b) Financial results: Analyse the level of expenditures of the year to date for the main components, compare with the previous budget and indicate any reasons for higher or lower expenditures than expected. Indicate whether these issues will have an impact on the plan for the next year, refer to the detailed and summary AWPB tables.
 - (c) Supervision, progress review, MTR, support missions' issues: Highlight the mission's recommendations of the previous year and their related compliances.
 - (d) Poverty situation: Provide a qualitative appreciation of the implementation to date on the poverty situation in the project villages and households. If available, observe the changes in qualitative and quantitative measures. Use some information from the Baseline survey and any other available indicators to underline the statements. Also review any new Government and/or donor initiatives.
 - (e) Gender: Discuss the roles of women in project and institutional management, planning and implementation and the project/programme impact on their situation, results and constraints. Analyse both the economic and the social aspects (income generation, agriculture, credit, literacy, education, health, etc...).
- 131. Progress prior to project start may be described for PY1 AWPB. This may include: Compliance with Loan effectiveness, establishment of management and operational structure, procurement, staffing, project areas' preparation, beneficiary selection and targeting, identification of support and training needs, commitments of local stakeholders and levels of counterpart matching funds.
- 132. Summary Presentation by Components. This chapter should present the implementation programming both in physical and financial targets, expected outputs and impact. Indicate if there are any major changes compared to last year's programme and budget, referring to the previous chapter if appropriate.

Table 2: Summary by Components:

Components	Total financial										
	achievements	AWPB Financing Plan			Estimated Coverage						
		IFAD	GOC	Taxes	Others	Total	Counties	Townships	Villages	H.H	Population
Α											
В											
С											
D											
E											
Total											

- 133. Detailed Presentation by Components. In this Chapter, a detailed discussion of the programming and implementation strategy of each component is presented as well as a discussion of the expected results and how the implementation modalities eventually differ from the previous year(s)' practices. For each component, present the following:
 - (a) Objectives and targets. Indicate the component objectives and physical targets for the AWPB period and compare with the whole project duration, discuss any trends:
 - (b) Implementation strategy. Indicate how the activities of the component will be programmed and implemented, discuss participatory approaches and discuss any institutional problems and their required solutions;
 - (c) Results. Indicate the expected results in terms of quantitative indicators and in terms of qualitative aspects. Indicate the expected number of beneficiaries (women, men) and households. Compare with the overall target of the project and with last year's results;
 - (d) Changes. Discuss and justify any changes compared to the initial design and previous experiences, in targets, implementation strategy or expected results. Indicate reasons.
- 134. Cost and Financing. This Chapter discusses issues related to the AWPBs costs and financing.
- 135. Costs: Any major changes in unit costs due to inflation/deflation and to changes in design compared to previous years and to the Appraisal report should be discussed and the manner who to deal with them indicated. (Unit costs may have changed since the appraisal report)
- 136. Financing: Issues related to the flow of funds, the timeliness of funds availability, of approval and disbursement procedures for all financiers will be highlighted, and ways to improve or overcome constraints indicated. (Not likely to be relevant in the project's first year).

Reporting, M&E and RIMS

137. During implementation, reporting and impact assessment of the project will be executed regularly by the PMOs. For reminding purpose and avoiding unnecessary delay, the schedule for regular reporting and impact assessment is summarized as in the following Table.

Table 3: Schedule for Project Reporting

Reporting/Assessment	Reporting schedule				
	AWPB for a fiscal year will be submitted to IFAD for "no				
Submission of AWPBs	objection" review in October of previous year (Narrative				
	report and attached Tables)				
Submission of procurement plan	It will be submitted to IFAD for "no objection" review,				
	together with AWPB each year				
Submission of progress report	January & July of each year (including attached Tables)				
	1 st level indicators: January each year, attaching to the				
Submission of RIMS Tables	progress report;				
Submission of Klivis Tables	2 nd level and impact indicators: the coming January after				
	RIMS survey.				
Submission of M&E Tables	January & July of each year, attaching to the progress				
Submission of Mac Tables	report.				
Submission of audit report	Before end of June each audit year				

Baseline survey	In the period of project design
Mid-term RIMS survey	Before Mid-Term Review
Completion RIMS survey	Before project completion Review

