

World Bank Loan Project

Shaanxi Poor Rural Areas

Community Development Project

(P153541)

Social Assessment Report

(SA)

Undertaken by Shaanxi Provincial Foreign-funded Poverty Alleviation Project Management
Center

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Main Participants

Person in charge of the Report:

Wang Jiankang, Researcher and President of Shaanxi Provincial Academy of Social Sciences

Authors:

Luo Cheng, Researcher at Shaanxi Provincial Academy of Social Sciences

Zhang Chunhua, Associate Researcher at Shaanxi Provincial Academy of Social Sciences

Lai Zuolian, Associate Researcher at Shaanxi Provincial Academy of Social Sciences

Li Bing, Associate Researcher at Shaanxi Provincial Academy of Social Sciences

Yang Lan, Assistant Researcher at Shaanxi Provincial Academy of Social Sciences

Feng Yuwen, Assistant Researcher at Shaanxi Provincial Academy of Social Sciences

Wang Xiaojuan, Assistant Researcher at Shaanxi Provincial Academy of Social Sciences

Ding Jieqing, Graduate student at Chang'an University

Bao Yudan, Graduate student at Chang'an University

Lu Shaobo, Graduate student at Chang'an University

Data Analysts:

Cheng Yuxi, Graduate student at Northwest University

Zhang Maotuan, Graduate student at Xi'an Wenli College

Min Dong Graduate student at Xi'an Wenli College

Technology Consultant:

Fang Haiyun, Associate Researcher at Shaanxi Provincial Academy of
Social Sciences

Expert on Agriculture planting technologies:

Wang Zhedu, Researcher on Promotion of Agriculture Technologies
at Shaanxi Provincial Station of Agriculture Technologies

Expert on Animal farming technologies:

Liu Shouxuan, Senior Livestock Engineer at Shaanxi Provincial
Bureau of Husbandry and Veterinary Services

Contents

Contents	I
1 Preface	1
1.1 Project Background.....	1
1.2 Project Content and Investment Budget.....	2
1.3 Definition of Project Areas.....	17
1.4 Scope and Subjects of Social Assessment	19
1.5 Social Assessment Tasks.....	23
1.6 Main Content of Social Assessment.....	23
1.7 Social Assessment Methodology.....	25
1.8 Summary.....	30
2 Project Area Social and Economic Development Overview	32
2.1 Project Area Social and Economic Development Overview.....	32
2.1.1 Baiyu Mountain Project Area.....	32
2.1.2 Project Area along the Yellow River.....	33
2.1.3 Project Area on the Dry Highland North of Weihe River.....	34
2.2 Cooperative Status in the Project Areas	34
2.3 Development of Leading Industries in the Project Areas.....	40
2.4 Status of Poverty Alleviation and Projects to be Built in the Project Area.....	43
2.4.1 Poverty Alleviation Progress in the Project Areas.....	43
2.4.2 Status of Content to be Built in the Project Areas	46
2.5 Summary.....	51
3 Stakeholders Analysis.....	53
3.1 Identification of Stakeholders	53
3.1.1 Identified Stakeholders	53
3.1.2 Stakeholders Overview.....	54
3.2 Stakeholders' Roles and Responsibilities in the Project.....	56
3.2.1 Farmers' Role and Responsibility in the Project.....	61
3.2.2 The Roles and Responsibilities of the poverty population, women, the aged, the young, migrant workers, the ill and the disabled	61
3.2.3 The Role and Responsibility of Cooperatives in the Project.....	62
3.2.4 The Role and Responsibility of Related Enterprises in the Project.....	64
3.2.5 The Role and Responsibility of Village Officials in the Project.....	64
3.2.6 The Role and Responsibility of Project Management Offices in the Project.....	64
3.2.7 The Role and Responsibility of Other Related Government Agencies in the Project	67
3.3 Stakeholders' willingness to participate and expectations of the project.....	69
3.3.1 Farmers' willingness to participate and expectations of the project	69
3.3.2 Village Committee's willingness to participate and expectations of the project.....	72
3.3.3 Enterprises' willingness to participate and expectations of the project	73
3.3.4 Related Government Agencies' willingness to participate and expectations of the project.....	73
3.4 Summary.....	75
4 Analysis of the Poverty Households	76
4.1 State of Poverty.....	76
4.1.1 Poverty Dimension Overview.....	76
4.1.2 Causes of Poverty	77

4.1.3 Livelihood of the Poverty Households	80
4.1.4 Poverty Households' Participation in Cooperatives.....	80
4.1.5 Capability of the Poverty Households to Participate in Industries with Unique Advantages	82
4.2 Participation of the Poverty Households in Project Activities	84
4.2.1 Identification of Poverty Household Participators in Project Activities	84
4.2.2 Poverty Households' Knowledge and Participation in Project Activities	85
4.2.3 The Poverty Households' Expectations and Effect Evaluation of the Project Activities.....	87
4.2.4 The Poverty Households' Needs and Preferences of Project Activities	90
4.3 Impact of Project Activities on the Poverty Households.....	92
4.3.1 Positive Influence.....	92
4.3.2 Potential Risks.....	93
4.4 Summary.....	94
5 Cooperative Analysis	96
5.1 Status of Specialized Farmer Cooperatives	96
5.1.1 Cooperative Overview.....	96
5.1.2 Main Categories of Cooperatives.....	101
5.2 Cooperatives' Demand for Project Content.....	102
5.6 Cooperative Case Study	123
5.7 Summary	125
6 Analysis of Government Departments.....	127
6.1 Comments on Past Activities	127
6.2 Views and Requirements on Project construction Content.....	129
6.2.1 Project Management Office	129
6.2.3 Other Related Departments	131
6.3 Project's Influence on Government Departments	134
6.3.1 Project Management Unit.....	134
6.3.2 Poverty Alleviation Office.....	135
6.3.3 Other Related Departments	136
6.4 Project Responsibilities and Management.....	138
6.4.1 Project Organization System and Responsibility Division.....	138
6.4.2 Project Implementation and Operation Management.....	142
6.5 Summary	144
7 Analysis of Gender and Disadvantaged Groups	146
7.1 Development Status of Women in Shaanxi Province and Project areas	146
7.2 Analysis of Women's Development in the First Project Areas.....	147
7.2.1 Women's Development Status	147
7.2.2 Women's development activities in Project Areas.....	152
7.3 Women's Participation and Cognition status in Cooperatives of the First Project Areas.....	155
7.3.1 Cooperative Participation	155
7.3.2 Cognition in Cooperatives.....	157
7.4 Analysis of Women's Needs in the First Project areas	159
7.4.1 Technical Training.....	159
7.4.2 Improving the Infrastructure.....	160
7.5 Content of Women's Participation of Project in First Project areas.....	161
7.6 Project Impact on Women.....	175
7.6.1 Positive Impact.....	175
7.6.2 Negative Impact	176
7.7 Suggestions of projects on improving women's development.....	178

7.7.1 Reform and Improve Membership Registration.....	178
7.7.2 Including “women’s participation” into the establishment and operation standards of the cooperative.....	178
7.7.3 Carrying out various forms of training for women.....	178
7.7.4 Creating a good external environment for women’s participation in the governance of cooperatives.	179
7.8 Summary.....	179
8 Research and Analysis on Project Land Use.....	182
9 Project Participation and Complaint	205
9.1 Project Participation of the Stakeholders.....	205
9.1.1 Information Publicity	205
9.1.2 Consultation.....	207
9.1.3 Participation.....	208
9.2 Complaints Mechanism	215
9.2.1 Complaint Content.....	215
9.2.2 Complaint channels	216
9.3 Summary.....	218
10 Social Risks and Monitoring.....	220
10.1 Main Social Risks.....	220
10.2 Measures to prevent and reduce risks	222
10.3 Monitoring Index.....	224
10.4 Monitoring and Evaluation Plan.....	225
10.5 Summary.....	226
11 Social Assessment Summaries and Conclusion.....	228
11.1 Summaries and Findings.....	228
11.2 Project Impact	233
11.3 Suggestions and Measures	237
11.3.1 Improvement Measures	237
11.4 Adoption of SA Suggestions in FSR	242
Appendix	245
Appendix 1 : Farmer Questionnaire	245
Appendix 3: Basic Information on Communities to be built in ____ County World-Bank-financed Rural Area Community Development Project.....	257
Appendix 4: ____ County World-Bank-financed Rural Area Community Development Project.....	261
Appendix 5: ____ County World-Bank-financed Rural Area Community Development Project Public Participation Plan.....	263
Appendix 6: Statistics on the Land Use in the Project Areas.....	264
Appendix 7: ____ County World-Bank-financed Rural Area Community Development Project Activities Demand Survey	266
Appendix 8: Status of Major Construction Content in the Project Area.....	268
Appendix 9: Farmer Population and Income in Project Counties.....	270
Appendix 10: Project Content with Women Participation.....	271
Appendix 11: Statistics on ____ Project Area Sub-project Activities	274
Appendix 12: Project Participation Manual (Presented independently)	275
Appendix 13: Pictures	275

1 Preface

1.1 Project Background

The World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project (hereafter referred to as the Project) is another innovative poverty alleviation project Shaanxi province has won over at the turning point of the next decade of poverty alleviation. It aims at constructing communities in poor rural areas by introducing the advanced poverty relief ideas. The Project was approved in October 2014 and was shortlisted as the candidate project supported by the World Bank loans in the fiscal years from 2015 to 2017 by the State Commission on Reform and Development and the Ministry of Finance. Implementation of the Project will rely on the utilization of the World Bank's advanced international poverty alleviation ideas under the guidance of the poverty relief policies of the central and provincial governments in this era of precise poverty alleviation strategically important for agriculture industry. The Project focuses on the poor groups in its planning. Among the 29 project areas of the 11 project counties in five cities in the province, 55.3% are designated poverty-stricken villages. In 2014, the poverty incidence in the project area is 29.9%, which is 1.7 times of the provincial poverty incidence of that year. Poverty of the project areas is severe. Therefore, the implementation of the Project is representative and highly exemplary in the development Shaanxi poor rural area.

The Project will implement precise poverty alleviation by utilizing the

local advantages in resources and existing traditionally advantageous industries in the way of industrialization and modernization of agriculture production. By integrating the development of value chains, the Project will provide economic infrastructure and services support for rural areas, as well as agricultural production system and farmer cooperative development capability and building support to realize development-oriented poverty reduction strategy. Its main objective is to improve the income of poverty population in project area so as to consolidate and promote the potential of poverty area for economic development to realize sustainable development of poverty alleviation.

Specific objectives of the Project include, by implementing poverty alleviation through agricultural industrialization and development in project areas, building one or two leading industries with special advantages, enabling poor households to grasp one or two production skills, realizing higher income increase rate of poverty households in project areas than the provincial average level; improving production infrastructure and public services facilities via construction of rural infrastructure; advancing the process of urban-rural integration to reach the public service level of local towns/townships; approaching equalization of public services in villages and towns by building poverty alleviation through agricultural industrialization organizations, rural service infrastructure, construction and management, etc.; improving capacity building in contiguous poor villages and eventually making the 182,200 beneficiaries in the project areas well-off by 2020.

1.2 Project Content and Investment Budget

The Project would consist of four components: Farmer Cooperative and

Value Chain Development, Economic Infrastructure and Services Support, Technical Assistance and Capacity Building Support, Project Management, Monitoring and Evaluation (M&E).

(a) Farmer Cooperative and Value Chain Development

This component includes: (i) Cooperative Establishment and Development, including institutional establishment of cooperatives, storage of processing of agricultural products, market development, etc. (ii) Cooperative Development Fund, involving agricultural infrastructure establishment, agriculture industrialization projects. (iii) Cooperative Enterprise Subsidy Fund/Corporate Competitive Grant (CG).

(b) Economic Infrastructure and Services Support.

This component includes: improving public services of project area centered on infrastructure construction, specifically, connectivity within selected villages, inter- villages, between villages and central small towns and transport networks; upgrading production infrastructure, including construction and rehabilitation of irrigation and drainage infrastructure, production roads, provision of cold storage and other post-harvest facilities, market facilities, etc.; strengthening other infrastructure closely serving the farmers income increasing activities.

(c) Technical Assistance and Capacity Building Support

This component includes: (i) institutional capacity building; (ii) project community capacity building; (iii) cooperative capacity building; (iv) project community development research; (v) famers capability building, and (vi) project facilitators, etc.

(d) Project Management, Monitoring and Evaluation (M&E).

This component includes: management training carried out by monitoring and evaluation agencies of all levels according to project implementation manual, R&D of monitoring platform as well as project evaluation.

Project Quantity of the first 12 confirmed project areas is listed in Table 1-1.

Table 1-1 Project Quantity of the First Project Areas

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'ercun Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
1	Cooperative and Value Chain Development															
1.1	Cooperative Building and Development															
1.1.1	Cooperative Institutional Construction	m ²	3095	400	200	900	575	240		200	60	160	160	200		
	Venue and Equipment Purchase (subsidy)	spot	13	1	1	1	1	1	1	1	1	1	2	1	1	
1.1.2	Market Development															
	Cooperative E-business platform	spot														
	E-business platform building subsidy	spot	11	1	1	1	1	1	1	1		2	1	1		
	Quality Traceability System	set	2						2							
1.1.3	Product Branding and Quality Certificate Subsidy															
	Certificate of Origin	item	5	1		1			1	1			1			

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'ercun Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
	Organic Certificate	item	3				1	1	1							
	Green Product Certificate	item	2		1						1					
1.1.4	Product Exhibit Store Subsidy															
	Second-tier cities and above		3			1	1			1						
	Municipal level															
	County level		2						1		1					
1.2	Cooperative Development Fund															
1.2.1	Agricultural Infrastructure Building															
	New Orchard Drip Irrigation	mu	4437.8			805.00	957.80		1050	525					1100	
	New Rain-harvesting Facilities	apor ²	959							150	300	185		324		100
1.2.2	Agriculture Industrialization Development Support															

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'ercun Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
1.2.2.1	Crop Cultivation Support															
	Minor Grain Crop	hectare	93.33												93.33	
1.2.2.2	Fruit Cultivation Support															
	Apple	Hectare	113.33						40.00						73.33	
1.2.2.3	Other Cultivation Support	hectare	0													
1.2.2.4	Animal Farming Support															
	Calf		1368								1368					
	Breeder she-donkey		400												400.00	
	Piglet		420								420					6000
	Breeder ewe		200										200			
	Stud ram		250										200	50.00		
	lamb		9010								1240		4530	3240		

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'erhuan Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
	Bees	Box	850										850			
1.2.2.5	Protected Agriculture															
	Multi-span greenhouse		6		6											
	Greenhouse		5				5									
	Makeshift greenhouses		50						50.00							
	Orchard Anti-hail Net (Morel Sun screening Net)	mu	2392.8	180.00		805.00	957.80		450.00							
	Orchard Support	mu	525							525.00						
	Orchard soil test		900				900.00									
	Orchard Fertilizing	mu	734.00					734.00								15
1.2.2.6	Animal Farm House Building															
	New	m2	2400												2400	
	Pig Pens for Collective Farming	m ²	2125								2125					

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'ercun Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
	Sheepfold for Collective Farming	m ²	1630										1630			
	Sheepfold in Individual Households	m ²														
	New	m ²	32400											32400		
	Renovated	m ²	10200										10200			
1.2.2.7	Agriculture Implements															
	Farming and Transportation Implements	set	99			5		11		75.00		4.00		4		
	Forage processing implements	set	8								4		1	3		
	Crop Protection Implements	set	20					20								
1.2.2.8	Agriculture Product Storage and Processing															
	Processing Factory Building															
	Civil Engineering (Plant Building)	m2	11370.00	1900	2300			6470		700.0						
	Equipment Purchase	set	5.00		5											

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'erhuan Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
	CA Storage (Cold Storage)		3				1			1		1				
	Civil Engineering	m2	14995				1075			5650		8270				
	Equipment Purchase	set														
	Cold Storage of other types		1					1								
	Civil Engineering	m2	1000.00					1000								
	Equipment Purchase	set														
	Cooperative Apple Post-harvest Processing Assembly															
	Civil Engineering	m2	300.00							300.00						
	Equipment Purchase	set	1							1						
1.2.3	Non-agriculture Industry Development Support															
1.2.3.1	Rural Tourism Project															

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'ercun Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
1.2.3.2	Farm Household Tourism Support	household														
1.3	Cooperative Enterprise Subsidy Fund	item														
2	Economic Infrastructure and Services															
2.1	Land Consolidation		0.00													
2.1.1	Slope to Terrace	hectare	73.33												73.33	
2.1.2	River Embankment	m ³	800										800			
2.2	Irrigation Project															
2.2.1	Staunch															
2.2.2	Motor-pumped Wells															
	Newly-built Motor-pumped Wells (cellar)	hole	27.00		4	3	3		6					1	10	
	Restored Motor-pumped Wells	hole	2.00			1	1									9
2.2.3	New Water diversion pipes and canals	km	0.00													

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'ercun Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
	Stone canals	km	6.2	4.50	1.1								0.6			
	Concrete U-shaped canal	km	15.50		3.5	12										
	Precast U-shaped Canal	km	3.52		3.523											
2.3	Water Supply and Drainage Project															
2.3.1	Water Supply Project															
2.3.2	Drainage Project															
	New	km	0.00													
	Renovated	km	6.45							6.45						
2.4	Road Project															
2.4.1	Production Roads															
	Production Roads															
	Renovated	km	245.77	7.54	4.69	13.5	11.63	14.10	13.60	18.8	31.6	70.112	40.2		20	

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'ercun Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
2.4.2	Production Bridges															
	New	处	22.00		3						8		11			
2.4.3	Inter-community Roads															
	Renovated (concrete)	km	116.42	19		19	12.33	9.03	13.35	5.71	13.1	1.3	11.60	12		
	Renovated (blacktop)	km	3.30					3.30								
	Renovated (brick)	km	13.00												13	
2.5	Environment Project		0.00													
	Civil Engineering	m ²	700.00			500	200									
	Equipment Purchase	Unit (set)	3.00			2	1									
2.6	Rural Energy Project															
	Methane Project	M ³														
	Civil Engineering	M ³	600.00									600				

SN	Project	Unit	Total Quantity	Baoji		Weinan				Xianyang	Yan'an			Yulin		
				Changfeng Community of Linyou County	Liangquan Community of Longxian County	Shiguan Community of Baishui County	Lingao Community of Baishui County	Caocun Community of Fuping County	Ganjin Community of Heyang County	Tingkou County of Changwu County	Shijiao Community of Yanchuan County	Leichi Community of Yanchuan County	He'erhuan Community of Yichuan County	Yangji Community of Dingbian County	Longzhen Community of Mizhi County	Yangjiagou Community of Mizhi County
	Equipment Purchase	M ³														
2.7	Market Development															
	Civil Engineering	m ²	7200.00				200					2000		5000		
	Equipment Purchase	Unit(set)	4.00		4											

Data Source: Feasibility Study Report (FSR) on World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project

The total investment of the Project is RMB718.06 million (\$109.46 million), which includes a baseline cost RMB619.04 million, unpredictable cost RMB 26.78 million, and financial cost incurred during operation RMB 72.24 million (see Table 1-2). Fund will be financed by applying for the World Bank loan of RMB 656 billion (accounting for 91.36% of the total investment) and mobilizing domestic counterpart fund of RMB 62.06 million (accounting for 8.64% of the total investment). Construction of project communities will be carried out in a phased manner with different starting time and content for each project. The entire Project will last for about five years.

Table 1-2 Total Investment Budget

SN	Project	Total Investment			Percentage to Total Investment
		Investment (10,000 yuan)	World Bank Loans (10,000 yuan)	Domestic Counterpart (10,000 yuan)	
I	Project-specific Investment	61904.00	55697.63	6206.37	86.21%
1	Cooperative and Value Chain Development	10661.84	8529.85	2131.99	
2	Economic Infrastructure and Services Support	11523.55	10533.50	990.05	
3	Project Development Fund	30215.66	27131.32	3084.34	
4	Technical Assistance and Capabilities Building	7495.47	7495.47	0.00	
5	Project Management, Monitoring and Evaluation	2007.48	2007.48	0.00	
	Total Direct Cost	61904.00	55697.63	6206.37	

II	Unpredictable Cost	2678.54	2678.54		3.73%
III	Total Project Cost (I+ II)	64582.54	58376.17	6206.37	89.94%
IV	Financial Cost incurred during Project Operation	7223.83	7223.83		10.06%
1	Front-end Fee	164.00	164.00		
2	Commitment Fee	163.96	163.96		
3	Interest Incurred during Construction	6895.87	6895.87		
V	Total Investment	71806.37	65600.00	6206.37	100.00%

Data Source: Feasibility Study Report on World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project

1.3 Definition of Project Areas

Selection of project counties follows three major principles: exemplary effect, focus on poverty-stricken areas and voluntariness; while selection of project areas follows five principles: conformity with the planning, target at poverty, appropriate size, effect and efficiency, as well as sustainability. Selection and identification was carried out among all the poverty counties and project areas in the province. The Project covers 11 counties of five prefecture-level cities (see Table 1-3), including Linyou County and Longxian County of Baoji Municipality, Changwu County of Xianyang Municipality, Fuping County, Baishui County and Heyang County of Weinan Municipality, Dingbian County and Mizhi County of Yulin Municipality, Yichuan County, Yanchang County and Yanchuan County of Yan'an Municipality. 29 poverty-stricken areas with appropriate size were chosen as project areas, among which 12 communities were identified as the first project areas.

Table 1-3 Project County Poverty Status

SN	Project City	Project County (District)	Project Area	Number of First Project Areas	Number of Townships Covered	Number of Administrative Villages Covered	Designated Counties of National Poverty Alleviation Plan	Counties in the Contiguous Poverty-stricken areas at National Level	Counties in the Contiguous Poverty-stricken areas at Provincial Level	Counties in the Former Revolutionary Base Areas	Remarks
Total	5	11	29	12	29	221	11	4	6	7	
1	Baoji	Longxian	3	1	3	15	√	√			

1 Preface

2		Linyou	3	1	3	16	√	√			
3	Xianyang	Changwu	3	1	3	8	√	√		√	
4	Weinan	Heyang	3	1	3	14	√		√		
5		Baishui	3	2	3	15	√		√		
6		Fuping	2	1	2	13	√			√	
7	Yan'an	Yanchuan	2	1	2	38	√		√	√	
8		Yichuan	3	1	3	19	√		√	√	
9		Yanchang	2	1	2	37	√		√	√	
10	Yulin	Mizhi	3	1	3	33	√	√		√	
11		Dingbian	2	1	2	13	√		√	√	

Data Source: Feasibility Report on World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project

1.4 Scope and Subjects of Social Assessment

Scope of Social Assessment includes 683 natural villages, 253 administrative villages (including 140 designated poverty villages) of 29 towns/townships in the 11 counties of five prefecture-level cities covered in the project area.

Social assessment subjects include 45,357 rural households in the project area with a total population of 177,578, among which 48,665 of 13621 households are poverty-stricken population. The first 12 project communities covers 132 towns/townships, 118 administrative villages and 53 designated poverty villages, and 300 natural villages, involving 20,194 households with a total population of 79,377, including 19634 poverty population of 5541 poverty households with a poverty incidence of 24.74%. (See Table 1-4)

There is no minority county in Shaanxi province. Ethnic minorities inhabit in the province in a dispersed and mixed manner. There are only three minority townships in the province, namely, Maoping Township and Xikou Township of Hui Nationality of Zhen'an County, Jiangkou Township of Hui Nationality of Ningshan County. There are 54 ethnic minority groups in Shaanxi province, a majority of which are Hui nationality. The population of permanent minority residents is 190,000, accounting for 0.48% of the total population of the province. In terms of regional distribution, they mostly scatter around with small clusters and a majority living in cities rather than rural areas. 70% of the minority populations live in cities and townships, while only 30% live in rural areas. In the five cities covered by the Project, the population of ethnic minorities only accounts for 0.21% of the whole population, in which the minority population of Yan'an municipality only accounts for 0.07%, which is the lowest, and the percentage living in the rural area is far less. There are no villages or clusters of ethnic minorities in the 29 project communities. Therefore, social assessment of the Project will not involve issues of ethnic minorities. (Data source: The 12th Five-year Plan of Ethnic Affairs of Shaanxi Province, 2012)

Table 1-4 Social Assessment Scope and Subjects

Municipalities	Percentage of Ethnic Minorities	County	Project Area	Total Population	Number of Households	Poverty Population	Poverty Households	Number of Administrative Villages	Designated Poverty Villages	Poverty Incidence Rate
Baiji	4.9‰	Linyou County	Changfeng Project Area of Changfeng Township (First)	5655	1433	1947	458	5	4	34.43%
			Jiufang Project Area	4209	1028	1538	437	4	3	36.54%
			Zhaoxian Project Area	6137	1648	1862	517	6	5	30.34%
		Longxian County	Liangquan Project Area of Dongfeng Township (First)	6729	1459	2076	463	5	2	30.85%
			Tieyuan Project Area of Tiancheng Township	4663	1036	2012	420	3	2	43.15%
			Guguan Project Area of Guguan Township	4758	1147	1999	549	6	6	42.01%
Xianyang	2.4‰	Changwu County	Tingkou Project Area (First)	3356	918	1073	301	3	2	31.97%
			Hongjia Project Area	3324	852	1150	331	3	2	34.60%
			Jujia Project Area	4680	1211	1310	337	3	2	27.99%
Weinan	1.1‰	Baishui County	Lin'gao Project Area (First)	8186	1967	2118	551	5	5	25.87%
			Shiguan Project Area (First)	4576	1167	1484	440	4	1	32.43%
			Dukang Project Area	5839	1382	2227	516	4	2	38.14%
		Fuping County	Caocun Township Project Area (First)	14755	3737	2965	926	6	3	20.09%

Municipalities	Percentage of Ethnic Minorities	County	Project Area	Total Population	Number of Households	Poverty Population	Poverty Households	Number of Administrative Villages	Designated Poverty Villages	Poverty Incidence Rate
			Daoxian Township Project Area	12784	3333	3722	1144	6	6	29.11%
			Xuezhen Township Project Area	13150	2939	2214	595	7	3	16.84%
		Heyang County	Ganjing Project Area (First)	5685	1485	1728	511	3	2	30.40%
			Zhibu Project Area	6332	1587	2267	600	4	3	35.80%
			Yangjiazhuang Project Area	7853	1904	2851	796	6	4	36.30%
Yulin	1.3‰	Dingbian County	Yangjing Project Area (First)	12521	3012	1476	393	9	2	11.79%
			Baiwanzi Project Area	3964	670	878	150	5	1	22.15%
		Mizhi County	Yangjiagou Project Area	4470	1450	1015	340	7	3	22.71%
			Longzhen Township Project Area (First)	5883	1666	1333	464	16	4	22.66%
			Yindou Project Area	2969	961	706	223	6	6	23.78%
Yan'an	0.7‰	Yichuan County	He'erchuan Project Area (First)	2447	788	845	305	8	5	34.53%
			Jiyi Project Area	5783	1823	1524	580	6	5	26.35%
		Yanchang County	Leichi Project Area (First)	4213	1053	1194	304	46	17	28.34%
			Luozishan Project Area	2425	606	567	189	49	28	23.38%

Municipalities	Percentage of Ethnic Minorities	County	Project Area	Total Population	Number of Households	Poverty Population	Poverty Households	Number of Administrative Villages	Designated Poverty Villages	Poverty Incidence Rate
		Yanchuan County	Shiyao Project Area (First)	5371	1509	1395	425	8	6	25.97%
			Dazhang Project Area	4861	1586	1189	356	10	6	24.46%
Total	2.1‰	11 counties	29 project areas	177578	45357	48665	13621	253	140	27.40%

Data Source: Shaanxi Provincial Ethnic Affairs Committee and county-level PMOs

1.5 Social Assessment Tasks

Social Assessment of the Project is aimed at finding out the development status of the industries and the development needs of rural households in the project areas, the status of farmer cooperatives and the intention and needs of stakeholders, identifying the potential social risks of the Project and trying to avoid or lessen the risks by related suggestions and measures, helping to improve project design and implementation to solicit support and effective participation of individuals and groups that are most directly affected by project activities. Therefore, the major tasks of the Social Assessment include:

(a) Identify major stakeholders of the Project; understand each stakeholder's recognition, needs and suggestions toward potential impact and risks of the Project.