- 138. *Progress Report.* Semi-annual and annual progress reports should be made and submitted to IFAD on project implementation (As required by Section 8.03 (Progress Report) of the General Conditions) during the project implementation period.
- 139. The progress report should present the main achievements, issues and constraints of the previous period, including the main recommendations of supervision, progress review, MTR, spontaneous support missions and the state of related follow-ups, as well as an appreciation of the impact of the project on the poverty and gender situation.
- 140. While preparing progress reports:
 - (a) Financial and physical achievements should be updated in comparison with targets set in AWPB and Appraisal Report
 - (b) Newly incurred progress during the reporting period in question and cumulated achievements should be distinctly updated
 - (c) Possible impact and outreach, as well as sustainable development need to be highlighted
 - (d) Spreadsheet tables and bullet-points should be used where appropriate to help pinpoint or highlight the situation.
- 141. As main chapters of the progress reports, the following components should be addressed:
 - (a) Physical results: Highlight the implementation strategy and describe the main physical results obtained so far, indicate positive results as well as implementation problems and the reasons for them, and the latter's impact on next year's plan and implementation.
 - (b) Financial results: Analyse the level of expenditures of the year to date for the main components, compare with the previous budget and indicate any reasons for higher or lower expenditures than expected. Indicate whether these issues will have an impact on the plan for the next year.
 - (c) Supervision, progress review, MTR, support missions' issues: Highlight the mission's recommendations of the previous year and their related compliances.
 - (d) Poverty situation: Provide a qualitative appreciation of the implementation to date on the poverty situation in the project villages and households. If available, observe the changes in qualitative and quantitative measures. Use some information from the Baseline survey and any other available indicators to underline the statements. Also review any new Government and/or donor initiatives.
 - (e) Gender: Discuss the roles of women in project and institutional management, planning and implementation and the project impact on their situation, results and constraints. Analyse both the economic and the social aspects (income generation, agriculture, credit, literacy, education, health, etc...).
- 142. *M&E*. As required in the Loan Agreement and in Section 8.02 (Monitoring of Project Implementation) of the General Conditions, appropriate project monitoring and evaluation (M&E) system should be maintained to continuously monitor the project implementation.
- 143. Monitoring should be based on a set of indicators. In general, the project monitoring should follow the requirements of IFAD's RIMS, and the Guide for M&E (www.ifad.org). The monitoring units of PMO at different levels should collect data in accordance with the agreed indicators and report semi-annually to IFAD. Gender disaggregated data should be presented where applicable.
- 144. Results and Impact Management System (RIMS). IFAD's Section VI of the Consultation Report calls on IFAD to establish: "a more comprehensive and integrated system to measure and report on the results and impact of IFAD supported country programmes". In December 2003, IFAD Executive Board paper outlined the basis for the RIMS including the indicators, which will be reported on by all future projects and programmes.
- 145. RIMS is not separate from M&E; RIMS indicators are the core indicators of the M&E system and they should be fully integrated within the same system. There are three levels of indicators: the first level indicators correspond to physical results (log-frame output level), second level to

behavioural change (log-frame outcome level), and third level (IMPACT) to goal (log-frame goal level). Some "anchor" indicators are compulsory, others are dependant upon project/programme/component type.

- 146. For the purpose of this manual, impact will consist of "changes in the lives of the rural poor, intended or unintended, to which IFAD's interventions have contributed". IFAD's results management system adopts the above definitions and operationalizes them as follows:
- 147. First-level results (outputs): Development programmes first achieve financial and physical results, mostly expressed in terms of numbers and percentages (e.g. number of deep tube-wells sunk). Existing measurement systems tend from the outset to be relatively effective at reporting these results, which, in most projects, are many and constitute the bulk of management information.
- 148. Second-level results (outcomes): Outreach and numbers are not good enough. Development programmes must ensure that financial and physical results are matched by improved functionality and behavioural change (e.g. number of deep tube-wells sunk and managed for irrigation purposes by farmers after two years). First-level results tend to be quantitative and answer questions such as "what and how much"; second-level results become more qualitative, answering the questions "why and how". These results tend to take more time to realize (than first-level results), and require a different and more complex measuring and reporting system. This level of results, which often requires that quantitative information be complemented by qualitative assessments, is difficult to aggregate. The results also tend to be fewer in number; but they are critical for assessing and managing the quality of project services a key element of management information.
- 149. Third-level results (impact): The previous level of results contributes to impact in terms of achieving the higher-level goals of a development programme, with a degree of probability and over time (e.g. increased productivity of irrigated crops leads to increased assets and improved nutrition).
- A large number of results and of impact indicators are available for each of the 13 components retained for IFAD's results management system. Care should be taken to be selective so as to ensure feasibility, cost-effectiveness and timeless of the results-monitoring and reporting system. As well as being supportive of the MDGs, IFAD's mission and the objectives of its strategic framework, the criteria for the selection of results and impact indicators include: measurability: pertinence; accuracy and robustness; sensitivity to change; universal validity; culture neutrality; and scope for aggregation. The design of the indicators should also reflect the respective sectoral industry standard. Where appropriate, results and impact indicators must be gender- or sex-disaggregated, as this reflects both a crucial IFAD objective and the organization's contribution to MDG 3 (gender equality and empowerment). Furthermore, a few results and impact indicators should be mandatory for each project. As such, they become anchor indicators for IFAD's results management system. Anchor indicators consist of a short list of critical indicators based on objective, comparable data linked to the MDGs. These indicators are not intended to replace qualitative information but to provide a base around which the qualitative information can complete the explanatory framework. Finally, the results management system will need to allow for the inclusion of explanatory text against qualitative results and impact indicators that cannot always be aggregated.
- 151. For individual projects, results and information concerning such results will be managed with the matrix structure shown in the following table.

Table 4: Reporting on Results and Impact at the Project Level

		Baseline	Agreed	Appraisal	Target	Annual	Cumulative	Result
		Position	(and w	vhere	relevant,	Achievement	or Impact	
			Intermedia	ite Target	s)	(Progress Made)		
Result	or							
Impact								
Indicator								
Concerned								

Financial management

152. Financial Reporting and Auditing. Article 9 of the General Conditions stipulates the need to maintain separate accounts for the project, the frequency of financial reporting and auditing

requirements, the audit of the Special Account and the Statements of Expenditures and the need for a separate opinion by the auditor in respect of the statements of expenditure.

- 153. Financial Statement. As likely stipulated in the Loan Agreement, each province shall maintain separate accounts and records required by Section 9.01 (Financial Records) of the General Conditions, and thereafter prepare the financial statements of the operations, resources and expenditures related to the project required by Section 9.02 (Financial Statements) of the General Conditions in respect of each Fiscal Year until the loan closing date and such accounts and records shall be retained for at least ten years thereafter.
- 154. *Audit Report*. Audits should be submitted by "due date" (normally six months after end of borrowers/recipients fiscal year). If not submitted on time IFAD may engage an independent auditor to carry out work. If audit not received 180 days after "due date, loan/grant WILL be suspended.
- 155. Each province should appoint, with prior approval of IFAD, independent auditors acceptable to IFAD to audit the financial statements relating to the project/programme in each province for the each Fiscal Year.

Loan Administration

- 156. A Designated Account in USD will be opened by the DOF of Hunan Province in a bank acceptable to IFAD, through which all IFAD funding will be channelled. An initial deposit, approximately equal to projected eligible expenditures over the first six months of implementation, will be deposited into this account once the loan becomes effective, on the basis of a Withdrawal Application (WA) submitted by the Provincial PMO. Subsequent replenishments of the Designated Account will be effected through the submission of WAs and accompanying Statements of Expenditures (SOEs), in accordance with IFAD procedures as set out in the Loan Agreement. The initial deposit will constitute the 'authorized amount' of the Designated Account. All withdrawals must be in line with projected expenditures as detailed in the approved AWPBs.
- 157. Funds will flow from the provincial Designated Account to Project Accounts in CNY held by the county BOFs. For Xiangxi Prefecture, Funds will flow to the four project counties' Project Accounts via the prefecture BOF's Project Account in CNY. The provincial DOF will supervise that funds received at each level are transferred without delay. Provincial PMO, prefecture PMO of Xiangxi and all county PMOs will maintain separate Implementation Accounts in CNY; funds to support PMOs' activities related to implementation management and operations will be transferred from the DOF/BOF Project Accounts of respective levels.
- 158. Similarly, involved implementing agencies and service providers will open a separate Implementation Account in CNY to receive necessary funding from the county BOF's Project Account, in accordance with approved AWPBs and implementation progress.
- 159. Evidence of Authority to Sign Withdrawal Applications. Before withdrawal can commence (after the loan is declared effective), IFAD must receive from the Ministry of the Borrower responsible for Finance (the designated official representative of the Borrower in accordance with Section 8.01 of the Loan Agreement), a letter designating the person or persons authorized to sign withdrawal applications, together with their authenticated specimen signatures. (Please refer to the sample form of the authorization letter usually enclosed as Attachment in the LTB). To avoid possible delays in disbursements, such evidence should be furnished to IFAD, as soon as possible. If there are any changes in respect to the authorized signatories, a new letter of authorization should be sent to IFAD.
- 160. *Disbursement Procedures*. There are three standard procedures that can be used for withdrawing Loan funds. Details are usually included in the LTB as attachment 2.
- 161. Procedure I Reimbursement, should be used when eligible project expenditures reimbursable by IFAD have been pre-financed by the Borrower. For further details, please refer to Attachment 2A of the LTB.
- 162. Before submitting any application under this procedure, the Borrower should open a Project Account at a suitable bank on terms and conditions acceptable to IFAD. Therefore, name and address of the Bank as well as the number of the Project Account should be communicated to IFAD.
- 163. This procedure should also be used for replenishment to the Designated Account. For further details, please refer to related Attachment 2D of the LTB.