(b) Find out the establishment and development of farmer cooperatives in the project area, including the status of farmer cooperatives, its major operation method and effect; evaluate the status, capacity and sustainability of existing cooperatives, potential problems under existing project objectives and measures for improvement, cooperation practice and benefit distribution among farmers, enterprises, farmer cooperatives and government.

(c) Understand the industrial development in the project area, methods, sources and sustainability of the livelihood of local farmers, major problems and risks thereof, potential impact and risks the Project might bring to the livelihood of farmers.

(d) Learn the needs and attitude of poverty-stricken groups, women, the aged and the disabled toward the Project, especially toward the advantageous industries and cooperatives, and identify the Project's impact on them.

(e) Identify the project land acquisition and occupation, and analyze the impact of land acquisition as well as farmers' attitudes and opinions toward project land acquisition and occupation.

(f) Propose suggestions on measures to dodge or mitigate social risks of the Project to facilitate the realization of project objectives.

1.6 Main Content of Social Assessment

Main content of the Social Assessment includes: social economic baselines of the project areas, identification of stakeholders, analysis of poverty households, cooperatives and related government line agencies, gender analysis, analysis of project land acquisition, project participation

and complaint system, and policy suggestions, monitoring and evaluation, etc. Therein, focuses are fixed on identification of specific projects and reasons, project participation and disclosure mechanism, specific project mechanism, measures and key indicators of implementation.

(a) Social economic baselines: identify the scope and groups of beneficiaries, understand the social economic background of project areas, including population, land, income, crop and animal Farming, ecological resettlement and infrastructure, etc., describe and analyze the development of famer cooperatives and leading industries in project areas.

(b) Stakeholder analysis: identify major stakeholders on the project, such as villagers influenced (particularly focusing on disadvantaged groups including poverty households, women, the aged and the disabled, etc.), farmer cooperatives, enterprises related to the development of cooperative industry chain, poverty alleviation offices, etc. with focus on the attitudes and demands of major stakeholders such as villagers, cooperatives and enterprises toward development and the project; analyze the positive and negative influences of the Project on major stakeholders.

(c) Cooperative analysis: analyze the organization and operation methods as well as pros and cons of existing cooperatives in project areas; propose suggestions on the improvement of cooperatives as required by the development of exemplary industries based on the attitudes and knowledge of farmers towards cooperatives in project areas.

(d) Poverty analysis: learn the poverty status and causes of poverty in project areas; analyze the poverty-stricken groups' knowledge of, attitudes and demands toward the project, as well as the project's impact on the poverty-stricken groups.

(e) Gender analysis: understand the women development and existing women development activities; analyze women's participation in cooperatives, women's development needs as well as project's impact on women.

(f) Land acquisition and occupation analysis: learn about the basic status of land acquisition and occupation in project areas and its potential impact on farmers, famers' attitudes and opinions toward land acquisition and occupation by identifying and screening of land acquisition and resettlement.

(g) Related measures and suggestions: through project risk identification and analysis, propose targeted policy suggestions and work plans to avoid or mitigate social risks in the project, and offer suggestion to the design of .project information disclosure

1.7 Social Assessment Methodology

Social Assessment Investigation Unit consists of four teams with 9 members each (including one expert on crop farming, animal farming, immigrant policy and feasibility study respectively). SA adopts the methodologies of social sciences, including literature review, field study (including participatory observation, interviews with people with key information, profound interviews, seminars, and questionnaires) and data analysis, etc., to acquire complementary and mutually verifiable materials and data from various sources so that SA results approach the reality as much as possible. Specific SA process is as follows:

(a) Literature Review

Social Assessment Investigation Unit conducted literature review mainly by acquiring materials from related government agencies, searching project information on the internet and collecting data on the spot. Literature collected include: project feasibility reports at municipality and county levels; the 12th Five-year plans of municipalities and counties as well as government line agencies concerned, statistical yearbooks and communiques of 2014 and 2015 of Shaanxi province as well as municipalities and counties concerned; poverty alleviation plans, industry development plans and major project implementation planning of municipalities and counties concerned, survey reports on ethnic minorities in project cities and counties, status and planning of land transfer and consolidation and ecological resettlement in the project area, survey report on the status and planning of women development in project cities and counties, development plans of special advantageous industries, plans of pest control and prevention management, agricultural training records in project cities and counties, as well as data collected on the spot.

(b) Field Study

The four investigation teams, with the full support and cooperation from persons and departments in charge of the project of the poverty alleviation offices at county level, conducted two-month field studies in 11 counties of Shaanxi province. Subjects of the investigation include poverty households, cooperatives, related agricultural enterprises, village committees, project management offices, poverty alleviation offices as well as other government line agencies concerned in the project area. Details of the field study are listed in *the World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project Farmer Questionnaire, Community Information Table, Farmer Cooperative Survey, Project Land Survey, Project Public Participation Plan, Interview Outline for Project Management and Government Line Agencies Concerned, Interview Outline for Farmers, Interview Outline for Women,*

the Young, the Aged, and the Disabled, Interview Outline for Cooperatives and Enterprises, and Interview Outline for Village Committee (See Table 1-5).

Table 1-5 Project Field Study and Interviews

Municipality	County	Time of Study	Subjects, Content and Methodology of Study	Team Leader	Recorded by
Baoji	Longxian County	January 20, 2016 March 3, 2016	Main Content: 1. The attitudes of Longxian County government agencies and farmers in the community toward the Project are positive; 2. Analysis of community project management method, land acquisition and resettlement, ways to solve conflicts, enterprises, cooperatives and infrastructure construction in the project area, farmer self-governance and causes of poverty. Interview Subjects: County government agencies concerned Method: individual interview	Feng Yuwen	Feng Yuwen
	Linyou County	July 23 -24, 2015	Main Content: industry development, corporate operation main body, infrastructure, water for domestic use and production, public facilities, agricultural training, poverty alleviation, and disadvantaged groups, etc. Interviewees: Bureau of Land, Bureau of Transportation, Bureau of Culture, Supply and Marketing Cooperative, Bureau of Forestry, Bureau of Reform and Development, Bureau of Water Affairs, and Bureau of Agriculture Method: Seminars and questionnaires	Feng Yuwen	Wei Wen
Xian yang	Changwu County	December 7-9, 2015	Main Content: Agriculture (focus on fruits industry) development status, women development, related government agencies' approach to conflicts and other problems and suggestions; farmer's opinions, suggestions toward and willingness to develop cooperatives; cooperatives and related enterprises managers' analysis, opinions and suggestions toward the status and development objectives and problems of their own organizations; project land. Interviewees: 1. Project management units, related government agencies, 2. Farmers (women, the young, the old and the disabled), 3. Village committees (of 3 administrative villages), 4. Cooperatives and related enterprises. Method: seminars, group interview, individual interview and questionnaire	Luo Cheng	Yang Lan
Weinan	Heyang County	December 16, 2015	Main content: cooperative and value chain development, infrastructure establishment, technical assistance and agriculture construction, land acquisition and resettlement, project monitoring and management (for details please refer to the outline of each interview) Interviewees: functional departments, officials of 6 villages of Heyang County project area, disadvantaged groups (representatives of women, the young, the aged and the disabled), Jiujia Crop Farming Cooperative of Heyang County (Chairman Li Jianfeng), and villager representatives Method: seminars, group interview, individual interview and questionnaire	Lai Zuolian	Lai Zuolian
	Baishui County	January 15, 2016	Main Content: cooperative operation status, expectations and appeals of stakeholders, participation method of cooperative farmers, cooperative interest distribution mechanism Interviewee: Zhang Tianlong from Baishui Apple Cooperative Method: individual interview	Wang Jiankang	Wang Jiankang

Municipality	County	Time of Study	Subjects, Content and Methodology of Study	Team Leader	Recorded by
	Fuping County	December 16 – 17, 2015	<p>Main Content: cooperative and value chain development, infrastructure establishment, project land, technical assistance and agriculture establishment, project monitoring and management (details are listed in the interview outline).</p> <p>Interviewees: Poverty Alleviation Office, Bureau of Tourism, Women Federation, Bureau of Water Affairs, Bureau of Agriculture, Bureau of Civil Affairs, Bureau of Fruit Industry, Bureau of Forestry; village officials and villagers (Bai Peng, etc.) of 6 villages in Caocun Township project area of Fuping County</p> <p>Method: seminar, group interview and questionnaire</p>	Lai Zuolian	Lai Zuolian
Yan'an	Yanchang County	July 20-23, 2015	<p>Main Content: poverty status, farmers' willingness, enterprise status in the project area, immigrant resettlement, farmer skill training, project land and land transfer, industry development status, suggestions to the project, etc.</p> <p>Interviewees: County Bureau of Reform and Development, Bureau of Agriculture, Bureau of Fruit Industry, Bureau of Forestry, Bureau of Animal Husbandry, Bureau of Tourism and Bureau of Transportation, etc.; 30 farmers and 15 village and township officials from Hujiacun village, Wacun village, Zhongcun village of the poverty alleviation cluster of Heijiabu Township, and the first community of Leichi Township</p> <p>Method: seminar, group interview and questionnaire</p>	Wei Wen	Wei Wen
	Yanchuan County	December 16, 2015	<p>Main Content: cooperative operation status, stakeholders' expectations and appeals, participation methods of cooperative farmers, cooperative interest distribution mechanism, farmers' attitude toward cooperative, problems analysis and suggestions, etc.</p> <p>Interviewees: Village committee of Fanjiachuan of Jiajiaping Town of Yanchuan County, Party Secretary Mr. Gao of Shiyao village, farmers of Shiyao community, women's seminar of Shiyao community (7 people including Jing Xiufang and Biao Lanxiang).</p> <p>Method: Group and one-on-one interview, questionnaire</p>	Luo Cheng, Ding Jieqiong	Xin Moye, Bao Yudan
	Yichuan County	January 25, 2016	<p>Main Content: 1. The attitudes of Yichuan County government agencies and community farmers toward the community development project are positive. 2. Community project management method, land acquisition and resettlement, approaches to conflicts, project area enterprises, cooperatives and infrastructure establishment, analysis of farmers' self-governance and causes of poverty.</p> <p>Interviewee: Yichuan County government agencies concerned</p> <p>Method: individual interview</p>	Yang Lan	Yang Lan
Yulin	Dingbian County	July 21-24, 2015	<p>Main Content: Cooperative operation status, stakeholders' expectations and appeals, cooperative farmer's participation method, cooperative interest distribution mechanism, farmers' attitude toward cooperative, problems analysis and suggestions, project land, etc.</p> <p>Interviewees: Poverty Alleviation Office, Village Management Guidance Station, Bureau of Agriculture, village committees of Baiziwan community, village officials and villager representatives of Xiaojianzi village, Baiziwan village, Yaotai village, Liutai village, Jinpenwan village and Yangjing township.</p> <p>Method: Group and one-on-one interviews, questionnaire</p>	Yang Lan	Yang Lan, Chang Ting

Municipality	County	Time of Study	Subjects, Content and Methodology of Study	Team Leader	Recorded by
	Mizhi County	December 18, 2015	<p>Main Content: Cooperative operation status, stakeholders' expectations and appeals, cooperative farmer's participation method, cooperative interest distribution mechanism, farmers' attitude toward cooperative, problems analysis and suggestions, project land, etc.</p> <p>Interviewees: Villager representatives of Gongjiagou village of Yangjiagou Township of Mizhi County, Director Wang of Yangjiagou township government, Party Secretary of Gongjiagou village; Lao Gao, head of Vineyard Cooperative; Lao Li, worker at the Pig Farm Cooperative; Lao Gao, head of Donkey Meat Processing Cooperative; Lao Liu, head of Sheep Farm Cooperative</p> <p>Method: group interview and individual interview</p>	Luo Cheng, Zhang Maotuan	Wang Gang, Xin Moye

Methods adopted in the study include:

(i) Participatory Observation

SA investigation team visited government management agencies, project management agencies and the persons in charge, village committees, related agricultural enterprises, cooperatives and some residents, poverty households in particular, door to door, in all the project areas. By investigating and understanding the appearances, conditions of the villages and the people of all communities in the project areas, and by talking to the residents and officials of all levels in the towns/townships and villages, the team got a deeper understanding of the social economic and cultural status as well as the living conditions of the project areas, the scope of project impact, possible impact on the villagers and potential risks, which provides objective evidence for the optimization of project design.

(ii) Interviews with People with Key Information

SA investigation teams conducted interviews on a county-by-county basis with people with key information in related government agencies including poverty alleviation office, bureau of agriculture, bureau of animal husbandry, bureau of fruit industry, bureau of forestry, bureau of water affairs, supply and marketing cooperative, bureau of tourism, and the women's federation, with heads of town/township governments and villages, persons in charge of the cooperatives and associations, and agricultural technicians. The interviews aimed at soliciting opinions and suggestions from stakeholders on the project so as to provide better advice to the project design and implementation. The investigation teams visited over 30 agencies in three counties and held 8 interview meetings and talked with over 150 interviewees.

(iii) Profound Interviews

SA investigation teams and PMOs organized major stakeholders in the project areas to have face-to-face interview in order to understand their lives and work, the project's impact on them and potential risks, as

well as their opinions and suggestions toward the project design and implementation.

(iv) Questionnaires

A random sample of recipients of the questionnaires were chosen by multi-phase sampling with consideration of project content and characteristics of the project areas, organization and operation model of famer cooperatives, and features of different advantageous industries (categorized into crop and animal farming and service industries, etc.). The samples are distributed in all the communities of the first project areas.

The sample size is 730, with at least 50 for each community. 623 valid questionnaires were collected, validity rate being 94.9%. Therein, 581 samples are male, accounting for 83.8% of all valid questionnaires, and 112 are female accounting for 16.2%; 213 are poverty households, accounting for 30.7%. All questionnaires were distributed, answered and collected on the spot.

(v) Focus Group Seminar

Focus group seminars were usually arranged after indoor questionnaires. By organizing seminars among members of village committees, representatives of cooperatives and local farmers (mostly poverty households, including such disadvantaged groups as women and the disabled) in the project communities, SA investigation teams investigated the status of farmers' livelihood and production, their participation in the cooperative operation and agriculture industrialization, their knowledge of and willingness to participate in the project, as well as their attitudes, needs, opinions and suggestions toward the project. In the social assessment process, 14 seminars were held among villager groups. 8 participants were chosen randomly in each community including poverty households, women and the disabled. Altogether there were 112 participants in the seminars, including 32 poor people, accounting for 28.6% of the total; 16 women, accounting for 14.3%; and 13 disabled persons, accounting for 11.6%.

(vi) On-the-spot Data Collection

Data collected on the spot by the investigation teams include: statistical yearbooks, poverty alleviation and development plans, industry development plans, major projects implementation plans, land transfer and consolidation, status and plans of ecological resettlement, women development plans (including total population, education level, age and employment status, participation in existing cooperatives and poverty alleviation programs, etc.), agricultural training records, and materials on famer cooperative organizations, etc.

(c) Data were analyzed with both qualitative and quantitative measures. In quantitative analysis, database of questionnaires was set up

via SPSS and analyzed with SPSS11.5; after compiling all the excel data acquired, data were calculated and analyzed repeatedly. Data from various sources were compared to guarantee the reliability and authenticity of the data and then totalized or averaged. In qualitative analysis, interviewers firstly sorted out all the written and audio records of all interviews and the results of field observations. Then discussions were conducted within the investigation teams to verify inconsistent information from different sources. If there is unidentifiable information, it would be recorded objectively.

1.8 Summary

1. The World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project is another innovative poverty alleviation project Shaanxi province has won over at the turning point of the next decade of poverty alleviation. It aims at constructing communities in poor rural areas by introducing the advanced poverty relief ideas. The project scope was determined by the Foreign-funded Poverty Alleviation Project Management Center of Shaanxi Provincial Poverty Alleviation Office after screening the poverty-stricken counties and project areas in the province according to the selection criteria proposed in the Aide-Memoir by the World Bank Project Identification Mission. It covers 29 projects areas in 11 project counties of five prefecture-level cities.

2. The Project would consist of four components: Farmer Cooperative and Value Chain Development, Economic Infrastructure and Services Support, Technical Assistance and Capacity Building Support, Project Management, Monitoring and Evaluation (M&E). The total investment of the Project is RMB791.67 million (\$120.68 million), in which 82.9% is World Bank loans and 17.1% is domestic counterpart fund. Construction of project communities will be carried out in a phased manner. The first phase includes 12 project areas. The Project will last for about five years.

3. Scope of Social Assessment includes 253 administrative villages of 29 towns/townships in the 11 counties of five prefecture-level cities covered in the project area. Social assessment subjects include 45,357 rural households in the project area with a total population of 177,578, among which 48,665 are poverty-stricken population. There are no villages or clusters of ethnic minorities in the 29 project communities. Therefore, social assessment of the Project will not involve issues of ethnic minorities.

4. Social Assessment of the Project is aimed at finding out the development status of the industries and the development needs of rural households in the project areas, the status of farmer cooperatives and the

intention and needs of stakeholders, identifying the potential social risks of the Project and trying to avoid or lessen the risks by related suggestions and measures, helping to improve project design and implementation to solicit support and effective participation of individuals and groups that are most directly affected by project activities.

5. Main content of the Social Assessment includes: social economic baselines of the project areas, identification of stakeholders, analysis of poverty households, cooperatives and related government line agencies, gender analysis, analysis of project land acquisition, project participation and complaint system, and policy suggestions, monitoring and evaluation, etc. Therein, focuses are fixed on identification of specific projects and reasons, project participation and disclosure mechanism, specific project mechanism, measures and key indicators of implementation.

6. SA adopts the methodologies of social sciences, including literature review, field study and data analysis, etc., to acquire complementary and mutually verifiable materials and data from various sources so that SA results approach the reality as much as possible.

2 Project Area Social and Economic Development Overview

2.1 Project Area Social and Economic Development Overview

In 2014, the per capita disposable income of rural residents of Shaanxi province was RMB 7,923. Statistics show that the per capita disposable income of farmers in the 11 project counties is RMB 8,571, while the per capita disposable income of farmers in the 29 project areas is only RMB 5,348. The project area covers a total area of 55757.6 hectares, which includes 20768.9 hectares of arable land, 4336.8 hectares of available forestland, 5658.9 hectares of orchards, 4,804 hectares of available grass land, 6,822 hectares of available wasteland, and 383.3 hectare of water area, in which 273.8 hectares are available.

Research shows that the project areas still rely on traditional crop and animal Farming. Grain crops include wheat, corn, buckwheat, potato, broomcorn millet, foxtail millet and all kinds of beans. Economic crops include vegetables, apple, and all kinds of dried fruits and nuts. In 2014, the total area under grains was 177829 hectares with an output of 577991 tons, which is basically able to meet the needs in daily life. Raised livestock include cattle, cow, sheep, horse, mule and donkey. In 2014, the population of livestock on hand by the year-end was 74399, and the population of pigs, sheep and poultries on hand by the year-end was 211298, 1110506 and 1678500 respectively. The output of forage grass and meat was 1920000 and 32887 tons respectively. The project areas on the whole lack mature markets for agricultural products. The exchanges of production and life materials depend on country fairs, which are small in size and low-end, which makes the commodity transaction very difficult.

Geographically, the project areas can be put into three categories, namely Baiyu Mountain area, earth-rocky mountain area along the Yellow River, and dry highland north of Weihe River. Baiyu mountain area covers one county (Dingbian County); the area along the Yellow River involves four counties (Mizhi, Yanchuan, Yanchang and Yichuan); and the dry highland north of Weihe River involves six counties (Linyou, Longxian, Changwu, Fuping, Baishui and Heyang).

2.1.1 Baiyu Mountain Project Area

Baiyu Mountain area involves 13 administrative villages and 2

designated poverty villages in two towns/townships of Dingbian County of Yulin Municipality, covering 3919 households with a total population of 16401, in which 3201 are people in poverty.

Urbanization in the project area is backward. The project area lacks mature markets for agricultural products. The exchanges of production and life materials depend on country fairs, which are small in size and low-end, which makes the commodity transaction very difficult.

The project area still relies on traditional crop and animal Farming. Grain crops include buckwheat, potato, foxtail millet and all kinds of beans. In 2014, the total agricultural acreage of Dingbian County was 136421 hectares, in which area under grains was 111142 hectares with an output of 298472 tons, which was basically able to meet the needs in daily life. Area under economic crops was 18129 hectares.

Raised livestock include cattle, cow, sheep, horse, mule and donkey. In 2014, the population of livestock on hand by the year-end in Dingbian County was 18136, and the population of pigs, sheep and poultries on hand by the year-end was 99779, 852291, and 475300 respectively. The output of forage grass and meat was 500,000 tons and 19954 tons respectively.

2.1.2 Project Area along the Yellow River

The earth-rocky mountain area along the Yellow River is a contiguous poverty area at provincial and national level. The four project counties in this region involves 10 towns/townships, 127 administrative villages, 33 designated poverty villages with a total number of 17333 households and a total population of 56288, including poverty population of 15548. The project area is densely populated with insufficient land bearing capacity and little mineral resources. It has been an area of severe poverty in history with severely backward economic development.

Material exchange in the project area relies on country fair. Transaction in counties also account for a large part of all transaction. The situation of commodity transaction is ill-adapted to the current productivity and living standards.

The project area still relies on traditional crop and animal farming. Grain crops include foxtail millet, potato, broomcorn millet and all kinds of beans. In 2014, the total agricultural acreage was 70,000 hectares, in which area under grains was 60,000 hectares with an output of 200,000 tons. The per capita share of grains is 275 kg, which is basically able to meet the needs in daily life. Area under economic crops was 200,000 hectares.

Raised livestock include donkey, cow, horse, and mule. In 2014, the population of livestock on hand by the year-end was 50,000. The

population of slaughtered pigs and sheep was both 100,000 and the population of pigs, sheep and poultries on hand by the year-end was 100,000, 100,000 and 112 million respectively. The output of forage grass and meat was 220,000 tons and 100,000 tons respectively.

2.1.3 Project Area on the Dry Highland North of Weihe River

The six counties in the project area on the dry highland north of Weihe River involves 17 towns/townships, 81 administrative villages, 41 designated poverty villages and 26865 households with a total population of 109,600, in which the poverty population is 35,800. Since on the dry highland area north of Weihe River are mostly highlands with broken surface alternating with deep gullies with barren soil and deficient water resources. The fragile ecological environment, backward infrastructure and social undertaking, poor living conditions and narrow space for development slow down the income increase of farmers, which makes the area a new concave ground for the provincial poverty alleviation effort.

The project area still relies on traditional crop and animal farming. Grain crops include wheat, apple and all kinds of fruits and nuts. In 2014, the total agricultural acreage was 10,195 hectares, in which area under grains was 6687 hectares with an output of 73519 tons. Area under economic crops was 200,000 hectares.

Raised livestock are mostly cattle. In 2014, the population of cattle on hand by the year-end was 6263. The population of pigs, sheep and poultries on hand by the year-end was 11519, 28215 and 83200 respectively. The output of forage grass and meat was 120,000 tons and 2933 tons respectively.

2.2 Cooperative Status in the Project Areas

Currently, there are 3114 specialized farmer cooperatives in the 11 poverty counties under the Project. Therein, there are 166 cooperatives in the 29 project areas (crop farming cooperatives account for 57%, animal farming cooperatives account for 36% and service cooperatives account for 7%); and 69 cooperatives in the first 12 project areas. Information on the existing cooperatives in the project area is listed in Table 2-1.

Statistics show that in the 29 project areas, 13830 households are member of cooperatives, in which 4507 households are in poverty, accounting for 33% of all members. The investigation found that there are only 26 enterprise and social group members of existing cooperatives, only accounting for less than 1%, which is very limited. The investigation also found that all the 116 cooperative members in 21 project areas are all

farmers, accounting for 70% of the total. The mindset of small-scale production is very strong among some farmers due to decentralized management and contract over the past years. They haven't formed correct ideas of specialized farmer cooperative. Cooperative members' capability and management level is low. Although there are no official statistics on the actual operation of cooperatives, analysis of interview records and questionnaires found that most cooperatives in the project areas are not large in scale with inadequate driving ability on the whole. The internal operation mechanism is not mature with poor sustainability, and ambiguous definition of surplus income and divisible surplus. Even further, some cooperatives do not have operation activities after being registered.

Among the 30 cooperatives in the first 12 project areas, the earliest one was registered in 2007 (Huali Persimmon Cooperative of Fuping County and Taibai Persimmon Product Cooperative of Caocun Township). There are 9 newly registered (registered in 2015) and 4 pending cooperatives (register later than 2015), accounting for 30% and 13.3% respectively.

Analysis of interview records and questionnaire results show that poverty households become shareholders mostly by providing land, capital, skills and labor. The percentage of joining with land is the highest, reaching 53.75%, seconded by joining with capital, which accounts for 32.5%. In the third place is joining by offering skills and labor, accounting for 21.25%. Major decision-making methods of cooperatives include decision making solely by the legal person, by major shareholders and by members congress. Of the three methods, decision-making by member congress takes a highest percentage, reaching 72.5%, which shows that members enjoys a fairly high level of participation, management and decision-making rights.