- 164. Procedure II Direct Payment, should be used for project expenditures to be paid directly by IFAD to the suppliers or contractors. For details, please refer to related Attachment 2B of the LTB.
- 165. Procedure III Special Commitment should be used for project expenditures related to items imported by Project Implementing Agencies under "Letter of Credit" (L/C) requiring guarantees for reimbursement. For details, please refer to related Attachment 2C of LTB.
- 166. Designated Account. Use of the Designated Account(s) is restricted to making payments for eligible expenditures under Categories specified in Schedule 2 of the related Loan Agreement. Funds under the Designated Account(s) should not be used for other purposes nor for collateral of any sort and should remain in US Dollars, until actually used for making payments for eligible items under the Loan Agreement, except for eligible local expenditures, for which a lump sum, equivalent to about X months of IFAD financed items should be transferred to the Project's operating Accounts, upon receipt of a written request from the PMO. Additional request for local currency financing should be made on a monthly basis, or from time to time as may be necessary. The rate of exchange for the conversion of the local currency payments into US Dollars should be the prevailing rate of exchange by the handling bank on the date of transfer of funds from the Designated Accounts to the Operating Accounts.
- 167. Accounts and Accounting. Separate and disaggregated Implementation Accounts will be maintained by the provincial PMO, prefecture PMO of Xiangxi, and county PMOs, in accordance with IFAD's requirements and internationally acceptable accounting standards. IAs at various levels will also maintain disaggregated Implementation Accounts for project-funded activities. County BOFs will be responsible for periodic review of county PMO and IA accounts so as to ensure their adherence to acceptable standards of transparency and accuracy.
- 168. Application for Deposit of the Authorized Allocations. The deposit of the Authorized Allocation to the Designated Account(s) should be applied for under Withdrawal Application Form 100. The full amount of the Authorized Allocation may be applied for under one application, or it may be applied for in smaller amounts up to the aggregate of amount to be specified by IFAD.
- 169. No documentation is required in support of the application for the Authorized Allocation; however, the application should be accompanied with:
- a) A copy of the agreement between the Borrower/the Implementing/Executing Agency and the bank holding the Designated Account(s), confirming the establishment of the Designated Accounts, providing the accounts numbers and the agreed procedures for the operation of the Accounts; and
- b) A list of the persons (names and functions) authorized to operate the Special Account(s).
- 170. Replenishment to the Designated Accounts Form 100. The withdrawal applications for replenishment to the Designated Account(s) should be denominated in US Dollars and should be submitted on a regular basis, provided that the expenditure made thereunder during the previous month (Reporting Period) was more than the equivalent of an amount in USD to be specified by IFAD for Designated Account(s). The reimbursement application for replenishment to the Designated Account(s) should be made under the Withdrawal Application Form 100, a sample copy of which is usually enclosed in Attachment 2A of the LTB.
- 171. In order to recoup the actual US Dollars (USD) that were withdrawn from the Designated Account(s), the local currency expenditures that were funded from the Designated Account(s) should be converted at the prevailing exchange rate at the time of the transfer of USD to the Project Operating Account(s) in local currency, and not at the prevailing exchange rate at the time of the preparation of the withdrawal applications. At any given time, the balance in the Designated Account(s) in the holding bank, plus the payment of the withdrawal applications that were submitted to IFAD but not yet deposited in the Designated Account(s), plus the estimated USD equivalent of the expenditures that are not yet claimed for replenishment, should always be approximately equal to the authorized allocation.
- 172. Each application for replenishment to the Designated Account(s) should be supported by a statement issued by the holding bank for the Designated Account(s) at the relevant month-ending (Reporting Period), showing all transactions under the Accounts during the Reporting Period, including:
 - (a) Opening balance;
 - (b) Each transaction during the Reporting Period, by currency and amount paid;

- (c) Date of payment;
- (d) Rate of exchange used:
- (e) Deposit(s) by IFAD into the Designated Account(s) during the Reporting Period; and
- (f) Closing balance at the end of the Reporting Period.
- 173. The statement of Accounts by the holding bank must be provided in US Dollars, with each transaction shown in the currency and amount of withdrawal made.
- 174. The initial deposits in USD to the Designated Account(s) are advance disbursements and no supporting documentation is required with the application for these deposits.
- 175. Any funds remaining in the Designated Accounts that are no longer required to cover further payments for eligible expenditures must be promptly refunded to IFAD, under notice, for crediting to the Loan Account. Any refund shall be made to IFAD in the currency used by IFAD for the purpose of withdrawal from the Loan Account.
- 176. Designated Account(s) shall be protected against set-off, seizure or attachment on terms and conditions proposed by the Borrower and accepted by IFAD.
- 177. Statement of Expenditure. Schedule 2 of the Loan Agreement provides the use of Statements of Expenditure (SOE) for withdrawals from the Loan Account for certain expenditures and categories. The details are generally explained in Attachment 2E of the LTB. For withdrawals from the loan account that are eligible under SOE, the relevant supporting documents need not be submitted to IFAD, but should be retained by the Borrower for periodic inspection by representatives of IFAD. As provided in Section 4.07 of the General Conditions, all records (purchase orders, invoices, evidence of payment and delivery and all other relevant documents) evidencing the expenditures shall be retained at the PMO Office until ten years after the closing date for withdrawals. In addition, Section 9.03(b) of the General Conditions provides that the SOE should be audited every fiscal year and the certified copy of the audit report in the English language should be furnished to IFAD not later than six months after the end of the fiscal year.
- 178. Withdrawal Application. Each withdrawal application (in the original form, and in the English language) duly completed as prescribed, together with all supporting documentation, should be sent to the Loan Section, IFAD.
- 179. The withdrawal application, (which should be numbered consecutively irrespective of the withdrawal procedure used) and the required supporting documentation will be reviewed and if found to be in order, approved by IFAD. Correct banking instructions should be indicated in the withdrawal application in order to avoid payment delays. The complete name and address of the payee bank and the account number of the beneficiary should be duly reflected in the spaces provided in the withdrawal application. Do not abbreviate the bank names and avoid the use of the acronyms. Upon completion of the payment process, IFAD will send a payment advice to the Borrower and the relevant Implementing Agency if applicable. The payment advice includes, among other things, the value date of payment, the US Dollar, and SDR equivalents of the related withdrawal request, and the category(ies) charged. This information will enable to monitor loan withdrawals and determine the status of individual categories. To ensure receipt of payment advice, the Borrower is requested to provide IFAD the names and the complete addresses of the Borrower and the relevant Implementing Agency for the mailing list.