Table 2-1 Statistics on Existing Cooperatives in Project Areas

County	Number of Cooperatives	Project Area	Number of Cooperatives	Category			Number of Participants	Category		
				Crop Farming	Animal Farming	Service		Number of Farmers (Households)	Number of Poverty Households	Number of Enterprise & Public Institution and Social Organization Members
Linyou County	112	Changfeng Project Area of Changfeng Township (First)	5	5			251	251	167	
		Jiufang Project Area	10	8	2		633	620	245	13
		Zhaoxian Project Area	8	5	3		716	716	54	
Longxian County	234	Liangquan Project Area of Dongfeng Township (First)	4	4			345	343	119	2
		Tieyuan Project Area of Tiancheng Township	3	1	2		11	11	1	
		Guguan Project Area of Guguan Township	3	2	1		60	60		
Changwu County	205	Tingkou Project Area (First)	3	3			2214	2212	312	2

2 Project Area Social and Economic Development Overview

County	Number of Cooperatives	Project Area	Number of Cooperatives	Category			Number of Participants	Category		
				Crop Farming	Animal Farming	Service		Number of Farmers (Households)	Number of Poverty Households	Number of Enterprise & Public Institution and Social Organization Members
		Hongjia Project Area	5	3	1	1	357	357	256	
		Jujia Project Area	2	1	1		50	50	41	
Baishui County	540	Lin'gao Project Area (First)	3	1	1	1	781	779	269	2
		Shiguan Project Area (First)	4	2		2	623	622	275	1
		Dukang Project Area	7	5	2		180	180	81	
Fuping County	521	Caocun Township Project Area (First)	9	8	0	1	1546	1545	295	1
		Daoxian Township Project Area	15	10	5		776	776	15	
		Xuezhen Township Project Area	5	2	3		615	615	206	
Heyang County	213	Ganjing Project Area (First)	2	2			344	344	179	

2 Project Area Social and Economic Development Overview

County	Number of Cooperatives	Project Area	Number of Cooperatives	Category			Number of Participants	Category		
				Crop Farming	Animal Farming	Service		Number of Farmers (Households)	Number of Poverty Households	Number of Enterprise & Public Institution and Social Organization Members
		Zhibu Project Area	3	2	1		64	64	4	
		Yangjiazhuang Project Area	2	1	1		86	86	11	
Dingbian County	210	Yangjing Project Area (First)	9	5	4		57	57	11	
		Baiwanzi Project Area	9	7	1	1	60	56	7	4
Mizhi County	310	Yangjiagou Project Area	7	4	2	1	644	644	362	
		Longzhen Project Area (First)	7	0	7		40	40	9	
		Yindou Project Area	8	3	4	1	615	614	165	1
Yichuan County	229	He'erschuan Project Area (First)	2		2		417	417	240	
		Jiyi Project Area	6		6		823	823	456	
Yanchang County	218	Leichi Project Area (First)	8	5	3		917	917	263	
		Luoizshan Project Area	6	4	2		120	120	35	

2 Project Area Social and Economic Development Overview

County	Number of Cooperatives	Project Area	Number of Cooperatives	Category			Number of Participants	Category		
				Crop Farming	Animal Farming	Service		Number of Farmers (Households)	Number of Poverty Households	Number of Enterprise & Public Institution and Social Organization Members
Yanchuan County	322	Shiyao Project Area (First)	6	2	1	3	460	460	425	
		Dazhang Project Area	5	0	4	1	25	25	4	
Total	3114	29 project areas	166	95	59	12	13830	13804	4507	26

Data Source: County-level PMOs.

*Notes: Crop farming cooperatives include cooperatives specialized in cultivation of such as agricultural products as watermelon, apple, edible Fungi, chili, grains, persimmon, Shiitake mushroom, vegetables and minor grains, etc.; animal farming cooperatives include cooperatives specialized in raising livestock and poultries such as pig, cattle, sheep, chicken and donkey, etc.; service cooperatives include cooperatives specialized in providing services involving agricultural financing, selling farming equipment, production skill training and information services, and farm-based tourism.

2.3 Development of Leading Industries in the Project Areas

Major industries in the project areas include: animal husbandry (cattle, sheep, pigs, and bees, etc.), cultivation of grains (wheat and corn, etc.) and economic crops (apple, water melon, muskmelon, strawberry, walnuts, and edible fungi, etc.) Leading industries of project counties and major rural area economic indicators are listed in Table 2-2 and 2-3.

Table 2-2 List of Leading Industries in Project Areas

Municipality	County	Leading Industries
Baoji	Linyou County	Linyou County is a traditional farming county, with leading industries in agricultural planting, animal husbandry and growing of various fruits and nuts. After years of development, a series of leading industries that suit the situation of Linyou County have taken shape, including corn, walnuts, husbandry, tobacco, vegetables, edible fungi, melons and fruits, etc. in 2015, farmers successfully cultivated morels in the county, which is the first in areas north of Qinling Mountain.
	Longxian County	The grain cultivation features wheat, corn and yellow bean; economic crops include chili Chilies, apple, tobacco and walnuts; and animal husbandry includes cow, sheep, pigs and cattle. The industry categories are complete but with low operation standard and poor economic effect. The leading industry is not clear. Farmers rely heavily on the weather. The agricultural income is highly unstable.
Xianyang	Changwu County	The agriculture industry of Changwu County has its own regional advantages and features. With grains production at the basis, supported by fruits, livestock, vegetables and melons, Changwu County has developed an agricultural industry with apple orchard area on the highland, vegetable production area on the riffle area, and walnuts production area on the slopes. In 2014, the agricultural output accounted for 77.64% of the total output of agriculture, forestry, husbandry and fishery sections. In all the agricultural output, the output of apple accounted for 77.35%, accounting for 60.06% of the whole county's total output in 2014. Apple industry has become the leading industry for the famers' income increase in Changwu County.
Weinan	Fuping County	Fuping County is a nationally famous home to black jade, stone sculpture, pottery arts, dairy goats, fresh and dried persimmons, and Qiongguo candy. Persimmon cultivation has always been a leading industry in the traditionally advantageous industries in Fuping County that helps farmers getting out of poverty.
	Baishui County	Agricultural industries of Baishui County include grains production, apple planting, protected agriculture, animal husbandry and fishery. In 2014, income from apple planting and processing has accounted for 50.68% of the rural area income of the whole county, while revenue from grain production accounted for 20.28%, revenue from animal farming accounted for 12.48%, and revenue from export of labor service accounted for 11.67%. The apple industry has become a leading industry in increasing famers' income.
	Heyang County	In 2014, the output value of apple planting and processing of Heyang County was RMB1.31 billion and that of animal husbandry was 450 million yuan, accounting for 42.23% and 14.59% of the overall output value of agriculture, husbandry and fishery respectively. Heyang County is one of the eight areas that produce the best apples in the world and apple planting and processing is the leading industry of the county. In the meantime, the planting of such fruits as grapes and red globes is developing very well. The rate of flower mushrooms out of shiitake mushrooms is as high as 80%, which is three to five times higher than that in Jiangsu and Zhejiang province, which becomes a commodity very popular among merchants. Heyang County is also at the core of the exemplary cow raising area of modern husbandry of Shaanxi province.

Municipality	County	Leading Industries
Yulin	Dingbian County	Dingbian County is the biggest county-level gas and petroleum production area. Income of local farmers is mainly from crop and animal farming, labor services and policy subsidies. Five major industries in the county features potato planting, breeding of sheep, growing of forage grass, vegetables and minor grains. The southern part of the county abounds in potato, buckwheat, oil crops and minor grains. It is one of the most important production areas of potato and minor grains. The north part abounds in corn, vegetables, water melons, musk melons and potato. It is the production base for good potato, minor grains and pollution-free vegetables as well as a high-efficiency featured agriculture production area in Yulin municipality. Salt, furs and liquorice have been known as the three old treasures of Dingbian, while petrol, buckwheat and potato are called the three new treasures of Dingbian.
	Mizhi County	Mizhi County is known as the home to pollution-free and eco-friendly millet. The production of pigs, sheep and caged chicken is stable. The construction of a standard exemplary base for the production of apple in hilly area is picking up speed. The apple planting has achieved a breakthrough from zero to large area planting. It was named as an apple production base by the Provincial Bureau of Fruit Industry.
Yan'an	Yichuan County	Industries featured apple planting, tourism and development of gas, coal and petroleum have been developing rapidly. The fruit industry is the leading industry in the county. A pattern of “apple outdoor planting in the north, pear in the east, walnuts and Chinese prickly ash in the south and apple grown in plastic houses in the west” has formed. Animal husbandry featured pigs, cattle, sheep and poultries. In 2015, the animal husbandry provided 380,000 tons of Biogas fertilizer. And there are 8705 beehives in terms of beekeeping.
	Yanchang County	Yanchang County is where the first oil well was discovered in mainland China. It is also the best production area for apple, pears and watermelon. It is known as the Mother of Petroleum and the Home to Fruits and Melons.
	Yanchuan County	Yanchuan County is the home to jujubes in China and a production base of fine apples in Shaanxi province. So far the pattern of agricultural industry has been developed with four leading industries realizing considerable profits and scales. A jujube industry stripe was formed in the southeast part of the county, an apple planting area in the middle and protected vegetable cultivation and husbandry in the north.

Data Source: County-level PMOs.

In recent years, Shaanxi province has been speeding up the process of developing standard, scale and intensive agriculture based on special agricultural resources including grains, fruits, livestock, vegetables and tea. The agricultural industrialization has made remarkable achievements. However, as a big agricultural province, Shaanxi still has a long way to go on the path to mature agricultural industrialization. The main causes include slow industrial structure adjustment, immature agricultural technology system, severely insufficient development fund, low agricultural industrialization level and lack of leading agricultural enterprises, inadequate capability of rural labor and incomplete agricultural production organizations. The implementation of the Project will help to solve the above problems in different degrees. Particularly, it helps to ease the pressure brought by the lack of fund.

2 Project Area Social and Economic Development Overview

Table 2-3 Major Rural Area Economic Indicators of Project Counties (2014)

SN	Municipality	County	Total Output Value of Agriculture, Forestry and Fishery Industries (10,000 yuan)	Agricultural Acreage by Year-end (Hectare)	Area under Grains (Hectare)	Grains Output (ton)	Oil Crops Output (ton)	Cotton Output (ton)	Vegetable Output (ton)	Fruit Output (ton)	Apple Output (ton)	Meat Output (ton)	Poultry and Egg Output (ton)	Dairy Output (ton)	Cattle Population (10,000)	Cow Population (10,000)	Pig Population (10,000)	Sheep Population (10,000)	Poultry Population (10,000)
1	Baoji	Longxian County	305299	35442	32679	100101	1936		106199	33394	26067	9304	2392	204469	8.76	6.3	2.6	7.63	25.5
2		Linyou County	107561	30045	21370	66326	919		18381	1035	823	8034	213	5	5.62		1.05	12.33	19.57
3	Xianyang	Changwu County	292219	11666	12016	55175	1378		20155	293620	274050	4807	3161	14600	2.66	0.59	2.32	7.65	49.6
4	Weinan	Heyang County	332370	58395	50459	197372	3708	5586	180462	355301	267148	11443	4455	54552	3.87	3.43	12.02	5.32	62.6
5		Baishui County	398236	28718	27516	105208	7348		65210	537348	535277	16438	1455	1969	0.99	0.03	17.62	4.22	36
6		Fuping County	477479	70814	80181	355004	5014	634	300929	322681	221605	19965	22570	150822	3.32	2.06	15.27	35.88	208
7	Yan'an	Yanchang County	153645	16570	10423	40077	3520	560	101608	234791	230900	3232	1512	90	2.12	0.01	2	6.82	24.77
8		Yanchuan County	109300	24805	16966	43018	1008	358	31510	116313	65095	3163	1340	425	1.24	0.01	3.03	3.26	20.01
9		Yichuan County	196008	14851	6784	37235	878	13	43100	425400	417878	2518	1382	75	0.57		2.4	0.83	14.55
10	Yulin	Dingbian County	323520	138925	111142	298472	14971		122989	1791	1560	19948	2973	14353	0.73	0.52	9.98	85.23	47.53
11		Mizhi County	100865	27865	26783	88080	3919		16130	44076	26023	4828	3056	2423	0.89	0.08	1.99	16.76	51.78

Data Source: Shaanxi Provincial Statistical Yearbook of 2015

2.4 Status of Poverty Alleviation and Projects to be Built in the Project Area

2.4.1 Poverty Alleviation Progress in the Project Areas

According to the 12th Five-Year Plan of Poverty Alleviation in Rural Areas of Shaanxi Province, the poverty alleviation in the new era, starting from 2011, has made remarkable progress by launching six major poverty alleviation projects during the 12th Five-Year plan period with focus on concentrated contiguous poverty areas, villages with very low incomes and poverty households. Among all the counties under the project:

Baishui County has developed a way to gradually alleviate poverty and develop region by region through village-based and contiguous development. Remarkable progress has been made in such areas as the construction of beautiful countryside, immigrant resettlement, comprehensive agricultural development, village-based advancement, small-scale projects for public welfare and building of poverty alleviation society.

Linyou County has sped up the pace of alleviating special poor people out of poverty and increasing the income of poverty-stricken population by implementing the strategy of precise poverty alleviation by financial subsidy, supporting featured industries, immigrant resettlement, capacity building and materializing aids, etc. As a result, the living conditions of poverty population were improved, their education level upgraded. And poverty alleviation with social efforts was enhanced as a result of the social poverty alleviation project and the project of “offering one-on-one support between county leaders, county-level government agencies, officials and poverty townships, villages, and households; providing policy publicity, industry planning, financial support, technical services, guidance, and income increase to the doors of the poverty households.”

Based on the comprehensive social economic development, the poverty alleviation of Fuping County is aimed at increasing farmers' income and reducing the size of poverty population by focusing on the northern mountainous area. With resettlement for poverty alleviation and disaster relief purposes as the breakthrough point, the county implemented the strategy of “differentiated policies for different villages and households” and tried to form a three-in-one poverty alleviation effort to include social, industrial and specialized resources. It was decided to advance the construction of new homes for poverty households, infrastructure, public services, and the promotion of industrial development, development capacity, and improvement of ecological

environment, which helps to achieve remarkable progress.

Heyang County implements the strategy of precise poverty alleviation, creates dossiers for poverty villages and poverty population, and carry out the policies of poverty alleviation through specialized programs, agricultural industrialization and social resources. On the basis of village-based advancement and relocation, Heyang County made great efforts in improving the infrastructure establishment of poverty villages to break the bottleneck that restrains their development. Supported by policies in education, healthcare, culture, technology and social security, the county offers preferential support for poverty population. Their aim is to alleviate all the 72900 population out of poverty in four years by 2019 with extraordinary efforts.

Aimed at creating an exemplary county in the poverty alleviation and development in the province, Longxian County took initiative measure and explores a new model for poverty alleviation, which includes creating a big project area, building a big industrial park, improving supporting facilities, providing overall services, and deepening the reform of rural property rights system and operation system. The new model achieved noticeable progress and left positive experiences for other areas to learn from.

Aimed at increasing farmers' income and reducing poverty population, Changwu County focuses their poverty alleviation efforts in consolidating the foundation for development, promoting industries that helps to increase farmers' income, and improving the self-development capacity of poverty population. Taking the construction of poverty alleviation industrial park as an entry point, the county took great efforts in promoting whole village advancement and contiguous development, getting poverty population out of loess cave dwelling, isolated residence and dilapidated houses, building immigrant resettlement complex, launching "Rain and Dew" project, providing financial aid to college students in poverty, and conducting poverty population information collection, poverty alleviation statistic collection and monitoring, poverty relief by loans, technological assistance and social efforts, etc. The county-level poverty alleviation has achieved preliminary success. The county has explored new path to poverty alleviation that features facility-guaranteed development and industrial supported income increase.

Dingbian County has launched a series of poverty alleviation programs, including Baiyu Mountain Immigrant Resettlement, poverty relief by small loans and social efforts, comprehensive agricultural development, foreign-financed projects, village-based program, project funded by China's Welfare Lottery, which have achieved phased objectives. By 2015, the county has completed the third-round

World-Bank-financed poverty alleviation programs in all the 50 project villages and is now preparing for the World Bank Project special audit. So far, five stages of World-Bank-financed projects have been completed. The project has completed a total investment of RMB 51 million of World Bank loans and domestic counterpart fund.

Mizhi County spared no effort in implementing the tree poverty alleviation strategies, namely, poverty alleviation through specialized programs, agricultural industrialization and social resources. The war on poverty is fought in poverty villages and township, aiming at increase the income of poverty population. The poverty alleviation project is guided by the principle of “Five Precisions” (Precise identification, precise categorization, precise policy making, precise poverty alleviation targeting and precise management). A number of poverty alleviation programs have been implemented, including supporting agricultural industrialization and employment, conducting immigrant relocation and resettlement, providing education aid, medical insurance and social security. Measures were taken to make sure that the mechanism of leadership responsibility is implemented; relief efforts are precisely targeted; primary-level organizations are consolidated; joint social efforts are strengthened, and projects are properly monitored and responsibility accounted for. The county has made remarkable progress in the poverty alleviation.

Guided by the principle of differentiated policies for different villages and household to ensure precisely targeted alleviation, Yanchuan County implemented six development measures (poverty alleviation through agricultural industrialization, development of tourism, village-based advancement, capacity building and social security) and ten safeguard measures (restructuring agencies, making policies, household-based aid, designating “the First Party Secretary” to poverty villages, increasing financial investment, setting up guaranteed fund, providing social safety net, setting up supervision team, strengthening discipline inspection and supervision and conducting strict work assessment) to promote precise poverty alleviation, which set out on a good start and has made certain progress.

Guided by the principle of differentiated policies for different villages and household and “5 Precisions”, Yichuan County set up an organization specialized in making work plans, organizing work teams and work very hard to advance the precisely targeted poverty alleviation. By implementing five stages of the project, Yichuan County focused on the construction of poverty villages in remote areas and helped to increase the income of poverty households and lift most of the poverty population out of poverty. It also developed infrastructure, environment establishment, capability building and other public service programs to

improve the production and living conditions of poverty households and the overall development level of the poverty communities. By combining the World Bank's advanced poverty alleviation ideas with the actual conditions in the project areas, the county continued to explore new ways and models to carry out the poverty alleviation program and to serve the subsequent poverty alleviation after the poverty alleviation and development in the new era is completed. It constantly improves the effects of poverty alleviation with international cooperation and continues to contribute to the global fight against poverty.

By implementing five mechanisms, including immigrant resettlement, poverty alleviation through agricultural industrialization, village-based advancement, poverty alleviation through household-based aid and safety net relief, Yanchang County made sure that poverty alleviation policies are specified for each person and household. Aimed at poverty reduction, livelihood improvement, and achieving common prosperity, the county-level poverty alleviation project highlights special poverty alleviation programs, poverty alleviation through agricultural industrialization and social resources, increase investment of poverty relief fund, strengthening poverty alleviation measures so that the production and living conditions of poverty population is improved constantly, their self-development capacity improved noticeably and poverty scope greatly reduced.

2.4.2 Status of Content to be Built in the Project Areas

Investigation of the current status of project content to be built in the project areas shows that, each project area has its shortcomings in terms of infrastructure establishment. Although the building of connection roads in the project areas have been completed, the intra-village roads are most dirt roads with very low level of paved roads. So far, there are still over 30% of communities that don't have factory plants, motor-pumped wells, and equipment; over 40% of communities don't have pipelines, drainage ditch and waste-collecting facilities; over 50% of communities don't have animal houses; over 60% of communities don't have production bridges, rain-collecting facilities, livestock farm and methane projects; over 70% of communities don't have cold storage, orchard drip irrigation system, protected agriculture facilities; over 80% of communities don't have village drainage pipelines. In addition, communities are backward in developing services, market place, and cooperative E-business platforms, etc. Most projects are still a blank (Table 2-4). These problems have been hindering the development of the project areas to different degrees and have been in urgent need to be solved by the Project.

Table 2-4 Status of Projects to be Built in the Project Area

Project	Unit	Baoji		Xianyang	Weinan				Yan'an			Yulin	
		Longxi County	Linyou County	Changwu County	Heyang County	Baishui County		Fuping County	Yanchang County	Yanchuan County	Yichuan County	Dingbian County	Mizhi County
		Liangquan Community	Changfeng Community	Tingkou Community	Ganjing Community	Lin'gao Community	Shiguan Community	Huimin Community	Leichi Community	Shiyao Community	He'erchuan Community	Yangjing Community	Longzhen Community
Plant Construction	m ²		80	960			3500	0	4600	1500	100		
Equipment	set/unit		0	75 agricultural machine , 6 Note PCs, 7 PCs, 2 printers, 1electronic bulletin	a bagging machine for Shiitake mushroom		7	1		5	2		
Cold Storage				1				8		2			
Market place								1	1	3	1		
Cooperative E-business Platform				1			1	15		2			
Cooperative Product Brand Certification			3	1			2	2	1	1	1		
Terracing of Sloping land	Hectare		600							200		200	

2 Project Area Social and Economic Development Overview

Project	Unit	Baoji		Xiyan ng	Weinan				Yan'an			Yulin	
		Longxi an County	Linyou County	Chang wu County	Heyang County	Baishui County		Fuping County	Yancha ng County	Yanchu an County	Yichua n County	Dingbia n County	Mizhi County
		Liangqu an Commu nity	Changfe ng Commu nity	Tingkou Commu nity	Ganjing Commu nity	Lin'gao Commu nity	Shiguan Commu nity	Huimin Commu nity	Leichi Commu nity	Shiyao Commu nity	He'erch uan Commu nity	Yangjin g Commu nity	Longzhen Community
River Embankment	m								150	500	1100		
Bridges and Culverts		5								5	11	1	
Alternative Roads for Harvest	km									30			
Rain-collecting facilities	set	80		6						10		2000	
Motor-pumped Wells		10			13	6	4	172		3		15	
Pipelines	km	4		1.95			12	11	0.5	50			
Orchard Drip Irrigation	Hect are			88		9				500			
Seedling greenhouse			5							10			
Vegetable and fruit planting	mu	2000	6	1326	11852	1125			3	500	20		
Edible Fungi project			1(morel)		1 (Shiita ke Mushro om)					2			
Protected Agriculture			42					45		2			

2 Project Area Social and Economic Development Overview

Project	Unit	Baoji		Xianyang	Weinan				Yan'an			Yulin	
		Longxi an County	Linyou County	Changwu County	Heyang County	Baishui County		Fuping County	Yanchang County	Yanchuan County	Yichuan County	Dingbian County	Mizhi County
		Liangquan Community	Changfeng Community	Tingkou Community	Ganjing Community	Lin'gao Community	Shiguan Community	Huimin Community	Leichi Community	Shiyao Community	He'erchuan Community	Yangjing Community	Longzhen Community
Bees	hive		42							100	860		
Livestock house construction	m ²						900		2400	5000	3400	300	
Livestock farm construction	m ²	3200								500	3400	1800	
Service project			3					18		1			
Mutual aid fund project							1			1			
Projects participated by leading enterprises (major households)			1	1				1		2		1	
Domestic Water Source construction	place	5	1		7(Motor-pumped wells)	3			1	3	8	2	
Water supply project	place	5	1		1 (pump station)	4	1	1	1	3	6		
Village drainage pipe	m							1.3		5000			
Valley Drainage Ditch	m		1200	17300				10000	200	3500	6000		
Drainage ditch and cellar building			1							2	8		

2 Project Area Social and Economic Development Overview

Project	Unit	Baoji		Xianyang	Weinan				Yan'an			Yulin	
		Longxi an County	Linyou County	Changwu County	Heyang County	Baishui County		Fuping County	Yanchang County	Yanchuan County	Yichuan County	Dingbian County	Mizhi County
		Liangquan Community	Changfeng Community	Tingkou Community	Ganjing Community	Lin'gao Community	Shiguan Community	Huimin Community	Leichi Community	Shiyao Community	He'erchuan Community	Yangjing Community	Longzhen Community
Connection roads	km	7	7.5	1.36	19	6	35	32	2		42	10	
Intra- community roads	km	42	2	1.46	14	13.9	60	24			35	45	
Bio-compost pit	pit									1	52		
Waste-collecting facilities		25	3					5		1	15	1	
Methane Project	m ³						2400	400		500	96		

Data Source: County-level PMOs.

2.5 Summary

1. The net income per capita in the project is about RMB 5349, the sources of which rely heavily on traditional farming and husbandry. Grain crops include wheat, corn, buckwheat, potato, broomcorn millet, foxtail millet and various beans. Economic crops include vegetables, apple and various dried fruits and nuts. Livestock raised include cattle, sheep, horse, mule and donkey, etc.

2. Currently, there are 3114 specialized farmer cooperatives in the 11 poverty-stricken counties under the Project. Therein, there are 166 cooperatives in the 29 project areas and 29 cooperatives in the first 12 project areas. Most cooperatives in the project areas are not large in scale with inadequate driving ability on the whole. The internal operation mechanism is not mature with poor sustainability, and ambiguous definition of surplus income and divisible surplus. Even further, some cooperatives do not have operation activities after being registered.

3. Major industries in the project areas include: animal husbandry (cattle, sheep, pigs, and bees, etc.), cultivation of grains (wheat and corn, etc.) and economic crops (apple, water melon, muskmelon, strawberry, walnuts, and edible fungi, etc.) The main problems the project areas are faced with include slow industrial structure adjustment, immature agricultural technology system, severely insufficient development fund, low agricultural industrialization level and lack of leading agricultural enterprises, inadequate capability of rural labor and incomplete agricultural production organizations. The implementation of the Project will help to solve the above problems in different degrees. Particularly, it helps to ease the pressure brought by the lack of fund.

4. According to the 12th Five-Year Plan of Poverty Alleviation in Rural Areas of Shaanxi Province, the poverty alleviation in the new era, starting from 2011, has made remarkable progress by launching six major poverty alleviation projects during the 12th Five-Year plan period with focus on concentrated contiguous poverty areas, villages with very low incomes and poverty-stricken households. The project counties have accumulated precious successful experiences in years of poverty alleviation efforts, which set a solid foundation for the implementation of the Project.

5. Investigation of the current status of project content to be built in the project areas shows that, each project area has its shortcomings in terms of infrastructure establishment. Prominent problems project communities are faced with include low level of paved roads, inadequate agricultural facilities, insufficient water supply and drainage pipelines, slow development of protected agriculture, and backward E-business

development, etc., which is in urgent need to be solved by the Project.

3 Stakeholders Analysis

3.1 Identification of Stakeholders

3.1.1 Identified Stakeholders

Stakeholders refer to groups or individuals that influence project implementation and the realization of project objectives, as well as those impacted by project implementation. Based on project objectives and project construction plan, stakeholders in the first project areas were identified through field study of project areas and interviews with related government agencies (Details of interviews are listed in Table 1-5), which include:

(a) Farmers in the project areas, including disadvantaged groups such as poverty households, women, the aged, the young, migrant workers, the ill and the disabled; (b) cooperatives; (c) stakeholder enterprises; (d) village committees; (e) project management institutions, including provincial, municipal, county level, township level and community level project management offices; (f) related government agencies (see Table 3-1).