Project Completion and Loan Closing Dates

- 180. As provided in Section 7.18 of the General Conditions, the Project Parties shall complete the implementation of the Project by the project completion date. Please take note that only commitments made up to the completion date are eligible for financing under the loan.
- 181. The loan closing date or such other later date as IFAD shall establish, is the date after which IFAD can terminate the right of the Borrower to request withdrawals from the loan account. Up to the closing date, the Borrower may submit withdrawal applications for eligible project expenditures incurred (payments made or payments due) for commitments or contracts made up to the project completion date. Although IFAD can unilaterally extend the closing date, generally it prefers to obtain a formal request from the Ministry of the Borrower responsible for Finance (the authorized representative of the Borrower). After closing date, IFAD shall inform the Borrower on the formal closure of the loan account.

Auditing

- 182. In line with current practice for IFAD projects in China, the Provincial, Prefecture and County Audit Bureaux, which are constituted as independent bodies under the respective Government Offices, will be responsible for auditing accounts at provincial, prefecture and county levels on an annual basis. The Auditors will review withdrawals from the Project Accounts at various levels on the basis of SOEs, and provide an independent opinion on whether such expenditures fully comply with expenditures eligible for IFAD disbursements. The use of counterpart funds will be audited in a similar manner, with a corresponding audit report provided to IFAD for information. IFAD, as part of its supervision functions, will also inspect project accounts to ensure their adherence to acceptable standards.
- 183. The financial reporting and accounting practices currently followed by the DOF/BOF are acceptable to IFAD. The accounting sections of the PMOs at each level will be adequately staffed and trained to handle the accounting requirements of the Project.

Procurement

- 184. As stipulated in Section 7.05 (Procurement) of the General Conditions: All goods, civil works and services financed by the Loan shall be procured and engaged in accordance with the procedures specified in the Loan Agreement.
- 185. As stipulated in Section 7.06 (Use of Goods and Services) of the General Conditions: All goods, services and buildings financed by the Loan shall be used exclusively for the purposes of the Project.
- 186. Procurement of goods and civil works financed by the Loan shall be subject to the provisions of the "Guidelines for Procurement under Financial Assistance from the International Fund for Agricultural Development of 1982", as such guidelines may be amended from time to time by the Fund (the "Procurement Guidelines"). If any provision of the Procurement Guidelines is inconsistent with a provision of this Schedule, then the latter shall govern.
- 187. To the extent possible, the goods, civil works and services shall be bulked into sizeable bid packages in such a manner as to permit the optimal use of competitive bidding. Before the commencement of procurement, the Borrower shall furnish to IFAD for approval, (i) a list or lists of goods and services to be procured, (ii) the proposed grouping of these goods and services, and (iii) the proposed number and scope of civil works contracts to be awarded.
- 188. Procurement shall be undertaken only during the Programme Implementation Period.
- 189. No procurement shall be undertaken if it entails a payment to persons or entities, or an import of goods, prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. The Fund shall inform the Borrower of any such persons, entities or import.
- 190. The threshold amounts specified in the Schedule related to Procurement of the Loan Agreement include Taxes.
- 191. All bidding documents and contracts for the procurement of goods, works and services financed by IFAD loan will include a provision requiring contractors to:
 - (a) Allow full inspection by IFAD of all bid documentation and related records;
 - (b) Maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and
 - (c) Cooperate with agents or representatives of IFAD carrying out audit or investigation.
- 192. A procurement plan covering a period of 18 months will be prepared as part of the first AWPB to be reviewed by IFAD. The procurement plan will be based on the individual procurement plans prepared by each project county, the provincial PMO and the prefecture PMO of Xiangxi. The plan will provided information of goods disaggregated into different interventions of infrastructures, modules and management component. A draft procurement plan for PY1 is provided as Annex VIII for the PMO to further elaborate, on the basis of the detailed description goods and materials to be procured at PY1.
- 193. Details on procurement review by IFAD, including prior and post review, modifications, etc. are explained in Appendix I of the IFAD Procurement Guideline Manual. The Project will follow the

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national and IFAD procurement requirements and maintain all relevant documents, bids, purchase orders and payment vouchers for post review by IFAD and for audit purpose.

194. Please also refer to the Loan Agreement and the LTB for details related to Procurement of Goods and Services, Procurement of Civil Works, Review of Procurement Decisions and specific information regarding Local Competitive Bidding (LCB), Local Shopping, Direct Contracting, Force Account, and other related topics.

COMPLIANCE WITH IFAD POLICIES

- 1. **Design conceptual alignment**. The project goal and objective refer directly to the overarching goal of the IFAD Strategic Framework 2011 2015, aligning its investments with the latter's strategic objectives related to improved natural resources and economic asset base, improved access, income generation opportunities and decent work, capacity building for the beneficiary-governed and grassroots organizations, and enhanced service support system.
- 2. The component A of Community Infrastructure Improvement aligns its objective with IFAD policies related to natural resources management and economic assets base, and capacity building, it aims to achieve the outcome of strengthening the economic capacities at community level, especially the productive and livelihood assets for expanded and improved agricultural production, decreased physical isolation and thus improved integration into the market value chains, and improved productive and daily-life assets for the sake of the rural community and the households in the project area. Support is provided for irrigation facilities, village roads, drinking water supply facilities, and rural electricity grid upgrading. These activities would be critical for the project area to strengthen the community resilience to frequently-occurring climatic calamities, improve the access of rural poor to markets, information and technical services, and develop commercialized production of agriculture, which are regarded as effective measures for rural development and poverty reduction at the current stage.
- 3. Component B of Sustainable Agriculture Development complies with IFAD's policies in income generation opportunities, decent work and capacity building, innovation and scale-up, as well as with guidelines related to environment protection. It aims to strengthen the self-development capacities of the rural men and women and improve their income generation opportunities by supporting the sustainable development of diversified and adaptive agriculture at the levels of production and service support. The modular approach will be adopted for the component, while the concepts and techniques of sustainable development and environment protection will be integrated within all project activities. The production modules are designed to help strengthen the farmers' resilience and adaptability to uncertainties, mainly caused by climate change and market transformation. This will be achieved through income generation diversification and adaptive farming system at household level to orient it towards making farming a business and profitable for the poor farmer by using techniques such as eco-farming and niche-market production benefitting from timely market information systems. Mainstreaming the target farmers into the market value chain and production specialisation or diversification will be achieved through the support to farmers' cooperatives. The above mentioned modular interventions would be complemented by the module of technical service support, which intervenes at the supply side. On the assumption of successful implementation, the sustainable production model that the related module applies will be extended to the other farmers within and outside of the project area.
- 4. Component C of Project Management follows the concept of institutional and grassroots capacity building and enhanced service support, it aims to achieve the institutional benefits of: a) strengthening of implementing agencies at the decentralized level; b) strengthening technical service support system in at grassroots level; c) establishing and strengthening 589 Village Implementation Groups; d) strengthening of at least 27 farmers' associations or cooperatives.
- 5. **Sustainability**. The Project incorporates numerous features designed to promote long term sustainability:
- 6. Target communities will have a high level of 'ownership' of assets built and activities to be implemented in their villages through adoption of participatory planning and management processes; They were already engaged in the selection process of the priority investments for the villages via participation in the discussions organised by the VIGs that were established in the project villages since early 2011. The target groups (poor, women and minorities) are also adequately represented in the VIGs.
- 7. In direct support of the Government's on-going programme of strengthening the community assets, the Project will support the community-level infrastructure improvement, working directly and closely with technical agencies in charge of the government programmes and introduce community-based and beneficiary-governed M&M mechanisms as part of the sustainable use of public or collective assets;

- 8. Production modules aim more to introduce adaptive coping strategies based on income generation specialization and diversification, instead of ordering pre-identified production activities. Modules are compatible with the local production activities, which are profitable at current prices with full accounting of operating and capital costs. Demand for these products is strong and increasing;
- 9. All production-related activities supported are designed to be environmentally sustainable. In many cases these activities will be replacing other production activities that are not. For example, Module of orchard-poultry integrated farming is expected to reduce cropping pressure on marginal lands:
- 10. The design emphasises market value chain development in partnership with private sector operators (traders, brokers, processors etc.) facilitated by farmer's cooperatives. Particular emphasis is placed on the development of market know how within the cooperatives, development of improved market linkages involving contractual relationships, production of quality products, and capture of premium prices;
- 11. The module of technical service support is designed to promote increased responsiveness of extension agents to real needs, and increased accountability to farmer clients. Government is already showing increased willingness to strengthen the service support system in line with the results being achieved; success of the module can be referred to the system as good practice and for systematic replication;
- 12. The design emphasises the development of self-sustaining community-based organisations such as farmers' cooperatives, village M&M and users' groups that will be strengthened to play a key role in the implementation and on-going management of project activities;
- 13. Overall, strengthening the capacity of grassroots institutions and their support services is considered to be the most effective means of ensuring sustainability after the immediate project implementation period. The project design places major emphasis on developing the management and technical skills of stakeholders at all levels.
- 14. **Environmental impact**. The HARIIP is mainly on the support to improvement of community infrastructures, household-based IGAs with premium price potentials, and poor men and women's access to premium markets. Most of the envisaged activities will focus on the construction of community-based infrastructures, capacity building, income diversification and productivity improvement. It will not cause adverse environmental impacts but improve the quality and carrying capacity of the environment. Notions and techniques of environment protection and resource conservation will be introduced to the beneficiaries at the time the project support is offered, especially in relationship with infrastructure building and household-based production modules. The module of technical service support is to improve the capacity of farmers and in turn increase productivity in the project area through introducing update technology, which would upgrade the basis for environmental-friendly production. The module will improve the effectiveness of technical services, incorporating with training on the best practices and ecologically sound approaches.
- 15. Based on the above outlined expected scale of positive impacts and in contrasts to relatively minor risks, the Project should be pessimistically classified by caution for the purposes of environmental scrutiny as Category B. Local stakeholders are aware of the environmental issues and a continued attention will be paid to closely monitor the related evolution.
- 16. **Gender mainstreaming**. About 48% of the population is recorded as female in the project counties overall, and the number of female headed households is very small. Although work is shared by men and women, on-farm workload of women throughout the year tends to be higher than that of men due to out-migration of the latter and increasing intensity of farming activities. In addition to arable and perennial crop farming, and animal production activities, women carry out the daily family chores for which they spend more than 4 5 hours per day, including cooking, taking care of family, rearing pigs and poultry, sewing and mending clothes and shoes, etc. With regard to off-farm work, women are mainly engaged in fuel-wood collection and some women-specific activities, such as embroidery, whereas seasonal and permanent work in urban areas is mostly for men and single women. While the women's social status is generally perceived high by both men and women, their economic situation and status are far from being lifted and recognized at an equitable level.
- 17. In designing HARIIP the gender and gender checklist of IFAD was strictly followed by the design missions. To ensure the participation of women, the quota for female beneficiaries was formulated for project implementation and M&E. The role of female members in VIGs was also