Table 3-1 Identified Stakeholders in the Project Areas

Stakeholders	Number	
	Project Area	The First Project Areas
(a) Farmers	45357 households / 177578 people	20194 households / 79377 people
Poverty Population	48665	19634
Women	83480	37117
The Aged (over 65)	23263	10335
The Young (15-35)	49776	22281
Migrant workers	32803	14684
The ill and the disabled	3917	1791
(b) Cooperatives	166	30
(c) Enterprises and operation entities concerned		
(d) Village officials		
(e) Project Management Offices		
Provincial PMOs	1	1

3 Stakeholders Analysis

Stakeholders	Number	
	Project Area	The First Project Areas
Municipal PMOs	5	5
County-level PMOs	11	11
Township-level PMOs	29	12
Community-level PMOs	29	12
Community facilitators	29	12
(f) Related government agencies (including county-level bureau of agriculture, bureau of animal husbandry, bureau of fruit industry, bureau of forestry, bureau of water affairs, bureau of tourism, supply and marketing cooperatives, and women's federation, etc.)		

Data Source: Statistics collected in the SA investigation

3.1.2 Stakeholders Overview

(a) Farmers

There are 45357 farmer households in the project area of Shaanxi province with a total population of 177578. There are 20194 farmer households in the first 12 project areas with a total population of 79377. Farmers are a group with complicated components. From different perspectives, it is able to identify a number of subgroups such as poverty households, women, the aged, the young, migrant workers, the ill and the disabled.

The poverty population in the project area is 48665, accounting for 27.4% of the entire population, which includes 83480 women, 23263 seniors (over 65), 49766 young people (15-35), 32803 migrant workers, 3917 ill and disabled people.

The poverty population in the first project areas is 19634, accounting for 24.74% of the entire population, which includes 37117 women, 10335 seniors (over 65), 22289 young people (15-35), 14684 migrant workers, 1791 ill and disabled people.

(b) Cooperatives

In the project area, there are 166 specialized farmer cooperatives, 30 of which are in the first 12 project areas. Size of the cooperatives: The cooperatives have an average membership of 349 with an average amount of contribution of 3.19 million yuan. By the business category they operate, cooperatives can be put into three major categories: crop and animal farming and service cooperatives.

•Interview with Chen Ping, President of Dafu Agriculture Cooperative of Caocun Village of Fuping County

Dafu Agriculture Cooperative is specialized in persimmon processing. It produces three major products, dried persimmon, persimmon vinegar and persimmon leaf tea, which sell very well because of its good quality. Its products have entered Yonghui Supermarket. The cooperative plans to cooperate with Langyuan from Fujian. So it will have to expand its production scale. This cooperative is enterprise-driven and adopts the operation methods of enterprise plus farmers plus factory plants. Although the enterprise takes 40% of the shares, it only has one vote in the cooperative.

•Interview with farmers in Changwu County project areas of Xianyang Municipality

Farmers' expectation and association with cooperatives: cooperatives (a) improve the management skills of such crops as fruit trees and vegetables, etc. (b) Pesticide, fertilizers, fruit bags and agricultural machinery are bought and distributed together by cooperatives, which guarantees the quantity and quality. (c) Members are entitled to profit distribution based on the shares they have. (d) Products are able to sell at higher prices through cooperatives: Cooperatives and enterprises are more keenly aware of market trends. Benefits for women, the old and the disabled: they can participate and do what they are able to do.

(c) Enterprises and operation entities concerned

In the project area, enterprises related to agricultural product production, processing and marketing, large operators and other operation entities include 48 agricultural product processing enterprises, 13 storage enterprises, 258 households specialized in animal farming, 249 households specialized in farming, and 11 modern agriculture development parks.

•Interview with related government agencies of Dingbian County

Family farms: Dingbian County is one of the three counties in Shaanxi province that monitor the development of family farms. Since 2014, Dingbian County has identified two batches of over 120 family farms. Now there are 14 provincial level exemplary family farms and 47 municipal level exemplary family farms. All the 120 family farms have been certified specialized mostly in crop and animal farming and cultivation industry. Family farms are certified according to the scale standard set out by the province and municipalities.

(d) Village Officials

This category includes village officials of the 253 administrative villages in the project communities. The first project areas involve 118 administrative villages. Officials of each administrative village include Party Secretary of the village, head of the village and accountant.

(e) Project Management Offices

Project management offices are divided into five levels: province, municipal, county, towns/township, and community, which include 1 provincial level PMO, 5 municipal level PMOs, 11 county-level PMOs, 29 town/township-level PMOs and 29 community-level PMOs.

The provincial, municipal and county-level PMOs are in the charge

of provincial, municipal and county governments respectively. Community-level PMOs consist of representatives elected by villagers.

(f) Related government agencies

A number of functional government agencies are involved, including county-level bureau of agriculture, bureau of animal husbandry, bureau of fruit industry, bureau of forestry, bureau of water affairs, bureau of tourism, bureau of human resources and social security, supply and marketing cooperatives, bureau of environment protection and women's federation, etc.

3.2 Stakeholders' Roles and Responsibilities in the Project

3 Stakeholders Analysis

Table 3-2 Roles and Responsibilities of Stakeholders in the Project

Stakeholders Project Activities		Cooperative Construction	Agricultural Infrastructure Establishment	Cooperative Development Fund	Economic Infrastructure Establishment	Technical Assistance and Capability Building Program
Farmers		Join the cooperatives; use cold storage and processing facilities; promote sales of agricultural products through cooperative e-business platform.	Participate in the construction of production roads, irrigation facilities; share the convenience brought by the construction of facilities.	Participate in the construction of industry base and develop crop and animal Farming industry.	Participate in the project construction and Share the convenience brought by the construction.	Participate in skill training for farmers.
Therein	Poverty Households	Join the cooperatives; use cold storage and processing facilities; promote sales of agricultural products through cooperative e-business platform.	Participate in the construction of production roads, irrigation facilities; share the convenience brought by the construction of facilities.	Participate in the construction of industry base and develop crop and animal Farming industry.	Participate in the project construction and Share the convenience brought by the construction.	Participate in skill training for farmers.
	Women	Join the cooperatives; use cold storage and processing facilities; promote sales of agricultural products through cooperative e-business platform.	Participate in the construction of production roads, irrigation facilities; share the convenience brought by the construction of facilities.	Participate in the construction of industry base and develop crop and animal Farming industry.	Participate in the project construction and Share the convenience brought by the construction.	Participate in skill training for farmers.
	The Aged	Become shareholders and share the profits			Share the convenience brought by the construction.	

3 Stakeholders Analysis

Stakeholders Project Activities		Cooperative Construction	Agricultural Infrastructure Establishment	Cooperative Development Fund	Economic Infrastructure Establishment	Technical Assistance and Capability Building Program
	The Young	Participate in market development.	Participate in the construction of production roads, irrigation facilities; share the convenience brought by the construction of facilities.	Participate in the construction of industry base and develop crop and animal Farming industry.	Share the convenience brought by the construction.	Accept training of computer skills
	Migrant Workers	Become shareholders and share profits; increase the opportunities of employment or starting their own businesses.		Increase the opportunities of employment or starting their own businesses.	Share the convenience brought by the construction.	Accept skill training for migrant workers.
Cooperative		Responsible for the building of cooperative institutions, management and operation of agricultural processing and storage facilities, conduct market development, and promote the sales of cooperative products.	Support the construction of production roads and irrigation facilities and benefit from it.	Responsible for the implementation of production base, and provide guidance to members to develop crop and animal Farming industries.	Participate in the project construction and Share the convenience brought by the construction.	Support and organize members to participate in skill training.

3 Stakeholders Analysis

Stakeholders Project Activities	Cooperative Construction	Agricultural Infrastructure Establishment	Cooperative Development Fund	Economic Infrastructure Establishment	Technical Assistance and Capability Building Program
Related Enterprises	Cooperate with cooperatives and farmers to jointly build agricultural product storage and processing facilities, e-business platforms and brands.	Share the convenience brought by infrastructure establishment by cooperating with cooperatives and farmers.			
Village Officials	Help PMOs to mobilize farmers in the community and coordinate with related parties to solve problems.	Help PMOs to mobilize farmers in the community and coordinate the relations between workers.	Mobilize farmers, develop crop and animal Farming industry, and help cooperative to manage the construction of the base.	Organize the implementation of project construction, and coordinate the relations of community members.	Organize and mobilize community members to participate in skill training.
Project management offices	Plan, organize, manage and supervise project activities	Plan, organize, manage and supervise project activities	Plan, organize, manage and supervise project activities	Plan, organize, manage and supervise project activities	Plan, organize, manage and supervise project activities
Other government agencies	Provide professional support and management of e-business platforms and brand building	Provide technical assistance and management to the construction of production roads and irrigation facilities.	Provide technical assistance and management to the development of crop and animal Farming industries.	Provide technical assistance and management to the construction of water supply and drainage projects and waste disposal facilities.	Cooperate with the project and organize training.

Data source: SA investigation statistics

3.2.1 Farmers' Role and Responsibility in the Project

(a) Participate in “cooperative construction” project: Join the cooperatives voluntarily; use cold storage and processing facilities; promote sales of agricultural products through cooperative e-business platform; (b) participate in “agricultural infrastructure establishment” project, contribute labor to the construction of landing improvement, production roads, and irrigation facilities and get paid; (c) participate in the “cooperative development fund” project: use the development fund to expand the sales of crop and animal farming and service industries; (d) participate in the “economic infrastructure establishment” project, contribute labor to the construction of domestic water supply and drainage project, roads, power engineering, environment protection, rural energy projects, etc. and get paid; (e) join in farmers' capacity building program and participate in skill training.

●Interview with farmers in Ganjing project area in Heyang County of Weinan municipality

When asked about whether they support the World Bank's rural community development project in the area and why, farmers say they are supportive of the project because it helps to improve community environment and expand industry scales.

When asked whether they are willing to participate in the development of special local industries and why, farmers say they are willing to because it is profitable; and apple industry is suitable for local conditions and has been developing in this area for a long time which provides a good basis.

3.2.2 The Roles and Responsibilities of the poverty population, women, the aged, the young, migrant workers, the ill and the disabled

The poverty population, women, the aged, the young, migrant workers, the ill and the disabled are special subgroups of the farmers' category that need special attention. They are entitled to their lawful rights and are able to assume the role and responsibility as farmers. As long as subjective and objective conditions allow, they should not be excluded from the project activities.

However, due to the restraints of such factors as health, age and

distance from the project area, some people are unable to participate or can only partly participate in the project activities. Therefore, they don't or only partly assume the roles and responsibilities of farmers. But as members of the project communities, the implement of project activities will exert certain impact on them.

(a) The role and responsibility of poverty population in the project: Those who participate in project activities as ordinary farmers assume the role and responsibility of farmers in the project, except for those who do not have the capability to work due to illness or handicap.

(b) The role and responsibility of women in the project: Those who participate in project activities as ordinary farmers assume the role and responsibility of farmers in the project.

(c) The role and responsibility of the aged in the project: Due to the restraints of age and physical conditions, the aged do not participate in actual project activities. But they are entitled to share the convenience of community development brought by the project activities.

(d) The role and responsibility of the young in the project: Those who participate in project activities as ordinary farmers assume the role and responsibility of farmers in the project.

(e) Migrant workers: Since they are in most of the time far away from the communities, they are unable to participate in many project activities. However, they can participate in programs for the skill and capacity building designed particularly for migrant workers. And they entitled to share the convenience of community development brought by the project activities.

(f) The ill and disabled: Due to health problems, they do not participate in the project activities and do not assume the role and responsibility in the project. But they are entitled to share the convenience of community development brought by the project activities.

●Interview with villagers of Santai Village in Tingkou project area of Changwu County, Xianyang Municipality

They hope cooperatives can provide a more flexible operation mechanism for women, taking into consideration of the role of women in families. For example, they have take care of their children and send them to school. Developing production doesn't have to affect their family life.

3.2.3 The Role and Responsibility of Cooperatives in the Project

In the first project areas there are 30 specialized farmer cooperatives taking part in the project implementation, whose roles and responsibilities

include:

(a) Perform share restructuring, expand the scope of membership and stress on taking poverty population into the cooperatives; (b) responsible for the “cooperative construction” project: Responsible for the building of cooperative institutions, management and operation of agricultural processing and storage facilities, conduct market development, and promote the sales of cooperative products; (c) participate in the “agricultural infrastructure establishment” project, be partly responsible for the publicity and organization of the construction of production roads and irrigation facilities; (d) responsible for the construction of the “cooperative development fund” project: use the development fund to expand the sales of crop and animal farming and service industries; (e) help with the construction of economic infrastructure establishment project; (f) accept and be responsible for the “cooperative capacity building” project: accept the professional guidance of the Provincial Cooperative Guidance Center; organize cooperative management to participate in training of project management and operation with related industry development materials and office facilities purchased, as well as professional exchanges and inspection activities.

●Interview with Yangquan Fruit Cooperative of Changwu County, Xianyang Municipality

Cooperative Development Status: It covers an area of 300 mus with 40 households becoming shareholders with their orchards and transferred land. The production base has been constructed (roads and water conservancy facilities have been built according to standard); private investment is 1.2 million yuan, with government support. Estimated investment in 3 years is over 2 million yuan. In five years, it will yield profits. It has visited many similar cooperatives (in Baishui and other places) and hired professors from the Northwest University of Agricultural Sciences and local experts on agricultural technologies as consultants to give professional instructions.

Problems encountered so far include: private investment is huge with a pressure of capital shortage; some farmers are aware of the resistance; about 20% of farmers do not trust the cooperatives; rural labor hours are concentrated, drain of migrant workers causes shortage of labor; further expansion meets great pressure. They hope to get the support of the World Bank project so that when the development of the cooperative is on the right track, it will attract more members.

●Interview with President Lijianfeng of Jiuja Farming Cooperative of Heyang County, Weinan Municipality

The cooperative operation model is enterprise plus industry plus farmer households. It specializes in featured farming, vegetables and fruits, and handmade crafts. So far the major service provided to members is centralized purchase of agricultural materials. It has promoted the development of some poverty households,

The cooperative have to drive the development of poverty households by improving operation efficiency. In addition, government will have to provide external supervision to set straight the internal profit distribution system. In terms of organization structure, it should not imitate other cooperatives blindly. It has to improve the voice of poverty households in the cooperative. (The board of management and supervision must have members of women, the old, the ill and disabled.)

3.2.4 The Role and Responsibility of Related Enterprises in the Project

(a) Support and promote the construction of “cooperative construction” project: participate and support agricultural storage and processing, market development through business cooperation.

(b) Support and promote the construction of “cooperative development fund”: support and promote the development of crop and animal farming and service industries by establishing cooperation relations with cooperatives and farmers.

3.2.5 The Role and Responsibility of Village Officials in the Project

(a) Help community-level PMOs to conduct project activities: responsible for informing villagers of the project plans and measures; coordinate the conflicts and disputes among villages in the project activities.

(b) Participate in the project activities as ordinary villagers, and assume the roles and responsibilities of farmers.

●Interview with Santai Village Committee of Tingkou Township, Changwu County

The village committee supports and hopes farmers to become shareholders with their land. Cooperatives will manage it together and distribute profits by the number of shares at the year end. In this way, it will effectively avoid the inadequacy of farmers in production management and bring more profits through scientific and industrialized operation. In terms of farmers and cooperatives, they propose that cooperative as a platform sign letters of intent with merchants, and farmers sign official contracts individually with merchants so that farmers can decide the sales of agricultural products themselves. Thus conflicts of interests will be reduced.

●Interview with village officials of Caocun Township project area of Fuping County, Weinan

The policy of the World Bank project is good. The problem is whether it can be implemented successfully. The village committee will give full support because agricultural industrialization and scaled agriculture has become an inevitable trend. The persimmon planting scale is large, which meet the requirement of the project. Cooperatives should take into consideration of such disadvantaged groups as women, the old and the disabled. Cooperative development has to be regulated to avoid illegal financing. Poverty households (or households without the capability to work) can hand in their land to the cooperative for management and get profits by shares.

3.2.6 The Role and Responsibility of Project Management Offices in the Project

Project management institutions include provincial, municipal,

county-, town/township- and community-level project management offices.

(a) Responsibilities of Provincial PMOs

The provincial PMOs include Shaanxi Provincial Poverty Alleviation and Development Office, Shaanxi Community Development Project Management Office set up in the Provincial Foreign-financed Project Management Center, and experts and professionals hired by the provincial PMOs.

The responsibility of the Provincial Poverty Alleviation and Development Office is to call for the provincial project joint conference and through the joint conference: (i) discuss and decide major policies and guidelines of the Project; (ii) review the overall design of approved projects; (iii) decide the financing of domestic counterpart fund and the distribution and repayment of loans; (iv) coordinate and finalize the responsibilities of related departments and the project cities and counties; (v) inspect the implementation of the project.

Shaanxi Community Development Project Management Office answers to the provincial project joint conference and is in charge of the implementation and management of the Project under the guidance of the national project management office. It assumes the responsibility of provincial-level project management.

Experts and professionals make up of a technical consultant panel to conduct review and provide guidance for the Project.

(b) Components and Responsibilities of Municipal-level PMOs

The five project cities in the Project set up Project Management Offices that have three to five members. Its major responsibilities include:

(i) Help the provincial PMO to manage and monitor project activities; (ii) Supervise, examine and guide the work of county-level PMOs; (iii) Coordinate the counterpart fund of each municipality and the work expense of municipal and county-level PMOs; (iv) inspect and accept the project construction; (v) regulate the annual plan, reports and forms of project counties.

(c) Components and Responsibilities of County-level PMOs

County-level project institutions include county-level project joint conference, county-level PMOs and county-level project technical support group.

County-level project joint conference: county-level project joint conferences are set up in the 11 project counties in the Project to be in charge of the management and guidance of projects in the county. Its responsibilities include: (a) discuss, decide and approve selected activities in the project areas; (ii) review and approve the planning and outlines of county-level projects; (iii) coordinate the responsibilities of each department; (iv) examine and supervise the implementation of projects.

Responsibilities of the County-level PMOs include: (i) direct or organize the compile and review of project community development plans; (ii) review and approval of community project proposals; (iii) make annual project plans; (iv) formulate necessary project management system, organize project implementation, project quality monitoring and project inspection and acceptance; (v) conduct project monitoring, summarize project progress and report sheets, reports, and submit them to the municipal and provincial PMOs; formulate project summary and completion report when the project is finished; (vi) conduct financial accounting and fund distribution, direct or carry out project material procurement and distribution; (vii) manage, direct, and evaluate the performance of community facilitators; (viii) organize technical services, institutional construction, personnel training and experience sharing; (ix) direct and supervise the work of towns/townships and communities.

Main responsibilities of county-level technical support group include: (i) review community project plans and project designs, estimate investment of project participators; (ii) participate in the technical support, monitoring and completion inspection; (iii) provide practical technical training, technology design and consulting to project communities and farmers.

(f) Components and Responsibilities of Township-level PMOs

Project work stations are set up in the towns/townships involved in the project. Project work stations usually consist of 3 to 5 members and are headed by town/township chiefs or officials in charge. Responsibilities of project work stations include:

(i) help to direct the compiling of project community development plans; (ii) conduct project monitoring; (iii) manage the community facilitators; (iv) materialize the annual plan into communities, villages, households and project spots; (v) help with the project technology promotion and training of farmers; (vi) inspect and supervise the project progress, perform preliminary examination of project and report to the upper-level PMOs; (vii) be responsible for the distribution of project fund and procured materials, financial accounting and reimbursement of the projects; (viii) summarize and submit project progress and related report sheets, and reports, etc.

(e) Responsibilities of Community-level Project Management Institutions

Project management institutions of each project community are elected by the residents' conference (or community residents' congress) in the project community, which include Project Decision-making Committee, Project Implementation Committee and Project Monitoring Committee. Responsibilities of community-level project management institutions include:

(i) Coordinate or organize the compiling and revision of community-level development plan under the guidance of county- and township-level PMOs; (ii) Conduct project design according to the development plan; (iii) compile and submit the annual project plan of the community; (iv) manage community project assets; (v) responsible for the publicity, mobilization and organization of farmers to participate in project selection and implementation; (vi) organize and manage project materials procurement and conduct completion inspection, supervise the farmers' implementation of the project and submit related information timely; (vii) organize skill training or technical services according to the needs of farmers and project implementation; (viii) supervise and monitor the project work procedure and effect as well as the progress and quality of projects; (ix) conduct subsequent management of the project.

(vi) Responsibilities of Community Facilitators

Major responsibilities of community facilitators include: (i) participate in the trainings, discussion and field study activities organized by the county-level PMOs; (ii) responsible for the information publicity, promotion and mobilization in the project community; (iii) help the project community to set up such instructions as project management committee, make work system, monitor its operation and provide technical support; (iv) help to make participatory community development plan; (v) understand the needs of community and farmers for technology, information and market, and help technical department to conduct project design and technology training and services in the project community; (vi) help the community to conduct bidding and negotiation tendering, project quality and progress monitoring, project completion inspection and subsequent management; (vii) help and regulate the management of community development fund, and provide related services to the community and farmers; (viii) help the county-level PMO to monitor and evaluate the project progress, effect and impact; (ix) report the problems encountered during project implementation and offers suggested solutions to the county-level PMOs; (x) help the county-level PMOs to summarize the experiences of and lessons learned from the implementation process.

3.2.7 The Role and Responsibility of Other Related Government Agencies in the Project

Manage and supervise affairs incurred during the project activities in the jurisdiction of the agency. Bureau of Agriculture: provide technical support for the crop and animal Farming industry in the project activity; offer guidance and management toward farmers; Bureau of Forestry and Bureau of Fruit Industry: provide support for the Bureau of Water Affairs:

provide professional directions and management in irrigation facility construction. Bureau of Human Resources and Social Security: provide professional directions and support in the technical assistance and capability building project. Women's Federation: Ensure and fight for women's rights in the project construction. Bureau of Environment Protection: conduct environment monitoring of project activities. Supply and Marketing Cooperative: help and support the market development in the cooperative construction project. Bureau of Industry and Commerce Administration: support the brand building in the cooperative construction project, conduct registration and management of cooperatives and enterprises. Bureau of Land Management: Conduct monitoring and management of the land in the project activities.

●Interviews with government agencies of Linyou County, Baoji Municipality

Bureau of Transportation:

The financial revenue of Linyou County is limited and is unable to attract private investment, which makes the road building very difficult. The production road construction in the World Bank project is crucial for improving the road conditions in the project area. The previous road building projects were not very satisfactory with poor effect due to the small investment scale. Therefore, they hope the World Bank project can increase the investment amount to ensure the high quality of roads. Since different places have different situation, they hope there can be differentiated policies for different road building projects. The transportation department can coordinate and provide technical support and quality monitoring to the project construction.

Supply and Marketing Cooperative:

Processing of agricultural products is mostly preliminary. Deep processing is little. They suggest that storage and processing of agricultural products should go to the direction of deep process. Financial support to specialized cooperatives is still lacking. They hope the project can ease the problem of insufficient funding. Cooperatives can provide information for the sales of products.

Bureau of Development and Reform

It is imperative for Linyou County to speed up the infrastructure building, including roads, immigrant resettlement and domestic and production water, etc. therefore, the World Bank project fits the situation of Linyou County very well.

Bureau of Water Affairs

Since there is no large water project and the water utility rate is low, Linyou County has a serious problem in domestic and production water supply. The irrigation project and domestic water supply and drainage project of the World Bank is very significant for improving and solving this problem. The counterpart fund has to be in place more quickly.

Bureau of Agriculture:

Agriculture in Linyou County features the planting of vegetables and fruits and the protected agriculture is also developing well. The World Bank project supports the development of crop and animal Farming industry. It has to increase the investment in protected agriculture and provide more support for the prevention of natural disasters and training of agriculture technologies.

Women's Federation:

Women's Federation supports women to start their own businesses by offering

small loans and implementing “Business for Women” project. But the scale is limited. The implementation of the World Bank project helps to improve the employment of women with the help of cooperatives. However, the reduction of labors may have negative impact on the implementation of the World Bank project.

●Interview with government agencies of Changwu County, Xianyang Municipality

Bureau of Agriculture: They hope cooperatives can find a right direction for the development of agriculture industry, respect the wills of farmers and take economic interest as the priority instead of just growing apples.

Supply and Marketing Cooperative: They hope cooperatives can develop more modern and centralized agriculture. There are a large number of cooperatives but most are extensive with little driving force.

Bureau of Fruit Industry: They hope cooperatives can provide more support in term of technologies, information, fund and loans to help farmers develop their industries better.

Women’s Federation: They hope the project can take women’s rights into consideration and provide more jobs for women to improve the employment of women in the local areas.

3.3 Stakeholders’ willingness to participate and expectations of the project

SA investigation team conducted field study through participatory observation, interviews with people with key information, profound interviews, seminars, and questionnaires (see Table 1-5) and summarized, compared and analyzed information collected and got a comparatively in-depth understanding of such stakeholders as farmers, village committees, enterprises and related government agencies.

3.3.1 Farmers’ willingness to participate and expectations of the project

Farmers are the de facto implementers and direct beneficiaries of the project. Through varied methods including questionnaires, individual interview, and household-based seminar (including a certain percentage of women), SA investigation team collected basic information on the farmers’ family: including the development status, problems and difficulties encountered in the development as well as their needs, especially women’s need for development; farmers’ participation in local advantageous industries, farmers knowledge of the project and their participation in cooperatives; and got a comparatively thorough understanding of farmers’ willingness to participate and expectations of the project.

3.3.1.1 Overview of farmers’ willingness to participate and

expectations of the project.

(a) Willingness to participate the project: Farmers are generally very supportive of the project and hope to implement the project as soon as possible to promote the local economic development. The willingness is stronger in underdeveloped areas with inadequate development fund and poor production conditions.

(b) Project Demand and suggestions: First, farmers hope to improve the construction of such infrastructure of production roads, irrigation facilities, cold chain facilities, and large production machinery; second, they hope to improve product quality through the technical training provided by the project; third, they hope to enhance brand building through the project so that the agricultural products they sell will have larger competitive edge on the market.

(c) Project expectations: Farmers are generally optimistic about the project and believe the project will have mostly positive impact and will help farmers improve production conditions, increase income and improve quality of life. However, to a large extent it depends on whether the project operation is standard and regulated and whether the cooperative operation is regulated instead of in the private-interest-driven way in the past.

3.3.1.2 Farmers' Level of Project Participation

Of all the identified stakeholders, farmers are a group with the largest population and are most directly affected by project activities. They are the principal participators and beneficiaries of project activities. Their knowledge of and participation in the project activities will directly affect the implementation of project construction. Their support to and association with the project is crucial to the smooth operation of project activities. Therefore, qualitative analysis of farmers' participation in the project was conducted.

SA investigation team distributed questionnaires among farmers to learn about their knowledge of, association with, willingness to participate and demand of the project activities. A certain percentage of poverty households, women, the old and the young people were included in the recipients of questionnaires.

(a) Knowledge of and association with the Project

Questionnaire results show that 91.6% of the interviewees have heard of the project. Of all the counties, Linyou County has the highest percentage, 96.5% (see Table 3-3).

Table 3-3 Farmers' Knowledge of the Project (%)

Project County	Have Heard of the project	Never heard of the project
Linyou County	96.5	3.5
Longxian County	91.1	8.9

3 Stakeholders Analysis

Project County	Have Heard of the project	Never heard of the project
Changwu County	92.3	7.7
Baishui County	91.6	8.4
Fuping County	92.9	7.1
Heyang County	89.5	10.5
Dingbian County	92.2	7.8
Mizhi County	93.3	6.7
Yichuan County	90.8	9.2
Yanchang County	86.6	13.4
Yanchuan County	90.8	9.2
Total	91.6	8.4

Data Source: SA questionnaires for farmers

(b) Support to the Project

Questionnaires show that, when asked “do you support the World-Bank-Financed Rural Areas Community Development Project?” 95.7% of the interviewees said they are supportive. The percentage is the highest in Changwu County, reaching 96.3%; 2.8% of the interviewees said they do not support the project and 2.5% said they don’t care. (See Table 3-4) This shows that a great majority of farmers support the project and the project is welcomed by the farmers.

Table 3-4 Farmers’ Support to the Project (%)

Project County	Support	Don’t support	Don’t Care
Linyou County	93.5	2.4	4.1
Longxian County	89.1	3.6	7.3
Changwu County	96.3	1.6	2.1
Baishui County	90.6	4.8	4.6
Fuping County	94.8	3.7	1.5
Heyang County	93.5	2.9	3.6
Dingbian County	87.2	6.9	5.9
Mizhi County	91.8	4.5	3.7
Yichuan County	92.1	3.5	4.4
Yanchang County	93.6	3.2	3.2
Yanchuan County	90.8	5.6	3.6
Total	95.7	2.8	2.5

Data Source: SA Farmer Questionnaire

(c) Willingness to Participate in Project Activities

Questionnaire results show that 92.5% of the interviewees said they are willing to participate in the community development project and hope the project will create more job opportunities. Only 3.7% said they are not willing to participate, and the other 3.8% said they don’t care (Table 3-5).

Table 3-5 Willingness to Participate in Project Activities (%)

Project County	Willing	Unwilling	Don’t Care
Linyou County	92.5	3.4	4.1
Longxian County	90.1	5.6	5.3
Changwu County	93.43	4.12	2.45
Baishui County	91.6	4.3	4.1
Fuping County	94.12	2.67	3.31
Heyang County	90.5	5.9	3.6

3 Stakeholders Analysis

Dingbian County	89.2	4.9	5.9
Mizhi County	91.3	5.8	2.9
Yichuan County	90.1	4.5	5.4
Yanchang County	93.1	3.7	3.2
Yanchuan County	92.8	4.6	2.6
Total	92.5	3.7	3.8

Data Source: SA Farmer Questionnaire

To summarize, analysis of farmers' willingness and extent to participate in project activities show that farmers are strongly willing to participate and have high degree of knowledge and support of the project.

3.3.2 Village Committee's willingness to participate and expectations of the project

Village committees are at the end of government line. They directly deal with the farmers and are the de facto organizers of project implementation. SA investigation team surveyed officials in the village committees to understand village committee's willingness to participate and expectations of the project through seminars and individual interviews in terms of basic information about the village, operation mechanism of village committees, village officials' knowledge and attitude toward the project and their plans to implement the project.

(a) Willingness to Participate: All the officials of village committees surveyed are very supportive of the project. Village committees are willing to organize, mobilize, communicate and coordinate project construction as required by the project.

(b) Project demand and suggestions: Project construction should focus on infrastructure building, including production roads, irrigation water and facilities, large machinery such as the dried persimmon processing equipment Fuping county areas need. The project will be implemented through cooperatives, which requires that the operation of cooperatives must be regulated and monitored so that all cooperative members including women, the old, and the disabled benefit from it. Improvement should be made in brand building, expansion and extension of industry chain. For example, in Caocun project area of Fuping County could develop rural tourism based on the persimmon Crop Farming and processing factory as well as nearby0 tourist attractions.

(c) Project risk expectations: The project will not have negative impact and potential risks because it does not involve land acquisition and adjustment of farmers' interest. The potential problems and conflicts encountered in project implementation are controllable and can be coordinated. The project will help to improve the living conditions of disadvantaged groups including poverty population, women, the old and

the disabled, and to improve the production conditions and appearance of villages and to increase famers' income.

3.3.3 Enterprises' willingness to participate and expectations of the project

Enterprises are important partners of farmers and cooperatives and are one of the major promoters of the project implementation. SA investigation team, through seminars and in-depth interviews with persons in charge of such enterprises as Qijin Eco-Agriculture Co., Ltd. of Fuping County, collected information on the basics and development status of the enterprises, the problems and difficulties they encounter, their plans for the future, their opinions on the development of industries with local features as well as their attitudes toward the project, and understood their willingness to participate in the project and their expectations.

(a) Willingness to participate in the Project: Enterprises are all very supportive of the project and hope to be deeply involved in the project construction and improve infrastructure establishment and create more dynamic investment environment with the help of the project.

(b) Project demand and suggestions: Owners of enterprises interviewed believe that if the project is to help the poverty households, and the disadvantaged group including, women, the old, and the disabled get out of poverty, it has to formulate large-scale and standard crop and animal Farming industry, and create famous brands to improve the added value of products by expanding and extending the industry chain, which needs the policy and financial support of the government.

(c) Project risk expectations: Owners of enterprises interviewed believe that the positive impact of the project outweighs the possible risks. The project construction helps to improve the quality and efficiency of local industries and helps to increase famers' income. By the development of industries and extending the industry chain, the project will create more job opportunities and more sources of income and helps to lift the poor rural population out of poverty.

3.3.4 Related Government Agencies' willingness to participate and expectations of the project

Related government agencies are the planners and designers of the project. They take a leading role in the project construction. Through seminars and in-depth interviews among officials of the project areas and staff of related government agencies, SA investigation team collected information on the implementation of other projects in the project areas,

potential risks or problems in the implementation process and countermeasures; their ideas and suggestions on how to improve project effect and optimize the project.

(a) Attitude toward the Project: Related government agencies are supportive of the project. In the seminars and individual interviews, officials of the project areas and heads and staff of related government agencies all said they are supportive of and cooperate with the project construction. They believe that the root causes of poverty in the project areas are they failed to development large-scale industries and failed to lift the poor out of poverty through agricultural industry development. The bottleneck that hinders the development of agricultural industry is lack of fund and advanced technology. Therefore, by improving production infrastructure, enhancing skill training of farmers and regulating cooperatives, the project helps the industry development in the project area and the poverty alleviation in the project areas.

(b) Suggestions to the Project: The first is about infrastructure establishment. Connection roads and inter-village roads in the project areas have generally been innovated. But the conditions of production roads are poor. The design and building of production roads in different areas have to take the features of local industries into consideration so that it does not waste land and materials and is able to facilitate production, processing and transportation. The project has to attach great importance to the construction of irrigation facilities. For example, related agencies in the Caocun project area of Fuping County said that the lack of production water has exerted noticeable impact on the growing of persimmons. Projects in the dry areas must attach great importance to the construction of irrigation facilities such as motor-pumped wells and the management of irrigation water. The second is about cooperative development and operation. There are many registered cooperatives in the project areas but most of them failed to play the role required by the Law on Cooperatives due to non-standard operation and unsatisfactory development. Since cooperatives did not play their roles very well, it has negative influence on attracting farmers to join the cooperatives. However, generally farmers still hope there is an organization that represents their real interests. If the operation of cooperatives is regulated through rational management to guarantee members' rights, farmers are still willing to join in the cooperatives. The third is about agriculture industrialization. The industries chosen in the project areas have good foundation and have developed for a long time in the project areas. Farmers generally have acquired necessary skills and technologies. The project areas have the natural conditions such as oil and climate the chosen industries need. For example, Caocun Village of Fuping County is the most suitable area for the growing of persimmons. However, the general development level of

the industries so far has to be further improved. They hope to upgrade product processing facilities and improve product quality and class through project implementation. Brand building is imperative for improving the industry development level. Products in a lot of project areas have good quality, such as the apples in Ganjing project area of Heyang County, but do not sell at high prices. One of the reasons is that it does not have a well-known brand.

(c) **Project Risks and Expectations:** Heads and staff of related government agencies generally believed that the positive impact of the project far outweighs potential risks. The project construction helps to improve the infrastructure in the project areas, promote the industry development and regional economic development, and helps to lift the poor population out of poverty. Potential risks of the project include: First, if the newly founded or restructured cooperatives in the project fail to represent the interest of members, it may alienate the public and the project would be unable to help the poor people get out of poverty. The second is about the sustainability of the project, whether the infrastructure and facilities built and the cooperatives will continue to play their role when the project finishes.

3.4 Summary

(a) Stakeholders identified in the first 12 project areas include: farmers, including the poverty households, women, the old, the young, migrant workers and the disabled; cooperatives; stakeholder enterprises; village officials; project management imitations and related government agencies. Stakeholders include 20194 households with a total population of 83847. The poverty population is 20649, accounting for 24.74% of the entire population in the project areas; and 37117 women.

(b) Different stakeholders play different roles and undertake responsibilities in the project.

(c) The willingness of participation and expectations of different stakeholders may vary. As a group with the largest population most affected by the project, farmers are very willing to participate in the project, and have fairly good knowledge and are very supportive of the project. The implementation of specific project activities has a good public foundation.

4 Analysis of the Poverty Households

4.1 State of Poverty

4.1.1 Poverty Dimension Overview

There are 1,381,886 poverty households in the whole province with a total population of 4,469,032. The poverty incidence is 11.84%.

The project areas in Shaanxi Province involves 11 counties including Linyou County、Longxian County and Changwu County. There are a large number of poverty populations in each county (see Table 4-1). The poverty incidences in Changwu County and Linyou County are quite high, reaching 23.64% and 23.3% respectively.

The project areas of Shaanxi province have a total population of 177,578 with a poverty population of 48655. The poverty incidence is 27.4%. In the first 13 project areas, there is a total population of 79377 with a poverty population of 19634. The poverty incidence is 24.74% (see Table 4-1).

Table 4-1 State of Poverty in the Project Area

Region		Total Population	Number of Poverty Households	Poverty Population	Poverty Incidence (%)	Number of Administrative Villages Involved	Number of Major Poverty Villages
The whole Shaanxi Province		37751200	1381886	4469032	11.84	27530	
Total of Shaanxi Project Areas		177578	13621	48665	27.4	253	140
Total of the First Project Areas		79377	5541	19634	24.74	118	53
Linyou County	The Whole County	87359	6113	20358	23.3	100	76
	Project Area	16001	1412	5347	33.77	15	12
	The First Project Areas	5655	458	1947	34.43	5	4
Longxian County	The Whole County	271415	17199	61946	22.82		
	Project Area	16150	1432	6087	38.76	14	10
	The First Project Areas	6729	463	2076	30.85	5	2
Changwu	The Whole County	186944	13829	44195	23.64	146	98
	Project Area	11360	969	3533	31.52	9	6
	The First Project Areas	3356	301	1073	31.97	3	2
Baishui	The Whole	294794	14543	51438	17.45		

4 Analysis of the Poverty Households

Region		Total Population	Number of Poverty Households	Poverty Population	Poverty Incidence (%)	Number of Administrative Villages Involved	Number of Major Poverty Villages
	County						
	Project Area	18601	1507	5829	32.15	13	8
	The First Project Areas	12762	991	3602	28.22	9	6
Fuping	The Whole County	803481	26849	93470	11.63		
	Project Area	40689	2665	8901	22.03	19	12
	The First Project Areas	14755	926	2965	20.09	6	3
Heyang	The Whole County	456257	29653	102266	22.41	353	158
	Project Area	19870	1907	6846	34.17	13	9
	The First Project Areas	5685	511	1728	30.4	3	2
Dingbian	The Whole County	344983	9909	37123	10.76		
	Project Area	16485	543	2354	16.97	14	3
	The First Project Areas	12521	393	1476	11.79	9	2
Mizhi	The Whole County	220183	11303	34334	15.59	395	92
	Project Area	13322	1027	3054	23.05	29	13
	The First Project Areas	5883	464	1333	22.66	16	4
Yichuan	The Whole County	123040	5839	15585	12.67		
	Project Area	8230	885	2369	30.44	14	10
	The First Project Areas	2447	305	845	34.53	8	5
Yanchang	The Whole County	154888	8872	20198	13.04	288	102
	Project Area	6638	493	1761	25.86	95	45
	The First Project Areas	4213	304	1194	28.34	46	17
Yanchuan	The Whole County	198269	9528	28138	14.19	346	107
	Project Area	10232	781	2584	25.22	18	12
	The First Project Areas	5371	425	1395	25.97	8	6

Data Source: SA Farmer Questionnaire

4.1.2 Causes of Poverty

The causes of poverty in the project include disaster, disease, disability, high tuition, lack of skills, lack of labor, and lack of fund (see Table 4-2).

Table 4-2 Number of Households that Got into Poverty for Various Reasons in the First Project Areas

Project Area	Number of Poverty Households	Cause d by Disaster	Cause d by diseases	Caused by Disability	Cause d by High Tuition	Cause d by the lack of skills	Cause d by the lack of labor	Cause d by the Lack of Fund	Cause d by other reasons
Linyou County	458	4	75	10	27	134	74	102	32
Longxian County	463	5	42	34	22	71	113	143	33
Changwu	301	31	62	29	26	30	33	42	48
Baishui	991	8	80	66	70	187	210	312	58
Fuping	925	38	362	109	236	43	23	67	47
Dingbian	393	20	104	50	52	20	24	52	71
Mizhi	464	27	36	14	55	122	4	190	16
Yichuan	305	10	30	45	0	12	63	25	120
Yanchang	304	12	19	22	14	72	13	152	0
Yanchuan	425	23	80	38	120	60	23	71	10

Data Source: SA survey statistics

Of all the causes of poverty in the project area, lack of fund, disease and lack of skills are the major (first three) causes of poverty, which is consistent with the general causes of poverty in the poverty population in the project counties and cities and across the province (see Table 4-3). However, the top three causes of poverty and the degrees of major causes vary slightly across the project areas.

The lack of labor is one of the top three causes of poverty in the project areas of Longxian County, Baishui County and Yichuan County. High tuition is one of the top three causes of poverty in the project areas of Yanchuan County, Fuping County, Dingbian County and Mizhi County. Disability is one of the top three causes of poverty in the project areas of Yichuan County and Fuping County.

The percentage of poverty caused by the lack of fund in the project areas of Yanchang County is as high as 50%, and the percentage is comparatively low in Fuping and Yichuan County, only accounting for 6.25% and 8.2% respectively. The percentage of poverty caused by diseases in the project areas of Fuping County is the highest, reaching 39.19% and the percentage in the project areas of Yanchang and Mizhi County is comparatively low, only accounting for 6.25% and 7.73%

respectively. The percentage of poverty caused by the lack of skills in the project areas of Linyou County is as high as 29.19%, and the percentage is comparatively low in Fuping and Yichuan County, only accounting for 4.6% and 4.1% respectively.

Since the major causes of poverty and the degrees of different causes vary in different project areas, the implementation and operation of project activities should be based on the actual situation of each project areas.

Table 4-3 Percentage of Different Causes of Poverty (%)

Region		Caused by Disaster	Caused by diseases	Caused by Disability	Caused by High Tuition	Caused by the lack of skills	Caused by the lack of labor	Caused by the Lack of Fund	Caused by other reasons
Shaanxi Province		2.197	22.981	4.226	6.402	21.515	11.06	21.645	9.974
The First Project Areas		3.328	17.617	7.785	12.357	15.914	11.84	23.795	7.364
Linyou County	The whole county	0.376	29.838	9.881	6.363	15.966	14.134	15.541	7.901
	Project Area	0.922	16.283	2.151	5.837	29.186	16.129	22.581	6.912
Longxian County	The whole county	0.209	12.925	7.925	5.971	19.6	9.46	25.967	17.943
	Project Area	1.018	9.165	7.332	4.684	15.275	24.44	30.957	7.128
Changwu	The whole county	1.67	17.695	6.298	5.055	21.296	12.452	31.231	4.303
	Project Area	10.381	20.761	9.689	8.651	10.035	11.073	13.841	15.571
Baishui	The whole county	2.991	9.737	0.701	13.147	28.433	18.346	14.935	11.71
	Project Area	0.848	8.058	6.616	7.04	18.83	21.204	31.552	5.852
Fuping	The whole county	1.777	35.528	4.916	10.03	14.053	5.717	23.055	4.924
	Project Area	4.069	39.186	11.777	25.589	4.604	2.463	7.281	5.032
Dingbian	The whole county	2.129	17.974	3.33	9.496	8.406	4.572	16.228	37.865
	Project Area	5.089	26.463	12.723	13.232	5.089	6.107	13.232	18.066
Mizhi	The whole county	0.867	0	0.982	3.468	25.63	10.165	41.378	17.509
	Project Area	5.909	7.727	2.955	11.818	26.364	0.909	40.909	3.409

Region		Caused by Disaster	Caused by diseases	Caused by Disability	Caused by High Tuition	Caused by the lack of skills	Caused by the lack of labor	Caused by the Lack of Fund	Caused by other reasons
Yichuan	The whole county	7.244	15.191	5.772	2.655	19.079	16.578	27.488	5.994
	Project Area	3.279	9.836	14.754	0	4.098	20.492	8.197	39.344
Yanchang	The whole county	2.852	24.865	1.679	2.66	20.458	16.873	28.224	2.39
	Project Area	3.947	6.25	7.237	4.605	23.684	4.276	50	0
Yanchuan	The whole county	13.371	22.796	2.215	10.118	11.975	4.838	13.854	20.833
	Project Area	5.412	18.824	8.941	28.235	14.118	5.412	16.706	2.353

Data Source: SA survey statistics

4.1.3 Livelihood of the Poverty Households

Sample survey shows that, the number of families relying on agriculture income as the major source of family income accounts for 65.52%; those relying on “migrant labor or wage” account for 33.41; and those rely on subsidies and donation account for 1.07%. It shows that agriculture income is the major source of income for the poverty households in the project areas. The singularity of income sources is a major feature of the livelihood of the poverty households in the project areas. The major consumption expenditure of the poverty households is living consumption and medical expenditure.

Due to the lack of labor, fund and skills, the poverty households in the project area usually have small scale of crop and animal Farming with low product output. For example, in Longzhen community of Mizhi County, the average farming area of the poverty households is only 4.27 mu, lower than the average 6.66 mu of ordinary farmers in the project area.

4.1.4 Poverty Households’ Participation in Cooperatives

Sample survey shows that 9.53% of the poverty households in Tingkou Township project area of Mizhi County have participated in cooperatives; 3.45% of the poverty households in Longzhen project area have participated in cooperatives. It shows that the participation rate of the poverty households in cooperatives is still low and the cooperative

development in the project areas is not very optimistic. Most of the cooperatives are not very well developed with immature structure and non-standard operations, which is not very appealing to the poverty households.

In fact, the poverty households are very willing to participate in cooperatives to develop together with its members. Questionnaire results show that 83.81% of the poverty households in Tingkou Township of Changwu County and 86.44% in Longzhen project area of Mizhi County are willing to participate in cooperatives.

Questionnaire results show that a majority of poverty households have some knowledge of specialized farmer cooperatives. 19.5% said they “know very well”; 31.1% said they “Know”, and 39.8% said they “know a little” (see Table 4-4).

Table 4-4 Knowledge of Specialized Farmer Cooperatives (%)

Project Area	Know very well	Know	Know a little	Do not know	Do not know at all
Linyou County	27.3	26.3	37.1	2.6	6.7
Longxian County	18.9	27.6	45.4	3.5	4.6
Changwu County	22.6	29.9	33.6	4.8	9.1
Baishui County	15.5	35.9	35.6	6.9	6.1
Fuping County	19.1	33.5	40.7	3.3	3.4
Heyang County	23.5	14.5	53.6	3.8	4.6
Dingbian County	16.5	26.5	38.7	7.9	10.4
Mizhi County	21.3	29.4	41.6	5.1	2.6
Yichuan County	17.2	39.5	35.4	4.5	3.4
Yanchang County	22.4	34.1	32.6	5.7	5.2
Yanchuan County	13.4	49.3	30.7	4.3	2.3
合计	19.5	31.1	39.8	4.5	5.1

Data Source: SA Farmer Questionnaire

A majority of poverty households said they are “very supportive” or “supportive” of establishing and developing cooperatives. Questionnaire results show that 43.59% of the interviewees in Tingkou community of Changwu County are “very supportive” of establishing developing cooperatives and 43.59% are “supportive”; that percentages are 47.2%

and 43.8% respectively in Longzhen community of Mizhi County; (see Table 4-5).

Table 4-5 Support of Establishing and Development Cooperatives (%)

Project County	Very Supportive	Support	Don't Care	Not Supportive	Very Not Supportive
Linyou County	40.9	47	5.5	3.1	0.4
Longxian County	43.5	44.2	3.6	5.5	3.2
Changwu County	41.59	45.59	12.32	0.9	0.6
Baishui County	41.4	44.9	9.5	3.8	2.4
Fuping County	42.8	49.2	4.3	4.1	0.6
Heyang County	39.6	48.2	7.7	3.9	1.1
Dingbian County	40.8	46.6	4.1	7.1	0.6
Mizhi County	47.2	43.8	4.8	4.2	0.2
Yichuan County	40.8	45.7	9.7	2.6	1.2
Yanchang County	38.8	47.7	4.5	36.5.0	4.5
Yanchuan County	46.9	44.8	3.1	4.3	0.9
Total	42.7	44.8	6.4	2.6	1.5

Data Source: SA Farmer Questionnaire

4.1.5 Capability of the Poverty Households to Participate in Industries with Unique Advantages

(a) Capability of the Poverty Households for the Development of Industries with Unique Advantages

Questionnaire results show that 40.22% of the poverty households believe they do not have the professional skills necessary to the development of industries with unique advantages; 39.13% said they have some knowledge but it is insufficient; only 20.65% believe they have acquired all the necessary skills they need. (see Table 4-6).

Table 4-6 Professional Skills Farmers have for Advantageous Industries (%)

Project County	Have	Partly Have	Do not Have
Linyou County	30.5	57.4	12.1
Longxian County	26.1	56.6	12.3
Changwu County	37.5	40.5	22
Baishui County	21.6	44.3	34.1

4 Analysis of the Poverty Households

Project County	Have	Partly Have	Do not Have
Fuping County	20.1	42.7	37.2
Heyang County	34.5	61.9	4.6
Dingbian County	29.2	54.9	16.9
Mizhi County	21.3	65.8	14.9
Yichuan County	30.1	50.5	19.4
Yanchang County	23.1	43.7	33.2
Yanchuan County	22.8	43.6	34.6
Total	20.65	39.13	40.22

Data Source: SA Farmer Questionnaire

(b) Willingness to Participate in Professional Training of Industries with Unique Advantages

Questionnaire result shows that most of the poverty households are willing to participate in the professional training of industries with unique advantages. 43.33% of the poverty households said they are “very willing to”, 48.89 chose “willing”, and only 3.34% said they don’t care and 4.42% chose “unwilling”. The percentage of “Very Willing” exceeds half of the interviewees, reaching 52.63%. (Table 4-7).

Table 4-7 Willingness to Participate in Professional Training of Industries with Unique Advantages (%)

Project County	Very willing	Willing	Don’t Care	Unwilling	Very Unwilling
Linyou County	45.9	46	4.5	4.1	0.4
Longxian County	44.5	42.2	4.6	6.5	2.2
Changwu County	52.63	39.47	2.63	5.26	0
Baishui County	37.4	48.9	7.5	4.3	1.9
Fuping County	41.8	50.2	5.3	3.7	0
Heyang County	43.6	44.2	7.2	4.5	0.5
Dingbian County	42.8	44.6	4.8	7.7	0.1
Mizhi County	37.38	53.25	3.13	6.25	0
Yichuan County	42.8	43.7	9.2	3.1	1.2
Yanchang County	39.8	46.7	6.5	35	5
Yanchuan County	48.9	42.8	3.6	3.8	0.9
Total	43.33	48.89	3.34	4.02	0.4

Data Source: SA Farmer Questionnaire

(c) Willingness to Participate in the Development of Industries with Unique Advantages

Questionnaire results show that 85.87% of the interviewees said they are “willing” to participate in the development of industries with unique advantageous and only 5.43% said they are “unwilling.” Over 90% of interviewees in Longzhen project areas said they are “willing” (see Table 4-8).

Table 4-8 Willingness to Participate in the Development of Industries with Unique Advantages (%)

Project County	Very willing	Willing	It depends
Linyou County	87.5	5.4	7.1
Longxian County	91.1	4.6	5.3
Changwu County	80	7.5	12.5
Baishui County	81.6	9.3	9.1
Fuping County	84.12	6.67	7.31
Heyang County	90.5	5.9	3.6
Dingbian County	89.2	4.9	5.9
Mizhi County	90.63	3.13	6.25
Yichuan County	19.1	14.5	5.4
Yanchang County	92.1	4.2	2.7
Yanchuan County	90.8	6.6	2.6
Total	85.87	5.43	8.7

Data Source: SA Farmer Questionnaire

4.2 Participation of the Poverty Households in Project Activities

4.2.1 Identification of Poverty Household Participators in Project Activities

Analysis of the causes of poverty shows, although the poverty population caused by disease, disability or the ability to work are stakeholders affected by project activities, they are in effect unable to participate in project activities and are unable to assume responsibilities. Therefore, we need to identify the poverty population that is able to participate in project activities.

After screening through the statistics on the poverty population and field study and identifying those caused by diseases, disability, and incapability to work as the group unable to participate in project activities, we calculate the poverty population that are able to participate by misusing the total poverty population in the project with those unable to participate. See Table 4-9.

Table 4-9 Size of Poverty Population Able to Participate

Project Area	Poverty Population	Poverty Population Able to Participate
Linyou County	1947	1586
Longxian County	2076	1698
Changwu County	1073	1013
Baishui County	3602	3278
Fuping County	2965	2541
Heyang County	1728	1537
Dingbian County	1476	1198
Mizhi County	1333	1146
Yichuan County	845	679
Yanchang County	1194	967
Yanchuan County	1395	1157

Data Source: SA survey statistics

4.2.2 Poverty Households' Knowledge and Participation in Project Activities

Through field study, SA investigation team found that PMO staff and village officials have conducted publicity promotion of the project in villages. In addition, Environment Assessment and Social Assessment teams' investigation also serve as a certain form of publicity promotion, which helps the poverty households to learn about and understand the project. However, the degree of knowledge and understanding is still low.

Questionnaire results show that 90.82% of the poverty households have heard of the Word Bank project and 9.18% said they have not heard of the project. In the project areas of Linyou County, 96.5% said they have heard of the project (see Table 4-10).