defined. To have more staff in PMOs was mentioned in PDR, but it was not easy to attach a specific percentage to female staff in PMOs. With relative high percentage of female beneficiaries in agriculture and training, project resources would be allocated to the female target groups on a priority basis. Based on this it shows from the attached gender checklist that HARIIP is given a score of 5 (Table 1).

TABLE 1
FRAMEWORK FOR MAINSTREAMING GENDER IN IFAD'S OPERATIONS
KEY FEATURES OF GENDER-SENSITIVE DESIGN AND IMPLEMENTATION

	SCORE (1-6)	Issues
1. The project design document contains – and project implementation is based on - gender-disaggregated poverty data and analysis of gender differences in the activities or sectors concerned.	4	The situation of poor women was analyzed, including their education, employment, role in decision-making, migration and workload. The project activities were designed specifying on poor women situation, e.g. infrastructure improvement to reduce their workloads, gender focus training to mainstream gender issues, more technical training to rural women and include women in decision-making in community level as well as representation in all project leading groups and PMOs. The analysis for project interventions was based on data per county and for the villages visited on village level. As the different project interventions are all targeted to the poorest, women and minority groups, no gender specific analysis was done on specific activities or sectors.
2. The project design report articulates – or the project implement – actions with aim to: • Expand women's economic empowerment through access to and control over fundamental assets; • Strengthen women's decision-making role in community affairs and representation in local institutions; and • Improve women's knowledge and wellbeing and ease their workloads by facilitating their access to basic rural services and infrastructure.	5	Activities are designed to empower women through economic improvement as well as through knowledge and ease their workloads. As females are in many cases the actual head of the family (because men are migrated to urban areas), projects under HARIIP which aim at improved agricultural productivity and improved access to markets will benefit women's economic potential. Increase the women's decision-making role in community through including more females in VIGs which might enhance their experiences in local administration and hence for the future also increase their possibilities in representation in local institutions, such as VCs.
3. The design document describes - and the project/programme implements - operational measures to ensure gender- equitable participation in, and benefit from, project activities. These will generally include:		
3.1 Allocating adequate resources to implement the gender strategy;	5	There are specific budget allocations for gender focus training for IAs in each

		location;
3.2 Ensuring and supporting women's active participation in project-related decision-making bodies and committees;	6	Leading group will be a important decision-making body and women federation will play the role on behalf of women in decision making. It was encourage to have more female staff in county project office, but it is still have not specific percentage designed. Also at the village level there is an adequate representation of women in VIGs, which was initiated by PMO at provincial level.
3.3 Ensuring that project/programme management arrangements (composition of the project management unit/programme coordination unit, project terms of reference, etc.) reflect attention to gender equality and women's empowerment concerns; and	6	There is female staff in PMOs, more than 30% for most PMOs visited. It is encouraged to give priority to women technical experts to deliver training because more than half beneficiaries would be female. It is also required to have more men from the leading group to attend the gender focus training.
3.4 Ensuring direct project/programme outreach to women (for example through appropriate numbers and qualification of filed staff), especially where women's mobility is limited.	6	Quotas set for women's participation; no problem of mobility, hence no specific staffing quotas, other than what is mentioned above.
4. The project's logical framework and monitoring and evaluation (M&E) system specify in design – and project M&E units collect – gender-disaggregated performance and impact data.	6	Quotas of women beneficiary for project activities was designed in the project's logframe and for M&E system. M&E units will collect gender-disaggregated performance and impact data.
AVERAGE SCORE	5	

18. **Target**. In order to ensure the targeting imperatives of IFAD assistance, HARIIP will adopt the well-being ranking that should be introduced in the project villages, under the responsibility of VIGs. Households of category C will be given priority as the main recipients of production modules, subjects of cooperative mainstreaming and technical service support. Similarly, beneficiary training should be tailored to meet the particularities of that prime vulnerable segment, there-by ensuring an equitable access to knowledge, techniques and opportunities. The project's full targeting strategy incorporates the following elements: eligible counties and townships were identified through a participatory poverty analysis during design; priority will be given to the poor and vulnerable groups, who will be identified through participatory perceived wealth ranking conducted by VIGs; and inclusive targeting for community level activities will be combined with focused targeting for production activities to ensure benefits accrue to poor households. Based on this it shows from the attached targeting checklist that HARIIP is given a score of 5 (Table 2).