Table 4-10 Poverty Households' Knowledge of the Project (%)

Project County	Have Heard of	Have Not Heard of
Linyou County	96.5	3.5

4 Analysis of the Poverty Households

Project County	Have Heard of	Have Not Heard of
Longxian County	91.1	8.9
Changwu County	81.5	18.5
Baishui County	90.6	9.4
Fuping County	92.9	7.1
Heyang County	90.5	9.5
Dingbian County	96.2	3.8
Mizhi County	91.7	8.3
Yichuan County	89.7	10.3
Yanchang County	86.6	13.4
Yanchuan County	87.8	12.2
合计	90.8	9.2

Data Source: SA Farmer Questionnaire

Questionnaire results show that the poverty households are very supportive of the project. 90.5% are supportive; 5.3% said they don't care and only 4.2% said they are not supportive. The support rate in the project areas of Fuping County is as high as 94.8% and that in the project areas of Yichuan County is 92.1% (see Table 4-11). It can be seen that the poverty households have high expectations of the project to improve their conditions through project construction.

Table 4-11 Poverty Households' Support to the Project (%)

Project County	Supportive	Not Supportive	Don't' Care
Linyou County	90.5	5.4	4.1
Longxian County	89.1	3.6	7.3
Changwu County	89.7	0	10.3
Baishui County	90.6	4.8	4.6
Fuping County	94.8	3.7	1.5
Heyang County	90.5	4.9	3.6
Dingbian County	87.2	6.9	5.9
Mizhi County	86.3	2.6	11.1
Yichuan County	92.1	3.5	4.4
Yanchang County	91.6	5.2	3.2

4 Analysis of the Poverty Households

Project County	Supportive	Not Supportive	Don't Care
Yanchuan County	90.8	5.6	3.6
Total	90.5	4.2	5.3

Data Source: SA Farmer Questionnaire

4.2.3 The Poverty Households' Expectations and Effect Evaluation of the Project Activities

Table 4-12 The Poverty Households' Expectations and Effect Evaluation of the Project Activities

Project Activities	Expectations	Effect Evaluation
Cooperative Establishment	Participate in cooperatives and use the equipment and sales channels of cooperatives to promote the processing and sales of agricultural products, or entrust land or orchards to cooperatives to management collectively so that the products may sell at higher prices.	The willingness of poverty households to participate in cooperatives: Realization of expectations has uncertainties. The poverty households' wish to participate can be realized easily, but their objective of promoting the processing and sales of agricultural products depends on the macro market environment and cooperative operation capability.
Agricultural Infrastructure Establishment	Building of production roads facilitates production management, and construction of irrigation facilities satisfies the irrigation demand.	It is able improve the general conditions of production roads and irrigation facilities in the project areas. However, the length of newly built production roads is limited. It is unable to guarantee that they will be able to reach the contracted land of the poverty population. Improvement of irrigation facilities is unable to meet all the irrigation demand.
Cooperative Development Fund	Be included in the production base to participate in the development of crop and animal Farming industries and get technical assistance.	It is able to provide better production facilities for the development of crop and animal Farming industry. But limited by project scale, it can only support part of the poverty population.
Economic Infrastructure Establishment	Improve the living conditions of the community	It is able to improve the living condition and environment of communities to get the poverty population out of poverty.
Technical Assistance and Capability Building	Improve their employment and development capability by accepting professional skill training, including production skills and technologies related to the industries in the community, skill training for migrant workers and computer skills.	The poverty population can get certain professional training and the categories and amount of skill training are able meet their demand. The problem is whether the training will help to improve their employment and production to get more profits depends on the macro economic environment.

(a) Expectations and Effect Evaluation of Cooperative Establishment Project

The poverty households are very willing to participate in cooperatives.

Questionnaire results show that 87.93% of farmers are willing to participate. The poverty households' expectations of joining the cooperatives include:

First, make use of the factories and cold storage built by the cooperatives to process and store agricultural products more effectively. The dried persimmon processing in Caocun project area of Fuping County depends on the traditional manual craft, which is difficult to finish the processing of large amount of fresh persimmons in a short time and unable to guarantee the processing quality. Large dried persimmon processing machine work fast with guaranteed quality. However, large cold-chain and agricultural machinery are too expensive for ordinary farmers, especially the poverty households, to afford. The poverty households wish to make use of the large agricultural machinery bought by the project. Second, sell agricultural products through cooperatives at higher prices to get more sales revenue.

Participation of the poverty households depends mostly on their willingness. Interview with cooperatives shows that cooperatives consider it an important task to attract poverty households into the cooperatives. The poverty households' expectation to use such agricultural product processing and storage machinery as workshops and cold storage depends on the way of utilization of the machinery and the poverty households' way of participation. Their expectation to sell products at higher prices through cooperatives' e-business platforms depends on the macro economy and the cooperatives' market development capability.

(b) Expectations and Effect Evaluation of Agricultural Infrastructure Establishment Project

The poverty households' expectations of agricultural infrastructure establishment include: improve production road conditions and irrigation facilities.

The living and production conditions of the poverty households in the project areas are very poor. SA investigation teams found in the field study that the poverty households generally have high expectations on the infrastructure building. They hope the project could focus on the improvement of production roads, irrigation water and large agricultural machinery, etc. SA investigation team found that in many project areas, "the last mile" of production roads is unable to get through. In some project areas, the production roads are bumpy and severely damaged. Some roads are too narrow for agricultural vehicles to get through. Inconvenient transportation greatly affects the production and sales. A lot of poverty households lack labors and they hope the production roads could be improved to facilitate production and hiring labors.

All the project areas of Shaanxi province are in the arid area and agriculture production is greatly restrained by the lack of water resources.

Although the productions in most project areas are water-saving productions. For example, the persimmon planting in Caocun project area of Fuping County and the apple growing in Ganjing project area of Heyang County are not very water-consuming. But they still need water. The fruit harvest is closely related to the water supply in the growth period. The poverty households expect to improvement the building of motor-pumped wells and the management of irrigation water.

The expectation to improve production roads is restricted by the scale and regional distribution of the production road construction. Newly built production roads might not directly lead to the contracted land of the poverty households, but the objective of improving the overall conditions of production roads in the project areas is no doubt able to realize. The expectation to improve the irrigation conditions depends on the regional distribution of irrigation facilities to be constructed and the ways of irrigation facility management. Moreover, whether it is able to meet the poverty households' demand of irrigation depends also on the amount of irrigation water that can be obtained.

(c) Expectations and Effect Evaluation of Cooperative Development Fund Project

Questionnaire results show that 90% of the poverty households in the project area are willing to participate in the development of industries with unique advantageous but are restrained by the lack of fund and technology. They hope to participate in the cooperative development fund project and the construction of project base and to get the support from the project to develop crop and animal Farming industries. In the meantime, they also hope to get technical assistance from the cooperatives on crop and animal Farming skills.

The expectation to participate in the development of crop and animal Farming industry requires necessary fund and skills. It depends on whether the fund provided by the cooperative development fund project is able to meet all the demands or whether the participating farmers have their own capital and if the poverty households lack necessary fund, how to include them in the project through creative cooperative management. In addition, whether the poverty population has the skills and experiences needed for developing corresponding industries also affects the realization of expectation. Skill training is needed to solve the problem of lacking skills and experiences.

(d) Expectations and Effect Evaluation of Economic Infrastructure Establishment Project

The poverty population expect, through the economic infrastructure establishment, to: First, improve domestic water conditions. Project areas in arid and semi-arid areas general have insufficient water supply with

poor water quality. For example, villagers from Ganjing project area of Heyang County said that although the villagers have enough drinking water but the water quality is poor. Second, improve the road conditions in the villages. Although the road conditions have been improved in general, the inter-village roads are still poor. Third, improve the electricity supply of the rural area.

The water supply project, road project, environment project and rural energy project in the project design are all imperative for the improvement of infrastructure and environment in the project areas. The expectation to improve economic infrastructure depends on the selection of region for the project construction and the areas covered by the projects. And a good operation and management system is needed for the subsequent using and management, such as the effect of waste collecting facilities, when the construction is finished.

(e) Expectations and Effect Evaluation of Technical Assistance and Capability Building Project

SA teams found during the field study that the poverty households are generally poorly educated and lack necessary skills. They hope to participate in the skill training provided by the Technical Assistance and Capability Building project. 42.52% of the interviewed poverty households hope to get training in animal farming skills, 39.57% in training of skills needed in growing grains and vegetables, 36.58% in training of fruit and tree planting skills, and 24.6% in training of skills needed for migrant working. Interviews found that some poor people worried that the training they get won't help him/her develop related industries or won't help to get employment opportunities.

Whether the poverty population is able to improve their skills and self-development capability through the Technical Assistance and Capability project to get more employment and development opportunities depend on their willingness and objectives to participate in the skill training, their capability of learning and the adaptability of training content. Whether they can successfully develop the industries they want or get employed will to a large degree depend on the macro economic conditions?

4.2.4 The Poverty Households' Needs and Preferences of Project Activities

According to the project plan, project construction consists of such major project activities as cooperative building, agriculture infrastructure establishment, cooperative development fund, economic infrastructure establishment, technical assistance and capability building support, etc.

Different project activities have different objectives and focuses and

the needs of different poverty households vary too. What category of projects do the poverty households need more? What kind of project activities can better satisfy their needs? How do they evaluate the importance of project activities? By conducting questionnaires, SA teams sorted the poverty households' needs and preferences of project activities by importance. The questionnaire asks the poverty households to put the 5 categories of project activities in sequence by importance on a scale of 1 to 5 with the importance declining from 1 to 5.

By averaging the value of importance of each project activities, we can see how important the poverty households consider a project activity (see Table 4-13).

4-13 The Poverty Households' Valuation of Project Activities by Importance

Project Activities Project Areas	Cooperative Construction	Agriculture Infrastructure Establishment	Cooperative Development Fund	Economic Infrastructure Establishment	Technical Assistance and Capability Building Support
Total	2.55	2.25	2.74	3.65	2.63
Linyou County	3.79	2.72	1.79	2.82	2.35
Longxian County	2.18	1.66	3.07	3.99	2.72
Changwu	2.14	2.74	2.64	3.83	1.99
Baishui	2.68	1.5	3.28	4.31	2.9
Fuping	2.5	2.95	3.48	3.2	2.37
Heyang	2.28	2.23	3.01	4.23	1.98
Dingbian	2.67	2.97	2.57	3.15	2.87
Mizhi	2.52	1.74	2.14	3.59	2.93
Yichuan	2.95	2.54	2.18	3.07	3.09
Yanchang	2.13	2.27	3.52	3.71	2.87
Yanchuan	2.03	2.38	2.41	3.84	2.33

Data Source: SA Farmer Questionnaire, importance decline from 1 to 5

The poverty households' valuation of project activities by importance shows that their needs and preferences of project activities are sorted in the following order: In the first place is Agricultural Infrastructure Establishment, seconded by Cooperative Construction, and followed in sequence by Technical Assistance and Capability Building Support, Cooperative Development Fund, Economic Infrastructure Establishment and Mutual Aid Fund.

However, their needs and preferences may vary from project area to project area. For example, in Linyou, Dingbian and Yichuan project areas, Cooperative Development Fund is in the first place; while in Longxian

County, Baishui and Mizhi project areas, in the first place is Agricultural Infrastructure Establishment. In Changwu, Fuping and Heyang, Technical Assistance and Capability Building Support is in the first place, while in Yanchang and Yanchuan, Cooperative Construction is in the first place. It shows that the poverty households in different project areas have different needs for the project activities. Project activities should be arranged according to the practical needs of the poverty households in the project implementation.

It is worth noting that in order to compare the differences between the poverty households and the regular farmer households in terms of needs and preferences of project activities, SA also distribute the same questionnaires among non-poverty households. Analytic results show that regular farmer households have similar needs and preferences to the poverty households in the same project area and that result is consistent in the project area in general.

4.3 Impact of Project Activities on the Poverty Households

4.3.1 Positive Influence

(a) Improve infrastructure and the living conditions of the poverty households

Infrastructure construction is an important component of project construction. Infrastructure establishment is backward across all the areas covered by the project areas, especially the production roads and agricultural irrigation facilities. Project implementation can change this backward situation to a large extent and provide the poverty groups with better infrastructure needed for the development of industries with unique advantageous. Particularly, the updates and improvement in crop and animal farming facilities and product processing equipment will greatly improve the production and living conditions of farmers in the project areas and give the poverty groups more opportunities to develop.

(b) Expand the marketing channels for agricultural products to help the poverty households increase production output and income.

SA teams found during seminars and in-depth interviews with farmers that they have difficulty in selling their products due to singular market channels, narrow market scope and low prices. The main reason is the lack of necessary facilities and market information. Due to the lack of cold chain, large machinery and other facilities necessary for the storage, transportation and processing of agricultural products, the products can only are sold in the markets nearby by large quantity in a short time range, which leads to low prices. In addition, without the guidance of regulated operating cooperatives and leading enterprises, regular farmers are unable

to obtain sufficient market information, which is no good for product selling. The project will help with the establishment and operation of cooperatives and provide large storage, transportation and processing facilities needed, which will improve the marketing capability and the ability to obtain market information and solve the difficulties in transportation, selling and low prices from the root.

(c) Improve the production skills of the poverty population to improve their self-development capability

SA teams learned from the filed study that the lack of skills is general among farmer households, especially the poverty households, in the project areas. They are ill-educated, which limits their self-development capability. Improving the self-development capability of the poverty population in the project areas is an important task in the project construction, which will help to develop the human resources and the intelligence of the poverty households in addition to natural resources in the project areas. Compared with regular farmer households, the poverty households particularly lack the production and management skills of crop and animal farming. The training of practical farming skills and technical experts for poverty alleviation will help the poverty households in the project areas to acquire scientific crop and animal farming skills, management ideas and market awareness, improve the overall education level of farmers in the project areas, improve their production skills and management capability so as to improve the capability of farmers, particularly the poverty farmers, to participate in industry development and cooperative and their self-development capability.

4.3.2 Potential Risks

(a) Market Risks

Industries developed in the project areas are mainly crop and animal Farming, which have great market risks. Farmers in the project areas, especially the poverty households, lack the ability to obtain and analyze market information and therefore have limited capability of handling market risks. If the prices of agriculture products fall or stay low for a long time, it will greatly hurt farmers' incentive to participate in the crop and animal Farming industry, which will in turn affect the sustainability of project. When the project areas realize scale production, some project villages will develop singular industry structure, which will increase the market risks.

In addition, prices of labor, raw materials and equipment needed in the project development may rise under the market influence, which will not only increase the cost of project construction and operation and affect

the project effect or profits, but also cause some destabilizing factors.

(b) Livelihood Risks

The size of investment and the time needed to yield profits will directly affect the economic gains of project and the farmers' incentive to participate. The major sources of income for farmers in the project areas are migrant working and traditional crop and animal Farming. Their income is low. Project implementation requires certain preliminary investment. The production cycles of some industries are long. It usually takes a long time to yield profits. For farmers with limited sources of income, particularly the poverty households that live on rural subsistence allowances, the preliminary investment and long production cycle will have a negative impact on their livelihood, and thus undermine their willingness and confidence to participate.

(c) Technology Risks

The poverty households' way of production in the project area is outdated. They still rely on the traditional crop and animal Farming skills. The farming skills are simple and extensive, which lead to low production output. The animal farming technologies are neither scientific nor intensive. Production and processing technologies are primary with low level of disease control technologies. Although the project will provide intensive skill training for farmers, especially poverty households, the training effect is not guaranteed because of the low level of skills the farmers originally have. If they are unable to grasp the skills, it will have a negative impact on the sustainability of the project.

(d) Fair Benefit Risks

Project implementation involves the interest distribution mechanism. Since it is unable to choose project households on an absolutely fair basis, it will cause internal conflicts in the villages, which will have negative social impacts. Since the project involves different interest groups, there are risks on whether it is able to listen to the opinions from all aspects and consider interests of all parties in terms of interest distribution and participation. The poverty households' participation in cooperatives and the development of industries involves the problem of interest distribution. If their interests are impaired, it will directly affect their incentive and enthusiasm.

4.4 Summary

1. The project areas of Shaanxi province have a poverty population of 48655. The poverty incidence is 27.4%. In the first 12 project areas, there is a poverty population of 19634. The poverty incidence is 24.74%. The poverty incidence is much higher than the average of 11.84% across the province. Although the poverty incidence varies in the first 13 project

areas, they are much higher than the average across the whole county. Therefore, it is imperative to get the poverty population out of poverty through the project implementation.

2. Of all the causes of poverty in the project area, lack of fund, disease and lack of skills are the major (first three) causes of poverty, which is consistent with the general causes of poverty in the poverty population in the project counties and cities and across the province. However, the top three causes of poverty may vary slightly across the project areas. Therefore, the implementation and operation of project activities should be based on the actual situation of each project areas.

3. Agriculture income is the major source of income for the poverty households in the project areas. Although the percentage of poverty houses that have participated in cooperatives is low (in some project areas lower than 10%), most of the poverty households said they are supportive of the development of cooperatives and are willing to participate. However, the poverty households have different level of knowledge of the project activities. Many of them do not know the project very well. The poverty households in different project areas have different needs and preference of the project activities. But generally speaking, they are more inclined toward agricultural infrastructure establishment and cooperative development.

4. Project activities will help to improve the production and living conditions of the poverty population, help to improve production output and income and self-development capability. But to a large extent, the outcome depends on the management of potential market risks, fair benefit risks and technology risks.

5 Cooperative Analysis

5.1 Status of Specialized Farmer Cooperatives

5.1.1 Cooperative Overview

By the end of 2014, there are 36,000 specialized farmer cooperatives in Shaanxi province with an average of 336 cooperatives in each county (district). There are 3114 cooperatives in 11 project counties, including 112 cooperatives in Linyou County, 234 in Longxian County, 205 in Changwu County, 540 in Baishui County, 521 in Fuping County, 213 in Heyang County, 210 in Dingbian County, 310 in Mizhi County, 229 in Yichuan County, 218 in Yangchang County, and 322 in Yanchuan County. The number of cooperatives in Baishui, Fuping, Mizhi and Yanchuan exceeds the provincial average.

In the 29 project communities there are 166 specialized farmer cooperatives with an average of 5.7 in each community. The number of cooperatives in Daoxiang project area of Fuping county is 15, while in He'erchuan community of Yichuan County and Jujia project area of Changwu County, there are only two respectively.

Table 5-1 Number of Specialized Famer Cooperatives in the Project Areas, the Project Counties and the Province

	Number of Cooperatives	County	Number of Cooperatives	Project Area	Number of Cooperatives
Shaanxi Province	36000	Linyou County	112	Changfeng Project Area of Changfeng Township (First)	5
				Jiufang Project Area	10
				Zhaoxian Project Area	8
		Longxian County	234	Liangquan Project Area of Dongfeng Township (First)	4
				Tieyuan Project Area of Tiancheng Township	3
				Guguan Project Area of Gugua Township	3
		Changwu County	205	Tingkou Project Area (First)	3
				Hongjia Project Area	5

5 Cooperative Analysis

	Number of Cooperatives	County	Number of Cooperatives	Project Area	Number of Cooperatives
Ditto	Ditto			Jujia Project Area	2
		Baishui County	540	Lin'gao Project Area (First)	3
				Shiguan Project Area (First)	4
				Dukang Project Area	7
		Fuping County	521	Caocun Township Project Area (First)	9
				Daoxian Township Project Area	15
				Xuezhen Project Area	5
		Heyang County	213	Ganjing Project Area (First)	2
				Zhibu Project Area	3
				Yangjiazhuang Project Area	2
		Dingbian County	210	Yangjing Project Area (First)	9
				Baiwanzi Project Area	9
		Mizhi County	310	Yangjiagou Project Area	7
				Longzhen Project Area (First)	7
				Yindou Project Area	8
		Yichuan County	229	He'erchuan Project Area (First)	2
				Jiyi Project Area	6
		Yanchang County	218	Leichi Project Area (First)	8
				Luoizshan Project Area	6
		Yanchuan County	322	Shiyao Project Area (First)	6
				Dazhang Project Area	5
		Total in the 11 counties	3114	Total in the 29 project areas	166

Data Source: SA investigation statistics

There are 30 specialized farmer cooperatives firstly supported by the project, with an average of 2.7 in each county. Fuping County has 7 cooperatives, which is the largest. Cooperatives are specialized in crop and animal farming, processing and selling, based on the local agricultural output. Some cooperatives expand their businesses into such

fields as storage of melons and fruits and vegetables and farm-based tourism, production-related information consultation (such as cooperatives in Dingbian, Yanchang and Mizhi). The first cooperatives, Huali Persimmon Cooperative of Fuping County and Taibai Persimmon Cooperative of Caocun Township, were registered in 2007. The numbers of new cooperatives (registered in 2015) and cooperatives to be built (registered later than 2015) are 9 and 4 respectively, accounting for 30% and 13.3% respectively. The sizes of cooperatives vary greatly. The membership varies from 5 to 1596 (with an average membership of 333). The investments range from 20,000 to 13 million yuan with an average of 3.19 million yuan (see Table 5-2).

Table 5-2 Overview of Specialized Farmer Cooperative in the Project Areas

County	Cooperative Name	Number of Administrative villages involved	Major Business	Membership	Time of Registration (Year)	Total Investment (yuan)
Linyou County	Changfeng Watermelon Cooperative	3	Watermelon Planting and Selling	90	2012	4.35
	Changfeng the Su's Apple Cooperative	2	Apple Planting and Selling	46	2012	2.3
	Changle Wenfeng Edible Fungi Cooperative	5	Edible Fungi Planting and Selling	80	2015	43.6
Longxian County	Qingquan Chili Cooperative	1	Chili Planting and Selling	720	2015	350
	Zhongxin Grains Cooperative	1	Grains Planting and Selling	430	2012	210
Changwu County	Langrun Fruit Cooperative	1	Apple Planting and Selling	556	2015	408.7
	Jing'ao Fruit Cooperative	1	Apple Planting and Selling	7	2013	50
	Changling Fruit Cooperative	1	Apple Planting and Selling	5	2016	500
Baishui County	Lin'gao Fengxiang Keyuan Apple Cooperative	1	Apple Planting and Selling	604	2013	143.9
	Jinhong Organic Apple Cooperative	4	Apple Planting and Selling	413	2008	262.49
Fuping County	Dafu Persimmon Planting Cooperative	6	Persimmon Planting and Processing	557	2015	187.98
	Nongle Persimmon	6	Persimmon Planting and	508	2011	500

5 Cooperative Analysis

County	Cooperative Name	Number of Administrative villages involved	Major Business	Membership	Time of Registration (Year)	Total Investment (yuan)
	Cooperative		Processing			
	Lyjinyuan Fruit Cooperative	6	Persimmon Planting and Processing	40	2012	10
	Huali Persimmon Cooperative	6	Persimmon Planting and Processing	306	2007	100
	Shengyi Fruit Planting Cooperative	6	Persimmon Planting and Processing	190	2011	130
	Taibai Persimmon Product Cooperative of Caocun Township	6	Persimmon Planting and Processing	360	2007	2
	Jinshida Persimmon Cooperative	6	Persimmon Planting and Processing	190	2009	300
Heyang County	Jiujia Crop Farming Cooperative	6	Apple and Shiitake Mushroom Persimmon Planting and Processing	318	2015	787.35
Dingbian County	Yangjing Jianhui Animal Farming Cooperative	1	Planting and Selling of crops and vegetables; raising and selling of animals; preparing for lamb raising project	324	2013	105.5
	Nongdezhuang Crop Farming, Forestry and Husbandry Cooperative	1	Crop farming and selling, animal farming and selling, forestry and sand amelioration; selling of agricultural materials and machinery, production-related information consultation	10	2014	580

5 Cooperative Analysis

County	Cooperative Name	Number of Administrative villages involved	Major Business	Membership	Time of Registration (Year)	Total Investment (yuan)
	Guoyun Agriculture Cooperative	1	Planting, storage and selling of potatoes, melons, fruits and vegetables	5	2011	500
Mizhi County	Longlaigou Apple Cooperative	13	Planting and selling of mountain apples	1596	2016	670
	Longzhen Minor Grains Cooperative	13	Planting and selling of minor grains	400	2017	500
	Longzhen Jiami Donkey Cooperative	13	Raising and processing of Jiami Donkey	400	2017	500
Yichuan County	Fuyuan Animal Farming Cooperative	8	Raising and selling of sheep	315	2015	300
	Jiyi Honey Bees Cooperative	8	Raising and selling of bees and honey	102	2008	310.8
Yanchang County	Guoxianju Fruit Cooperative	10	fruit production, storage and selling; production of charcoal and fruit baskets	624	2015	500
	Zhongxin Animal Farming Cooperative	14	Raising, processing and selling of livestock, poultry and fish; exchanges of new variety and skills; training, consultation and services	642	2012	1300
Yanchuan County	Huguang Crop Farming Cooperative	5	Planting and selling of apples	200	2015	100
	Chengfeng Animal Farming Cooperative	8	Raising and selling of pigs, cattle and sheep	435	2015	212.5

Data Source: SA Statistics

5.1.2 Main Categories of Cooperatives

According to different business activities, specialized farmer cooperatives can be put into three categories: crop farming cooperatives, animal farming cooperatives and service cooperatives. So far, there are 23 crop farming cooperatives, 7 animal farming cooperatives and 9 service cooperatives in the first project areas, accounting for 59%, 17.9% and 263.1% respectively. Crop farming cooperatives can be further categorized into cooperatives specialized in watermelon, apple, edible fungi, chili, grains, persimmon, Shiitake mushroom, vegetables and minor grains; animal farming cooperatives can be further categorized into cooperatives specialized in raising pigs, cattle, sheep, chicken and donkey, etc.; service cooperatives can be further categorized into cooperatives specialized in providing agricultural materials, production-related technical training, information consultation, and farm-based tourism (see Table 5-3).

Table 5-3 Categories of Specialized Farmer Cooperatives in the Project Areas

Project County	Crop Farming Cooperatives		Animal Farming Cooperatives		Service Cooperatives		Total	
	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)
Linyou County	3	100	0	0	0	0	3	100
Longxi County	2	100	0	0	0	0	2	100
Changwu County	3	100	0	0	0	0	3	100
Baishui County	2	100	0	0	0	0	2	100
Fuping County	7	50	0	0	7	50	14	200
Heyang County	1	100	0	0	0	0	1	100
Dingbian County	1	25	2	50	1	25	4	100
Mizhi County	2	66.7	1	33.3	0	0	3	100
Yichuan County	0	0	2	100	0	0	2	100
Yanchang County	1	33.3	1	33.3	1	33.3	3	100

5 Cooperative Analysis

Project County	Crop Farming Cooperatives		Animal Farming Cooperatives		Service Cooperatives		Total	
	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)
Yanchuan County	1	50	1	50	0	0	2	100
Total	23	59.0	7	17.9	9	23.1	39	100

Data Source: SA Statistics

Note: Since some cooperatives operate more than one kind of businesses, the total of all categories of cooperatives is more than 33.

5.2 Cooperatives' Demand for Project Content

Investigation of the cooperatives supported by the first project areas, the project content they need consists of four aspects: livelihood and industry development, economic infrastructure and services, technical assistance and capability building support, and management and monitoring. To put it more specifically, the needs of cooperatives focus on project-related management and monitoring, cooperative construction, agriculture infrastructure establishment, facility building, technical assistance and capability building, public-private partnership, and cooperative development fund, etc. The demand for Project Management Training and Capability Building of PMOs, Maintenance Management of Project Operation at the provincial, municipal, county and township level, Cooperative Institution Building including offices and office supplies, Market Development including venue, E-business platform and brand certification, etc., production roads, Production Capability Building, Community Capability Building, facility operation management training and institution operation management, Project Management and Monitoring Platform System Development, is the highest, accounting for over 67%; seconded by the demand for cooperation with leading enterprises and technology providers, irrigation system, agricultural product storage and processing facilities including workshops, equipment and cold storage, etc., crop and animal farming and service industry development fund, and water supply and drainage project, accounting for 33% to 60%. The demand for compost, waste collection, energy projects such as methane and solar energy, electricity project, production insurance and seedling greenhouses is the fewest, accounting for 13% to 27% (see Table 5-4).

5 Cooperative Analysis

Table 5-4 Specialized Farmer Cooperative Project Content

Cooperative Name Project Content	Changfeng Watermelon Cooperative	Changfeng Edible Fungi Cooperative	Changfeng the Su's Apple Cooperative	Qingquan Chili Cooperative	Langrun Fruit Cooperative	Lin'gao Fengxiang Keyuan Apple Cooperative	Jinhong Organic Apple Cooperative	Jiujia Crop Farming Cooperative	Yangjing Jianhui Animal Farming Cooperative	Yichuan Fuyuan Animal Farming Cooperative	Yichuanjiyi Honey Bees Cooperative	Guoxianjiu Fruit Cooperative	Zhongxin Animal Farming Cooperative	Yanchuan Shuguang Crop Farming Cooperative	Yanchuan Chengfeng Animal Farming Cooperative	Total (frequency)
Cooperative Institution Building (offices and office supplies)	√		√	√	√	√	√		√	√	√	√		√	√	12
Agricultural product storage and processing facilities (workshop, equipment and cold storage, etc.)				√	√		√	√	√			√	√			7
Market Development (venue, E-business platform and brand certification, etc.)				√	√	√	√	√	√	√	√	√	√	√	√	12
Production Insurance				√				√								2
soil amelioration	√	√		√				√				√	√			6
Production Roads	√	√	√	√	√	√	√	√		√	√		√	√		12

5 Cooperative Analysis

Irrigation Project				√	√	√	√	√		√	√	√		√		9
Seedling Greenhouse	√			√												2
Crop Farming Development Fund				√	√		√	√					√	√		6
Animal Farming Development Fund				√					√	√	√		√		√	6
Service Industry Development Fund				√	√			√					√	√	√	6
Cooperation with Leading Enterprises				√	√	√	√	√	√	√	√	√				9
Cooperation with technology providers				√		√	√	√		√	√		√	√	√	9
Water supply and drainage project (Domestic Water and drainage)				√	√	√		√					√			5
Road Construction				√	√	√	√	√	√	√	√			√	√	10
Power supply project				√	√	√										3
Environment Project (compost,				√			√	√							√	4

5 Cooperative Analysis

waste collection, etc.)																
Rural Energy Project (methane, solar energy)				√	√			√					√			4
Production Capability Building				√	√	√	√	√	√	√	√			√	√	10
Community Capability Building				√	√	√	√	√	√	√	√			√	√	10
Cooperative Capability Building				√	√	√	√	√	√	√	√	√	√	√	√	12
Farmer Capability Building				√	√	√	√	√	√	√	√		√	√	√	11
Project Management Training and Capability Building of PMOs in the city-, county- and township-level.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15
Community Infrastructure Construction Management Training and Institutional Capability Building				√	√	√	√	√	√	√	√			√	√	10

5 Cooperative Analysis

Industry Development Infrastructure Management Training and Intuition Operation Management				√	√	√	√	√	√	√	√			√	√	10
Project Management and Monitoring Platform System Development				√	√		√	√	√	√	√			√	√	10
Maintenance Management of Project Operation at the provincial, municipal, county and township level.	√	√	√	√	√		√	√	√	√	√	√	√	√	√	14

Data Source: SA statistics

* Note: 15 cooperatives answered the question of construction content.

5.3 Attitudes of Farmers in the Project Area towards Types, Scale and Benefits Distribution of Cooperative

Among the three types of cooperatives, farmers in project areas' have the highest willingness of participation in crop farming, followed by animal farming and then service. It indicates that the project area has a low industrial gradient with traditional crop and animal farming as the major industries and low demand for agricultural social services. Specifically, farmers in the seven counties of Linyou, Longxian, Changwu, Fuping, Heyang, Mizhi and Yanchang share similar desire for participation in different types of cooperatives. 100% of farmers in the four counties of Linyou, Fuping, Heyang, and Yanchang opted for specialized crop farming cooperatives. For specialized animal farming cooperatives, farmers in the three counties of Dingbian, Mizhi and Yanchuan showed the strongest desire for animal farming cooperatives followed by crop farming cooperatives and then service-oriented ones. In comparison, farmers in Baishui County showed an increasing trend of willingness of participating in crop farming(5%), animal farming(45%) and service cooperatives(50%). See table 5-5 for details.

Table 5-5 Willingness of Farmers in Project Area for Participation in All Kinds of Specialized Cooperatives (%)

Project county	Crop farming cooperatives	Animal farming cooperatives	Service oriented cooperatives	Total
Linyou	100	0	0	100
Longxian	90	10	0	100
Changwu	70	20	10	100
Baishui	45	5	50	100
Fuping	100	0	0	100
Heyang	100	0	0	100
Dingbian	30	60	10	100
Mizhi	40	55	5	100
Yichuan	70	20	10	100
Yanchang	100	0	0	100

5 Cooperative Analysis

Project county	Crop farming cooperatives	Animal farming cooperatives	Service oriented cooperatives	Total
Yanchuan	20	80	0	100

Data source: SA survey statistics

There is a common belief among farmers in project areas that the scale of the specialized cooperatives should not be too large. Otherwise, it may lead to higher cost for management and coordination, thus lowering the operational efficiency. In general, there is a downward percentage of agreement for cooperatives of under 100, 100-300 and above 300. Specifically, Changwu, Mizhi and Yanchang demonstrated an aligned trend with the overall tendency of views about cooperative size. 100% of Yanchang farmers believe less than 100 participants should be involved in one cooperative. Under the circumstance of the majority of people agree about cooperatives of under 100, more people recognize those of above 300 than 100-300. In comparison, there is a rising percentage of agreement about cooperative scale of under 100, 100-300 and above 300 in Baishui, Fuping and Yanchuan. Linyou, Heyang and Dingbian showed the highest percentage of agreement about 100-300 size, being 70%,70% and 60% (See table 5-6).

Table 5-6 Farmers' Views about Cooperative Scale (%)

Project county	≤ 100 人	100-300 人	≥ 300 人	Total
Linyou	20	70	10	100
Longxian	60	10	30	100
Changwu	70	20	10	100
Baishui	25	35	40	100
Fuping	0	30	70	100
Heyang	0	70	30	100
Dingbian	30	60	10	100
Mizhi	80	15	5	100
Yichuan	90	0	10	100
Yanchang	100	0	0	100
Yancuan	10	20	70	100

Data source: statistics from SA survey

Farmers in project areas commonly believe that a stable mechanism and expectation for benefits distribution should be developed to increase the attractiveness and sustainable development capacity of the project. Overall, there is a downward trend in farmers' recognition of the

following four ways of distribution: equity capital-based dividend sharing, refunding in proportion to the volume of the transactions with cooperatives, bonus sharing and other means. Specifically, farmers in Linyou, Longxian, Changwu, Baishui, Fuping, Heyang, Mizhi, Yichuan and Yanchang tend to share about methods benefit distribution. What's noteworthy is that among the ten counties, 100% of farmers in Linyou and Yanchuan believe the benefits should be distributed based on capital shares. In comparison, 70% and 30% of farmers in Dingbian agree about trade volume and capital input based distribution respectively(See table 5-7) .

Table 5-7 Farmers' Views about Distribution of Cooperative Benefits

Project county	Refunding in proportion to the volume of the transactions	Equity capital-based dividend sharing	Bonus sharing	Others	Total
Linyou	0	100	0	0	100
Longxian	40	50	10	0	100
Changwu	10	90	0	0	100
Baishui	40	50	5	5	100
Fuping	10	90	0	0	100
Heyang	40	60	0	0	100
Dingbian	70	30	0	0	100
Mizhi	5	80	10	5	100
Yichuan	10	70	20	0	100
Yanchang	0	70	30	0	100
Yanchuan	0	100	0	0	100

Data source: statistics from SA survey

●Interview with member of Qingquan Chili Cooperative of Longxian

The scale of cooperatives should be market oriented. Currently, ordinary farmers, poor households and disadvantaged groups should be treated identically. Provided that good profits follow, some should be allocated to help the poor and disadvantaged, especially in healthcare, education and training, etc.

5.4 Problems and Suggested Solutions

5.4.1 Problems

There are some some farmer cooperatives in project areas which are still in the early stage, being in low level, of small industrial scale and inadequate for driving growth. Through surveys, the following problems are found:

1. Lack of knowledge about cooperatives

Due to the remote location, poor infrastructure, low level development and slow industrial growth compounded by inadequate communication of information, farmers are less inclined to accept new things and only pay attention to and participate in projects when real benefits are seen. In many cases, joining cooperatives is a result of following others. Most people are not aware of the benefits and outcomes of cooperatives. Especially in villages where there are no cooperatives in the vicinity, farmers have less knowledge about it. And women know less about cooperatives than men.

2. Poor Operation

Only a small portion of cooperatives existing in project areas are functioning well. Some of them have never gone into operation and become the so-called “dormant cooperatives”. Reasons for poor operations include:(a) Obscure goals, e.g. some cooperatives are set up for obtaining state preferential policies and subsidies; (b) Lack of strong interest chain and performing poorly in driving development. Most of the cooperatives comprise only of local successful farmers and farmers with large farmlands. Other farmers are not part of it and cannot benefit from it. Once disputes about interests come up, the cooperative falls apart instantly; (c) Immature management. The cooperatives are poorly operated and arbitrarily managed. Despite good farming skills and sales experience, local capable farmers lack expertise in running cooperatives and marketing; And cooperatives in poor areas are of small scale and perform weakly in driving local growth. Compounded with inadequate revolving fund and development, cooperatives are prone to fall into

difficulty in cases of natural disasters and market fluctuations.

3. Poor internal mechanism and operation

On their visit to cooperatives in project areas, SA teams found that most of the cooperatives are poorly run in the following aspects: (a) unclear ownership of assets. The assets of some cooperatives are not clearly defined, resulting in disputes in dividends sharing; (b) unable to be run according to rules. Some cooperatives have no accountants and monitoring committees. Some don't have an accounting system and books with only running accounts; (c) Many cooperatives don't distribute dividends. Some return profits based on standards that are below those required in "Law on Specialized Farmers Cooperatives"; (4) A large majority of cooperatives are established only very recently with a low level of maturity. Cooperatives are run mostly based on the credibility and authority of individuals. Shareholders of the cooperatives are mostly several local successful farmers, large-scale farmlands holders and village officials without the representation of ordinary and poor farmer in the management; There are few people in the management team that master technologies, good at business running and have management know-how; There is a serious lack of training in the cooperatives; In case of shortness of capital, assets may be mortgaged, but the challenge of land for supporting facilities has become the bottleneck for cooperatives development.

4. Low level of participation of farmers

In reality, farmers show higher willingness of joining in cooperatives than actual participation. Seen from the activities of farmers in the cooperatives, members are just nominal members without actual participation in cooperatives activities due to the fact that some farmers cooperatives are in a dormant state; In cooperatives in operation, it's common for cooperatives to purchase agro-products from farmers. Some offer technical guidance and training for farmers together with related agencies and provide some productive materials by obtaining capital and project support. Ordinary farmers have few chances to take part in the governance of cooperatives. The large majority of cooperatives basically have never had a general meeting of members.

The reasons for the low participation of farmers in cooperatives consist in: inadequacy of farmers, lack of capital, information and technology; some impoverished people lack in conditions for participating in cooperatives and industrial development because of physical (diseased or handicapped) and mental impairment; farmers are not able to shoulder the market risks and focus more on short-term interests; Controlled by mostly initiators and partners, many cooperatives is inadequate in institutional organization with the managers not willing to share profits with others; It's common for some local successful

farmers and large-scale farmlands holders who are not willing to share expertise to monopolize technology and capital; With low capacity, most cooperatives are of small scale, lack of capital and incapability to motivate a large number of farmers to participate.

5.4.2 Suggestions and measures for improving cooperatives

1. Step up the publicity, education and training

For farmers' inadequate knowledge of cooperatives, related government agencies should increase the publicity and education of cooperatives. Suggestions are as follows: (a) make plan for information disclosure, publicity and training throughout the early, middle and late phases of the project. The early stage is focused on disseminating knowledge about the project and cooperative while the middle phase is concentrated on the disclosure of information on the establishment process, options for industrial development, community purchasing, construction and training in production technologies and the late phase is focused on releasing information about the status of cooperatives operation, such as benefits distribution, financial management, industrial development and technological upgrade. (b) In spreading information about project and cooperatives and organizing training sessions, the participation of special groups should be fully taken into account, including the poor, women, the senior, and the handicapped; (c) The publicity activities and training should be arranged in off seasons like spring and winter; (d) The publicity meetings and training should be sited in where farmers often gather or easy to reach, such as village committee, village squares and take into account the clustering of farmers' houses. Events can be organized based on natural villages, administrative villages or clusters of houses; (e) Training should be delivered in simple and plain language that are well known and easily understandable to the locals. Given the low literacy of farmers in most of the poor areas, information should be conveyed as much as possible through oral presentation and pictures; (f) The progress of publicity and training should be reviewed on a regular basis. It's recommend that two reviews should be conducted in the early stage of the project and one review in the rest periods.

2. Increasing the participation of ordinary farmers

The following suggestions are proposed for addressing the low participation of ordinary farmers: (a) Preparatory teams should be set up prior to the establishment of cooperatives and make sure it includes at least one woman; (b) villager meetings or villager representatives meetings should be convened to have a preliminary screening for cooperatives members, determine the type and principal industries of

cooperatives and finalize the membership while making sure 30% of membership is registered poor households; (c) Meeting of all members should be convened to finalize the institutional structure, charter and governance system and benefits distribution mechanism as well as set up archives and have information released and disclosed; (d) Training and guidance of technologies and management of industrial development and cooperatives operation which should cover all members if possible; (e) Cooperatives members should be informed of the selection and purchase of seedlings (breeding stocks) which should be archived and their opinions be respected; (f) Job and training opportunities should be offered to cooperatives members especially poor ones; (g) Enough information should be provided upon signing of contracts with businesses and cooperatives members, based on the willingness of members; (h) Agro-products should be purchased at the same price for all members and the distribution of benefits should be released on a regular basis.

3. Establishing cooperatives that are in line with the trend of industrial development and meet the needs of farmers and the market, and the cooperatives' capacity of providing services to farmers

The following suggestions are recommended for cooperatives poorly run: (a) Members should be notified of the establishment and industrial selection of cooperatives, which should be decided after consultations with all members; (b) Industries to be developed should be preliminarily determined based on the local industrial development status, and finally determined through SWOT and value chain analysis; (c) Cooperatives that meet farmers' needs should be established and services should be provided to members for publicity, training and supply of productive materials based on farmers' needs.

4. Taking good care of the relationship with all departments and entities

Specialized farmers cooperatives in project areas are in the critical stage of rapid development. Based on the real operation and existing problems of cooperatives, focused measures should be taken and special attention should be given to handling the following relations: (a) Poorly run cooperatives should be standardized through policy adjustment, model demonstration and preferential measures; (b) While continuous support is given to leading business projects, support to cooperatives should also be increased. Based on the characteristics of cooperatives, a slew of key projects should be identified, such as farmers technological training, dissemination of agricultural technologies, facility agriculture and cold chain system and processing, etc; (c) The relationship between specialized farmers cooperatives and other rural collective economic organizations should be properly handled.

Rural collective economic organizations like village collective

economy, agricultural associations, etc should be encouraged to developed together with cooperatives as they play an important role in the development of cooperatives;(d) The relations among departments involved in supporting and guiding cooperatives should be handled properly. Departments for fiscal management, finance, agriculture, animal husbandry and science associations contribute tremendously to the development of cooperatives, but there is inadequate coordination and communication among them. The development of cooperatives increasingly requires the guidance of specialized agencies. Based on previous experiences, specialized guidance and service agencies should be built to improve governance, bring resources together and promote the healthy development of cooperatives.

● **Interviews with member of Qingquan Chilli Cooperative of Longxian County**

The profitability of the cooperative is currently low with inadequate dividends sharing, weak governance and poor marketing. It does not play enough role in growing production and lifting farmers out of poverty. Thus farmers are less motivated to participate. The future development of the cooperative requires extended industrial chain, added product value and further expanded market. The functions of the cooperative should also be expanded to include some government functions like agricultural technology training.

5.5 Ways of benefit sharing and operation model of cooperatives

5.5.1 Benefit sharing mechanism

Establishment of benefit sharing mechanism
Participation in sharing the benefit of cooperatives refers to the distribution of profits(also surplus) gained from the business operation of the cooperative, for which the establishment of benefit sharing mechanisms is the premise. Although it has been established in all 30 cooperatives supported in the first batch of project areas, the outcomes are not so satisfactory seen from the rebating of benefits in 2015. Among all of the cooperatives, nine had benefits distributed, accounting for 30%; The rest 21 didn't have profits distributed, accounting for 70%. In terms of localities, cooperatives having benefits distributed are concentrated in Fuping and Yanchang, which has 7 and 2 cooperatives accounting for 77.8% and 22.2% of total respectively (See table 5-8).

Table 5-8 Establishment of benefits distribution mechanism in surveyed cooperatives

Project county	Cooperatives with benefit distribution	Cooperatives without benefit distribution	Total
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5 Cooperative Analysis

	Quantity	Percentage (%)	Quantity	Percentage (%)	Quantity	Percentage (%)
Linyou	0	0	3	100	3	100
Longxian	0	0	2	100	2	100
Changwu	0	0	3	100	3	100
Baishui	0	0	2	100	2	100
Fuping	7	100	0	0	7	100
Heyang	0	0	1	100	1	100
Dingbian	0	0	3	100	3	100
Mizhi	0	0	3	100	3	100
Yichuan	0	0	2	100	1	100
Yanchang	2	100	0	0	2	100
Yanchuan	0	0	2	100	2	100
Total	9	30	21	70	30	100

Data source: SA survey statistics

2. Methods of benefits distribution

The survey shows that the principal methods of benefit sharing of cooperatives in project areas include: refund based on transaction volume which was adopted by 24 cooperatives accounting for 46.2%; dividends sharing based on share capital, which was adopted by 21 cooperatives accounting for 40.4% of total; benefit sharing based on bonus, which was accepted by 7 cooperatives accounting for 13.4%. Refunding based on transaction volume and dividends sharing based on share capital are the major methods for benefit distribution. In addition, some cooperatives in Fuping and Mizhi(6 respectively) adopt combined method(See table 5-9).

Table 5-9 Methods of Benefit Distribution in Specialized Farmers Cooperatives

Project county	Refunding based on transaction volume		Dividends sharing based on share capital		Benefit sharing based on bonus		Total	
	Quantity	Percentage (%)	Quantity	Percentage (%)	Quantity	Percentage (%)	Quantity	Percentage (%)
Linyo	0	0	3	100	0	0	3	100

5 Cooperative Analysis

Project county	Refunding based on transaction volume		Dividends sharing based on share capital		Benefit sharing based on bonus		Total	
	Quantity	Percentage (%)	Quantity	Percentage (%)	Quantity	Percentage (%)	Quantity	Percentage (%)
u								
Longxian	2	100	0	0	0	0	2	100
Changwu	3	100	0	0	0	0	3	100
Baishui	2	100	0	0	0	0	2	100
Fuping	7	53.8	6	46.2	0	0	13	200
Heyang	1	100	0	0	0	0	1	100
Dingbian	0	0	3	100	0	0	3	100
Mizhi	3	33.3	3	33.3	3	33.3	9	100
Yichuan	1	33.3	1	33.3	1	33.3	3	100
Yanchang	2	100	0	0	0	0	2	100
Yanchang	0	0	2	100	0	0	2	100
Total	21	48.8	18	41.9	4	9.3	43	100

Data source: SA survey statistics.

*Note: As some cooperatives have multiple businesses, it may occur that the total amount of all types of cooperatives exceed 33.

5.5.2 How farmers in the cooperatives benefit

SA team found in field surveys that farmers mainly benefit from joining cooperatives in the following ways: 1. obtain productive materials like seedlings, fertilizers and agrochemicals for free or at a lower price; 2. farmers benefit from leasing out or transferring land; 3. obtaining shares

and dividends through productive materials input, such as land and fruit trees, etc.; 4. working at the production base of cooperatives and earn income; 5. getting free technological guidance and training; 6. selling agro-products to the cooperatives at a higher price; 7. getting refund based on transaction volume and other ways.

1. Obtain productive materials like seedlings, fertilizers and agrochemicals for free or at a lower price

It's common practice for cooperatives in project area to provide agricultural productive materials for free or at lower than market price for members, which include seeds, seedlings, pesticides and fertilizers. It's achieved through the following means: (a) Cooperatives buy pesticides, fertilizers, thin film materials and seedlings through bulk purchase and sell to members at a low price; (b) Some cooperatives give farmers productive materials like fertilizers and seedlings for free to farmers through projects or with capital applied; (c) Productive materials are provided to farmers for free prior to production and the cost will be deducted in times of harvesting or when farmers have money. Providing agricultural productive materials for free or at lower than market price is widely and well accepted by local farmers which ensures the quality while reduces operational costs. In the meantime, it can also reduce poor households' capital input and make them participate in and benefit from production directly.

2. Getting paid for transferring land to cooperatives

It's common for land be transferred to cooperatives or businesses as production or farming bases with farmers getting paid. The benefit from land transference is closely related to the fertility, flatness and distribution of land. Generally speaking, flat, fertile and contiguous land with easy transport access is paid higher. Most land transferred is paid 200-600 CNY per mu each year.

3. Obtaining shares and dividends through productive materials input

There are many ways for farmers to be shareholders, among which the most common ones are through capital input, labor input and land input. Due to lack of capital and labor, poor households mostly opt for land input and get dividends for it. Input of capital and labor is less common.

4. Earning income by working at cooperative production base

Working at cooperative production base is a way for most farmers to get benefits which is more common in crop farming cooperatives, such as grapes, apples and persimmons planting. Members of the cooperatives are first considered for job opportunities and poor households will be given preference under the same circumstance. Since crop farming is seasonal, there are differences in income in different seasons. Generally speaking, spring, summer and autumn offer more jobs than winter. And poor households usually won't opt for working at cooperative based due to

limit in labor. The job opportunities are more attractive to the women and old people with working ability. On one side, women and the old can take care of both family and farmland. On the other, they can work and get paid in their free time in addition to other productive work, thus improving family income.

5. Free technological guidance and training

Most cooperatives are able to provide technological guidance and training for free to farmers who have a strong desire for it. Actually, training is usually conducted in the farmlands by cooperatives with technological experts invited from time to time. Pesticides are sprayed and fertilizers are given at unified time by cooperatives so that these are done in the optimum times. Some cooperatives that are operating well also provide technological guidance and advising regularly to farmers. Advice for addressing specific technological challenges is also provided on an irregular basis. This is also one of the real benefits that is most attractive to farmers.

6. Agro-products sales through cooperatives

Nearly all cooperatives help members sell products. Compared with non-members, cooperatives have many better channels than individual farmers, for example through product information and sales channels circulating among members and updating them about the supply and demand of products in a timely fashion, which helps improving production efficiency and realize the dovetailing of products and markets. More importantly, most cooperatives are able to purchase farmers' products at higher price than the market. Farmers can sell to cooperatives, businesses and small peddlars at their will. In addition, some cooperatives establish order agriculture after building connection with businesses who buy members' products at protective prices, which is the real benefit that farmers value most and given more attention to than rebating of

●Interviews with member of Fengxiangkeyuan Specialized Apple Cooperative of Baishui

It's planned that farmers get shares through input of land, ground fixtures, orchards and cash. Networks for protecting from hails and drip irrigation facilities are planned to be built. But there are concerns that farmers don't cherish them, under which circumstance, the facilities may be damaged quickly. We plan to convert these assets into shares for farmers to hold, combined with some cash shares. Each share is planned to be 300, 500 or 1000 CNY. Orchards will still be managed by farmer themselves to avoid the "big pot" problem and managerial problems. The coop mainly generate benefit through the supply and sales of agricultural materials and products sales.

cooperative benefits.

7. Profits Rebating

Although benefit distribution mechanisms have been established in all 30 cooperatives, the outcomes are not so satisfactory seen from the rebating of benefits in 2015. Among all of the cooperatives, only nine had benefits distributed, accounting for 30%. Despite this, rebating still becomes what impoverished farmers long for and the reason why they pay attention to the operation of the cooperatives.

5.5.3 The Operation Model, Advantages and Disadvantages of Specialized Farmer Cooperatives

I . Enterprise + Cooperative +Base +Farmer

Among 30 cooperatives, 3 adopt the model of “Enterprise + Cooperative +Base +Farmer”, accounting for 10%. The specific situation of this kind of model is expressed as follows:

1. Operation state and characteristics

In this model, the specialized cooperatives work as a go-between to maintain collaboration mechanism and benefits sharing system among leading enterprises, bases and farmers. The difficulties in the production and marketing of agricultural products will be solved through the model of “Enterprise + Cooperative +Base +Farmer”. Generally speaking, in this model, the cooperatives are built relying on enterprises while the enterprises sign production contracts with farmers via cooperatives and provide farmers with one package services covering the stages of before-production, during-production and marketing. This kind of integrated operation pattern ensures the quality safety of products from planting, production to marketing, opening a new path where enterprises are linked with bases which guide farmers’ work, and connects enterprises with farmers closely as a community. However, in this pattern, the enterprises in a dominant position which gives them the power of the decision making in setting acquisition price, acquisition standards and profits allocation, while the cooperatives are in a subordinate position and the farmers are in relatively disadvantageous position. In this model:

(a) Enterprises are mainly responsible for the processing and marketing of the products and most of them are responsible for the supply of means of production. At the same time, they have high requirements for the cultivation, selection and growing conditions for seedlings. This pattern is widely used in industry of high investment and high profits or industry of long investment cycle and high profits. In poor areas, the poor farmers lack money and even the funds of relatively rich families are

limited. Thus, it is necessary to draw supports from the enterprises. The enterprises can take advantage of the country's supportive policies on cooperatives in such aspects as funds, credits, taxes, land, and electricity to cut operation costs. To some degree, this kind of cooperatives are enterprises' cooperative.