TABLE 2
IFAD'S TARGETING POLICY - CHECKLIST FOR DESIGN

	SCORE	ISSUES / COMMENTS
	(1 TO 6)	
1) Does the main target group - those expected to benefit most- correspond to IFAD's target group as defined by the Targeting Policy (the extremely poor and food insecure)?	5	Targeting to the poor households (B and C categories of households in well-being ranking) in remote and hilly villages where poor minority people concentrated.
2) Have target sub-groups been identified and described according to their different socio-economic characteristics, assets and livelihoods - with due attention to gender differences?	5	Description on poor minorities and poor women provided, including their income, education, language speaking, employment, and

		farmland.
3) Is evidence provided of interest in and likely uptake of the proposed activities by the identified target sub-groups?	5	Proposed project activities were selected by participation of beneficiaries themselves. That indicated that the identified target sub-groups interest in and likely uptake the proposed activities.
4) Does the design document describe a feasible and operational targeting strategy in line with the Targeting Policy? The targeting strategy will involve either all or some of the following measures and methods:	5	
4.1) Geographic targeting – based on poverty data or proxy indicators to identify, for area-based projects or programmes, geographic areas (and within these, communities) with high concentrations of poor people	5	Focused on the remote hilly area where the poorest villages are located and within these villages to the poorest (minorities, women). More than 50% of all project interventions are geared at the poor villages in the mountainous areas.
4.2) Enabling measures – These include measures to strengthen stakeholders' and partners' attitude and commitment to poverty targeting, gender equality and women's empowerment, including policy dialogue, awareness-raising and capacity-building, and appropriate project/programme management arrangements (references in ToR, PCU composition); language in describing staff positions (s/he; masculine/feminine).	5	On village level, involvement of women and poor in VIG, at least two female VIG members were required. In township, county and provincial level, the women federation and poverty alleviation office participated in project leading groups, that will enhance the gender and poverty focus. To have more female staff in project offices and more training to female staff were required in the project.
4.3) Empowerment and capacity-building measures including information and communication, focused capacity- and confidence-building measures, organisational support, in order to empower and encourage the more active participation and inclusion in planning and decision making of people who traditionally have less voice and power.	5	Bottom-up approach beneficiaries and project activities selection which give the opportunities for the poorest to participate the planning. The decision making process in villages was transparent and whole communities were involved. The poorest and traditionally less powerful people will be empowered in the implementation. It is also important that there is a lot of attention in training for IAs and PMOs in participatory processes, gender focus training and social organizing to ensure that the voices of the poor are heard and their position is recognized.
4.4) Direct targeting when services or resources are to be channelled to specific individuals or households. Such measures may include eligibility criteria, to be developed and applied with community participation; quotas (e.g. for women), earmarked funds.	5	Quotas of poor and women participants in project was set for the implementation and M&E.
4.5)Attention to procedural measures that could militate against participation by the intended target groups (such as, excessive beneficiary contributions; cumbersome legal requirements, etc.).	5	The area size for agriculture and agro-forestry was re-considered and was considered acceptable with a view of the targeting strategy to reach the poorest. The beneficiary contribution, 0.6% of total budget,

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		was considered acceptable for
		targeting households.
5) Monitoring targeting performance. Does the design document specify that targeting performance will be monitored using participatory M&E, and also be assessed at Mid-term review?	6	With the quotas for women, categories of B and C, minority of beneficiaries designed for the project, the M&E and Mid-term review will assess the targeting performance.
OVERALL SCORE	5	3, 1

CONTENTS OF THE PROJECT LIFE FILE

- 1. **People** The country programme management team for the HARIIP include the following:
 - (a) Sana F.K Jatta, CPM, APR
 - (b) Irene Li, Finance Officer, CFS;
 - (c) Sylvie Martin, Legal Counsel, LEG;
 - (d) Thomas Rath (APR);
 - (e) Cheikh Sourang (PTA);
 - (f) Sun Yinhong, CPO, China ICO.
- 2. **Project generated knowledge.** The following project design related documents are available in the Programme Life File:
 - (a) Project Concept Note
 - (b) MOU of inception mission
 - (c) MOU of detail design mission
 - (d) Project Detailed Design Report (including 8 Working Papers)
 - (e) QER Reviewers Recommendation Note and CPMT minutes
 - (f) QE Panel Report
 - (g) Responses to the suggestions of RRN and CPMT minutes
 - (h) MOU of design completion mission
 - (i) Project Design Completion mission report (including 13 Annexes)
 - (j) The Working Papers, prepared by the project detailed design mission and finalised by the design completion mission, including the following:
 - i. Working Paper 1: Community Infrastructure Improvement
 - ii. Working Paper 2: Sustainable Agricultural Development
 - iii. Working Paper 3: Household-based Agro-Forestry Development
 - iv. Working Paper 4: Gender and Social Development
 - v. Working Paper 5: Environmental and Social Review Note
 - vi. Working Paper 6: Project Costs and Financing
 - vii. Working Paper 7: Project Economic and Financial Analysis
 - viii. Working Paper 8: Grant Proposal for Scaling-up and Research and Development of Roots and Tuber Crops
 - ix. Working Paper 9: Minutes of Meeting of the Design Completion Mission
- 3. **Knowledge base** Other relevant documents include:
 - (a) Results-Based Country Strategic Opportunities Programme (RB-COSOP) for China 2011-2015;
 - (b) Baseline survey to be prepared during the further design stages
 - (c) Draft Country Programme Review (2010/2011).
- 4. A summary of some of these and other relevant key files for HARIIP that were prepared or compiled during the design phase of the project are included in the working papers or placed on the project life file on XDESK.