(b) Cooperatives are responsible for connecting enterprises with formers, signing production orders with enterprises and signing growing and breeding contracts with farmers. The duty of the cooperatives is to provide growing and breeding technologies to farmers, acquire products, implement rough processing, build and operate bases according to the requirements and standards of enterprises. The enterprises will further process or sell the products after primary processing. In this model, the cooperatives play the role of an organizer and coordinator and rely on enterprises in productive process.

(c) Production bases are usually a part of enterprises or built and operated by cooperatives. The bases can be used in various ways such as providing seedling, breeding stocks to farmers or selling agricultural products. On one hand, the bases can enable the cooperatives to set an example and provide guidance for farmers through growing in scale; on the other hand, the cooperative can ensure the acquisition of products so as to get profits through the bases.

(d) Farmers are responsible for growing, breeding and carrying out specific growing and breeding activities. Farmers can sell the agricultural products by themselves or sell them to the cooperatives. Because the enterprises usually set guaranteed price in acquisition process, farmers are willing to sign contracts with the cooperatives. Although the guaranteed price is lower than the market price sometimes, farmers still choose the marketing channel of contracting farming which is relatively stable after weighing the advantages and disadvantages from the perspective of risks. In this model, farmers are in relatively disadvantageous position with lack of independence and weak negotiation ability in setting price and distributing profits. It is even harder to ensure the interests of farmers when the enterprises are profits-oriented.

The characteristics of this model are as follows: (a) The cooperatives are usually an affiliated part of the enterprises or one link in the industrial chain of the enterprises; the cooperatives are closely connected with the enterprises with strong reliance on the enterprises and poor independence; (b) the cooperatives are usually under the management of the enterprises and bases are managed according to standard production pattern. The cooperatives are in charge of connecting bases, farmers and enterprises and some of them provide the services of purchasing productive materials and offering technical guidance and training to farmers; (c) the cooperatives are highly standardized under strict requirements. The

cooperatives must unify the seedlings, standards, brand, funds, epidemic prevention and marketing according to the demands and standards of the enterprises.

2. Analysis of advantages and disadvantages

The main advantages of this model are as follows: (a) it can help the surrounding farmers increase incomes from related industries through land transfer, land lease, creating jobs and purchasing of agricultural products and other ways; (b) it can play a positive role in improving ecosystem and infrastructures; (c) it will promote the standardization, specialization and science application of agricultural production and inject more energy into the operation of the cooperatives. The disadvantages mainly are: (a) it is hard to guarantee the interests of farmers under the monopoly of the enterprises. The profits-oriented enterprises only focus on their own profits so it's hard for farmers to get more profits. If farmers' interests are seriously hurt, the enthusiasm to participate in the cooperatives will be affected; (b) the cooperatives rely a lot on enterprises and have little independence.

II. Enterprises +Base +Farmer

Among 30 cooperatives, 11 adopt the model of "Enterprises +Base +Farmer", accounting for 36.7%. The specific situation of this kind of model is expressed as follows:

1. Operation state and characteristics

In this model, the cooperatives provide farmers with technical guidance and pest control before, during, and post-production process, acquire and sell the agricultural products of members through the bases. The production bases are in charge of introducing and breeding good variety and providing seeds of good quality and high yield or developing scale production to increase incomes. The initiators or the organizers of the cooperatives most are rich households that develop large scale growing or breeding or capable people with economic strength and technologies. The cooperatives establish production bases on contiguous land through renting farmers' land or become a shareholder of farmers' land.

The characteristics of this model are as follows: (a) the rich households and capable people, as the main decision makers and principals in charge of operation and management in the cooperatives, will boost the development of cooperatives; (b) members can work at the bases, which connect the cooperatives and farmers closer; (c) the surplus will be returned to members on the basis of their proportion of shares. Other farmers besides members can also get incomes through working at the bases.

2. Analysis of advantages and disadvantages

The main advantages of this model are as follows: (a) the production

bases enhance farmers' understanding and promote their interaction with the cooperatives so as to strengthen the relationship between cooperatives and farmers; (b) the organizers of the cooperatives are familiar with local environment, resources and policies which will make it easy to establish cooperatives suiting local conditions; (c) it will promote the standardization, specialization and science application of agricultural production and inject more energy into the operation of the cooperatives.

The disadvantages mainly are: the operation and maintenance will set strict requirements for the administrators of the cooperatives. If arrange people without required technologies and ability do this work, the production bases will affect the continuous running of cooperatives and affect farmers' interests even enthusiasm to participate in cooperatives.

III. Cooperative +Farmer

Among 30 cooperatives, 16 adopt the model of "Cooperative +Farmer", accounting for 53.3%. The specific situation of this kind of model is expressed as follows:

1. Operation state and characteristics

The cooperatives that adopt the model of "Cooperative +Farmer" usually are cooperatives established and managed by capable rich households. The organizers and backbone members, who invest a lot and have management capacity and technologies, are the main decision makers and principals in charge of operation and management in the cooperatives. They are the core of cooperatives and play a decisive role in the survival and development of the cooperatives.

The characteristics of this model are as follows: (a) the rich households and capable people, as the main decision makers and principals in charge of operation and management in the cooperatives, will boost the development of cooperatives; (b) it adopt shareholding system management through unite farmers who enjoy common interests with the rich households and capable people; (c) the surplus will be returned to members on the basis of their proportion of shares.

2. The analysis of advantages and disadvantages

The main advantages of this model are as follows: (a) the organizers of the cooperatives are familiar with local environment, resources and policies which will make it easy to establish cooperatives suiting local conditions; (b) The organizers and backbone members mainly are the rich households, households with large volume of transaction, farmer brokers or people with prestige and power in village. They usually have quick access to village information, wider social network and richer market operation experiences. Therefore, they are capable of promote the development of cooperatives and increase farmers' income; (c) it is easy for the organizers to find appropriate partners and members to establish cooperatives in familiar villages.

The disadvantages mainly are: (a) the rich households and capable people may control the cooperatives and form interest groups that exclude the farmers holding different opinions; (b) the rich households and capable people invest a lot and hold most shares while the farmers invest a little and hold minority shares. These farmers, who are in affiliated position, have limited right to say. These will lead to a result that farmers get limited profits from surplus according to trading volume and the proportion of shares; (c) it perhaps makes these rich households and capable people decide and act arbitrarily. If they make wrong decisions, it will cause great losses to the cooperatives.

5.6 Cooperative Case Study

1. Qingquan Chili Cooperative in Longxian County

Located in Liangquan County, Qingquan Chili cooperative in Longxian County is constructed on the basis of Longxian Qingquan Agricultural Products Marketing Center. It was registered in the Administrative Bureau for Industry and Commerce on 7th July 2015 with a registered capital of RMB 3.5million yuan. Cooperative members involved 1 village (Shangliangquan village) and 368 members. They are all farmers. There are 83 poverty households, accounting for 22.6%. The Cooperative provides members with Chili-related services in terms of agricultural product production, management, processing, marketing, information, standard making and certification of green products, etc.

In the two years since its founding, the cooperative have processed and sold more than 1000 tons of Chilies, realizing sales revenue of over RMB 2.6 million yuan, which solved the Chili selling problem. It was welcomed by local villagers and contributed to the sustainable healthy development of local Chili industry. Since its founding, the cooperative adopts the operation mode of “cooperative+ farmer household+ base” and also covers technology training and promotion. The surplus distribution will strictly follow the principle of returning 60% of the disposable surplus to the members based on the volume of business and the remaining 40% will be distributed based on members’ shares.

In the World-Bank-financed Shaanxi Province Poor Rural Community Development Project, there were 1459 farmer households in the Liangquan project area, 463 of which are poverty households. The Cooperative plans to include at least 80% poverty households in the cooperative through the project implementation and exemplary demonstration so that they can get more job opportunities and increase their incomes. They are aimed at increasing the number of cooperative members from 268 to 850 and lifting the 463 poverty households out of poverty in the fifth years of the project implementation.

2. Jiujia Crop Farming Cooperative in Heyang County

Jiujia Crop Farming cooperative was founded by combining the three cooperatives specialized in apple, edible fungi, and herbs on 30th June 2015 with 57 founding members, all of whom were farmers. Cooperative services

farmers planting apples, edible fungi, and herbs, providing them with production material procurement, sales, and technical assistance. Cooperative development has been limited by several constraints: (a) Apple planting relies on a traditional planting mode with extensive management, which is vulnerable to market and natural disasters, and the rate of excellent fruit is low. (b) Shiitake mushroom planting facilities are obsolete with insufficient storage capacity, which is vulnerable to market risks. (c) The sales of apple and Shiitake mushrooms depend heavily on agents with poor active sales capability and low sales revenue. (d) The project areas have been affected by the hail in recent years. However, hail-protecting net investment is too large for farmers to afford. (e) The infrastructure of the project is inadequate with poor production roads and the irrigation system. In order to expand the scale and increase profits, the cooperative hopes to get the support of the World Bank Project.

After the World Bank's Identification Mission, the cooperative was reorganized to improve the apple, mushroom cultivation technology, expand orchards and greenhouses area; and strive for common wellbeing of all members. Now there are 145 members of cooperatives, all of whom were farmers. Apple orchards, Shiitake mushroom greenhouses are managed by the cooperatives. There are 511 poverty households in the project area with a population of 1728. There are 82 poverty households in the cooperative, accounting for 16% of the total in the community; there are 24 women, accounting for 16.6%. The project covers the disadvantaged groups such as the poverty households and women. There are 7 members of the Cooperative Council, 6 members of the board of supervisors with 1 woman each. The cooperative plans to change its registration in October 2016 after the inclusion of the second batch of cooperative members.

After restructuring, the cooperative has a total asset of 5.90488 million yuan, in which 5.83088 million yuan are shares by material objects or land transfer and 74, 000 in cash. 1586.4 mu of apple orchards are included as shares, including 1189.1 mu of fruit-bearing orchard, 397.3 mu of immature orchards ; What are also invested as shares include 357.6 mu of land, 317 mu of Chinese prickly ash, 180 mu of Chinese medical herbs and 189000 packs of Shiitake mushrooms. The assets are evaluated by the following standards: fruit-bearing apple orchard 3000 yuan/mu, immature apple orchard 1000 yuan/mu, land 300 yuan/mu, Chinese prickly ash 2000 yuan/mu, Chinese medical herbs 1000 yuan/mu, and Shiitake mushroom 5 yuan/pack. Since the day of restructure registration, the physical assets of members will be reevaluated every three year. One share is 5000 yuan and each member can only subscribe for 20 shares in. integral number. The World-Bank-financed project fund dividend rights will be distributed to all members with the members in poverty 1.2 times of the non-poverty members. The cooperative plans to change registration in October 2016 after the inclusion of the second batch of cooperative members.

It is expected that cooperative members will directly benefit from the project investment after its completion. The first people who directly benefited from the project investment include 145 farmers, 76 poverty households and 24 women. Potential beneficiaries include 1450 farmers and 435 poverty households. In addition, driven by industrial demonstration and infrastructure construction, the cooperative will found the Ganjing Center for Apple Planting and Selling, which

will extend the industrial chain and increase the income of the project area. As a result, the development of apple and Shiitake mushroom industry in adjacent areas (such as Yangjia Village, Huangpu Village, Qiaoziyuan in Hancheng, Zhiyang County) will be promoted.

Brief Comments

All members of the cooperative are farmers, including 82 poverty households, accounting for 16% of poverty households; 24 women, accounting for 16.6% of the cooperative membership. The project covers the socially disadvantaged groups such as poverty households and women. In addition, there are 7 members on the Cooperative Council, 6 members on the board of supervisors, including 1 woman each. Meanwhile, the cooperative will reevaluate the physical assets of its members every three years distribute the bonus of the World-Bank-financed project to all members with the amount distributed to the members in poverty 1.2 times of the non-poverty members. The overall operation of the cooperative is regulated.

5.7 Summary

1. The project is going to support the construction of 30 specialized farmer cooperatives firstly, including 23 crop farming cooperatives, 7 animal farming cooperatives, and 9 service cooperatives, accounting for 59%, 17.9%, and 23.1% respectively

2. The demand for Project Management Training and Capability Building of PMOs, Maintenance Management of Project Operation at the provincial, municipal, county and township level, Cooperative Institution Building including offices and office supplies, Market Development including venue, E-business platform and brand certification, etc., production roads, Production Capability Building, Community Capability Building, facility operation management training and institution operation management, Project Management and Monitoring Platform System Development, is the highest, accounting for over 67%;

3. The willingness to participate in crop farming of cooperatives, animal farming cooperatives and service cooperatives in the project areas is decreasing in sequence; their recognition of cooperatives with less than 100 members, 100-300 members and more than 300 members are decreasing in sequence; the percentage of their recognition on sharing out bonus according to the investment in capital, returning according to the turnover, sharing bonus according to the rewarding is decreasing in sequence too.

4. Farmers in the cooperatives benefits mainly from : (a) Obtaining agricultural means of production for free or buying them at low prices; (b) getting land transfer compensation by renting or transferring; (c) becoming shareholders and get dividend rights with land or fruit trees; (d) getting income from working at the cooperative production base; (e)

obtaining technical and skill training for free by participating in the cooperatives; (f) selling agricultural and sideline products to the cooperatives at higher prices; (g) getting rebate from transaction volume.

5. The 30 cooperatives in the first project areas have established profit distribution mechanism. However, judging from the returns of proceeds in 2015, only 9 of them carried out profit distribution, accounting for 30%. The rest 21 cooperatives did not carry out profit distribution, accounting for 70%. In the meantime, the primary profit distribution methods in the project areas include: rebate on transaction volume (21 cooperatives adopt this method, accounting for 40.4%), distribute dividends on the investment of capital (21 cooperatives adopt this method, accounting for 40.4%); and distribute dividends by award (7 cooperatives adopt this method, accounting for 13.4%). rebate on transaction volume and distributing dividends on the investment of capital are the two primary methods of distribution.

6. In the 30 cooperatives in the first project areas, 16 cooperatives operate in the mode of “cooperative + farmer households”, accounting for 53.3%, which is the highest. This type of cooperatives are usually organized and operated by leading farmer households with great economic strength and capability. Founders and backbone members usually have large investments, good operation and management capability and skills. They are the principal decision makers and managers of daily operation. They are the key members of the cooperatives, playing a deciding role for the survival and development of the cooperatives. Features of this operation mode include: (a) The leading households and farmers are the principal decision makers and managers of daily operation and are able to promote cooperative development; (b) farmer households that have common interests with the leading households are pooled together to enforce stockholding system; (c) profits are divided according to shares invested.

7. So far, specialized farmer cooperatives in the project area have the following problems: (a) farmers have little knowledge of the cooperatives; (b) cooperative operation is poor; (c) internal management system is immature and the operation is not regulated; (d) farmer participation rate is low. Accordingly, the following measures and suggestions are proposed to improve the cooperative operation: (a) reinforce the publicity, education and training concerning cooperatives; (b) attracting more farmer households to participate; (c) establish cooperatives whose operations are consistent with the development direction and the demand of households and market to improve cooperatives' capability to serve the farmer households; (d) establish good relationship with government agencies and other stakeholders.

6 Analysis of Government Departments

6.1 Comments on Past Activities

Government departments made significant achievements in the past poverty alleviation work. Learning from previous activity planning, construction, management, training and benefit gives instruction on this project's implementation.

(a) Activity planning. All departments should follow the Strategy of Alleviating Poverty in Three Years, Realize Comprehensive Well-off Society in Five Years, continue to implement the Anti-poverty Strategy of "Precisely targeted poverty alleviation with industrial and social efforts", and further open up thoughts. In addition, based on county-level economic development features, all departments should build specific anti-poverty working mechanism, push forward "One County One Strategy, One Household One Method" anti-poverty project to make particular plans, and emphasize on supporting poor villages and poor households with Lottery Welfare Funds Project, Household Industry Project and Whole County Development Project.

(b) Construction. At present, investment on infrastructure and industry anti-poverty projects is still in shortage. Therefore, county-level government should work with economic development, agriculture, water conservation, transportation, forestry, civil administration, education and health sectors to do the followings: (i) Increase infrastructure investment. Local governments should increase fiscal investment on poor villages to improve agriculture, infrastructure, production, and people's living condition, and to implement new community construction and industrial park supporting projects. (ii) Strengthen the role of "Internet +" in anti-poverty projects. Governments should popularize Internet in villages, support e-commerce enterprises' county business, encourage and support poor households to set up online shops by providing related education and training, resources, market linkage, favored policies and services. (iii) Support anti-poverty industry development. Local governments should support poor households to develop local special industry to increase income. (iv) Increase fund support to poor households. By issuing *Interest-free Small Amount Loans to Poor Household Implementation Plan* and setting up Mutual Help Fund Association, the government can efficiently solve the problem of poor household getting loans for their living and production.

(c) Management. In regard to governments' unclear responsibility, lack of supervision and corruption problem, all departments should: (i)

adopt target management responsibility system. County-level government should sign anti-poverty liability statement with poverty alleviation office and all villages and towns, introduce related Anti-poverty Evaluation Standard, make quantitative assessment on anti-poverty projects and work, and make sure all projects are supervised and fairly implemented. (ii) Strengthen fund supervision. Governments from all levels should strictly follow *the Implementation and Management of Fiscal Funds for Poverty Alleviation* and other related regulations to make sure all households are properly supervised, all funds are properly used and all projects are properly carried out. (iii) Carry out Sunshine Government Administration. Before project implementation, governments should disclosure poor households list, projects contents, funds details and allowance standard. Before the projects evaluation after they are implemented, governments, under the supervision of projects supervision group, should disclosure projects budgets and final settlement. When reporting expenses, supervision group should supervise one by one and make reimbursement after signed. In addition, public notification and audition should be made step by step.

(d) Training. Poverty alleviation office should work with Bureau of Animal Husbandry, Bureau of Fruits, Bureau of forestry and Bureau of agriculture to carry out career training for poor households. All departments should increase job positions for peasant households, especially poor households. In details, (i) innovate mechanism of technical training on peasants. During the implementation of projects, counties, towns and villages should supervise from beginning to the end, keep technical training on households, and use on-site training to improve households' production skills. (ii) carry out "The Rain Plan" training. Under the principle of "actuality, effectiveness, utility", with employment-oriented, the government should follow "The Rain Plan", start special planting, electros welding and agricultural machinery maintenance and repair majors to improve peasant households' employment skills. (iii) Develop public welfare work. Governments should prioritize the opportunity to suitable poor people to increase their income.

(e) Benefit. Through a serious of anti-poverty work, project area infrastructure has been improved, which includes water, electricity, road and telecommunication. Further, related industry income takes more than 50% of poor households' total income, and peasants' income in all counties has increased steadily. However, there are several things need to be further improved, and there is still a long way to go in anti-poverty work. Meanwhile, while developing county-level economies, government departments from all level should guarantee social and ecological benefit, make sure economic benefit, social benefit and ecological benefit are

united, and keep a sustainable development of country economy.

6.2 Views and Requirements on Project construction Content

As the implementation and supervision party of the projects, government departments' attitude will directly affect the result of projects. Therefore, evaluation group holds seminar with projects officials and related government department, take in-depth interviews with project managers and understand government's attitude toward the projects.

6.2.1 Project Management Office

All county-level governments hold supporting attitude toward this project. They think the project should be properly carried out.

(a) Strengthen organization and leadership to provide guarantee for project implementation. Build county-level, town-level and project-level implementation organization and make sure all of them actively play their roles.

(b) Expand publicity and training. Governments should use flexible form and strengthen publicity and training. Through publicity, project area should form an atmosphere of "know the project, care about the project, and support the project" and arouse the enthusiasm of farmers to participate in. Meanwhile, the project should strengthen training work, make plans, and emphasize on train a group of leaders who knows how to cooperate and help with cooperative work.

(c) Adhere to the leading position of project area, innovate way of poverty alleviation and development. Governments should make Full implementation of the project area dominant mode, and switch current situation from "government work for project area" to "projects do thing under the support of government". Through self-decision making, self-management and self-supervision, projects area should trigger internal motivation; enhance project area and the crowd's sustainable development ability to accumulate effective experience for a new stage of poverty alleviation work.

(d) Funds should be properly used. It is important to manage project funds, make sure funds are allocated and project tasks are accomplished.

6.2.2 Poverty Alleviation Office

As project construction office, Poverty Alleviation Office believes the reason why anti-poverty work is hard to be done is lack of funds,

●Interview with Heyang County Government, Weinan City

The county government believes that the implementation of the program shall not be promoted solely by administrative means or copy the pattern employed in other countries. It should be unfolded in good accordance with actual situation with appropriate governmental supervision. The distribution of benefits should be given more attention. The industry should be developed first to lead prompt poverty alleviation work and make average and impoverished farmers' voice heard well. A few seats in both board of supervisors and board of directors should be saved for the representatives from the impoverished farmers' community.

●Interview with Dingbian County government, Yunlin City

- (1) Program funds need to be better managed. All funds activities are subject to two sets of procedures: the reimbursement and appropriation shall be carried out in accordance with both the World Bank's regulation and the fund management regulation of the city or county in terms of procedure. Dual requirements of fund management policy make funds even harder to properly use.
- (2) The training program is underfunded. More appropriation per trainee is urgently demanded.

technology and infrastructure. The implementation of this project helps develop infrastructure and improve related industries in project area. In details, project area construction should be done from the following five aspects:

(a) Infrastructure such as transportation, storage and working environment. Under the support of government, project area move forward. However, due to the limit of infrastructure, the scale of industry development was lagged. With the help of this project on infrastructure, industry development and the crowd's living condition will be largely improved.

(b) Technical support such as professional training. Currently, there are not enough training activities for local peasants, and their enthusiasm to participate is not high enough.

(c) Business service facilities, such as production and distribution, website building, information system building, etc. At present, due to the limit of market and infrastructure, project area is facing the problem of selling. In addition, high cost and information

dissemination result in low prices. Therefore, it is urged to provide necessary distribution channel, information and related facilities to upgrade product value chain, expand sale and lower selling costs.

(d) Demonstration garden construction: standardize fertilization, testing and irrigation. At this time, a large number of cooperatives have registered in project area, but most of them are not running. Also, current cooperatives are small-sized with limited funds and invest.

(e) Institution building. Cooperatives should possess a certain number of technical personnel, increase poor households' participation and build efficient supervision mechanism.

●Interview with Fuping County Poverty Alleviation Office

In Fuping County, there are around 600 cooperatives existing, but most of them are not properly managed, and are self-supported small cooperatives. There are major five aspects of community development project construction: ① infrastructure, such as transportation, storage, office work, etc. ② Technical support facility construction, such as related technical training. ③ Business service facilities construction, such as production and distribution, website construction, information system construction and so on. ④ Demonstration garden construction: standardize fertilization, testing and irrigation. ⑤ Institution building. Cooperatives should possess a certain number of technical personnel, increase poor households' participation and build efficient supervision mechanism.

●Interview with Dingbian County Poverty Alleviation Office

(a) Currently, local agriculture production is mostly traditional farming and breeding whose price is easily affected by the market price. Therefore, it is necessary to develop agriculture projects that are free from market price influence, such as government-oriented agricultural and sideline products processing industry (They are currently existing, but not in a large scale)

(2) In regard to public service construction, emphasis should be put on rural water supply service (it is hoped that through the Yellow River diversion project, the problem of safe drinking water can be solved) and electricity service (current service cannot meet the need of local production).

6.2.3 Other Related Departments

Other related departments include the Bureau of Agriculture, Bureau

of Livestock Husbandry, Bureau of Fruit Industry, Bureau of Forestry, Bureau of Water Affairs, Bureau of Tourism, Supply and Marketing Cooperatives and Women's Federation. These departments stated their suggestions on project construction as follow.

The Bureau of Agriculture: Provide support and assistance for the land improvement in the under-developed area; Establish construction projects such as road, weir and paddy for regional development; Support poor peasants with purchasing agricultural machinery; Lower the threshold of entering cooperatives.

Bureau of Water Affairs: Further upgrade waterworks infrastructure; solve the problem in water supply for irrigation as well as human and livestock. Prompt water-saving irrigation techniques to lift up the efficiency of water use.

Bureau of Forestry: Keep working on serving current members of the cooperatives as well as drawing more farmers to the membership. Start training program of cultivation, techniques and sales for existing members; uphold the principle of environment protection and practicing recycling agriculture; Repurpose the area which is unfit for agricultural and farming activities to forestry or grass.

Women's Federation: organize leading female figures in the community to prompt the cooperative and lead senior females in the working class to join. Ensure that women take at least 30 percent of the total members in cooperatives and that the opinion from the women community is taken into consideration in decision-making. It is important to make sure female representatives in the institution accounts for certain percent of the total members. Also, female's interests should be guaranteed.

Bureau of Tourism: construct modern parking that features fruit picking, sightseeing and country experiencing. Facilitate the parks with necessary infrastructure such as roads, signs, gallery, and entertaining farmhouse. Set up displaying and sales sector for the featuring local agricultural products.

Bureau of Fruit Industry: improve the techniques in cultivating, livestock-raising and agricultural product processing and the utilization efficiency of organic fertilizer. Invite agriculture specialists to give lecture and field program. Improve disaster mitigating and preventing capability

●Seminar with related departments of Fuping County, Weinan City

(a) Bureau of water affairs: compare irrigation and non-irrigation and letting farmers make free choice between those two. Further promote water-saving irrigation method (estimated 2000 to 3000 RMB per unit of area)

(b) Bureau of agriculture: provide current members with training program of techniques, sales and cultivating. Invite agriculture specialists to give lecture and field program.

(c) Women's Federation: small loans, Medicare and legal assistance provided by the World Bank are well implemented (legal assistance covers about one hundred thousand person per year). It is necessary to organizing leading female figures in the community to prompt the cooperative and lead senior females in the working class to join. It is important to ensure women consist at least 30% of the total representatives and to provide subsidy for the elder and disabled.

(d) Bureau of Tourism: It beneficial to construct modern park that features fruit-picking, sightseeing and country-experiencing. The culture in persimmon shall be well exploited and integrate into the tourism. It is also necessary to facilitate the parks with infrastructure such as roads, signs, gallery, entertaining farmhouse, and agriculture display exhibition area.

6.3 Project's Influence on Government Departments

6.3.1 Project Management Unit

1. Positive influences

(a) The project helped pushing forward industry structure adjustment and promoting local economic development.

The implementation of the program fully exploits the advantage of the natural resources and technique resources, and also gives boost to the development of featuring and leading industry and brings industry structure adjustment up to speed. It also makes great difference in the development of the neighboring counties and the boost of regional economy size.

(b) The project pushes forward the change of government functions and promotes government image

The program is to be implemented in a way that enables the impoverished population to adapt to getting involved in the process rather than simply receiving assistance, which grants their rights to know, to choose, to decide, to supervise and to manage during the entire process. The method employed transforms the role of the local government from taking the lead to give the guidance and grants the final say to the target individuals in essential parts such as the use of fund, the right to manage and the implementation of crucial bits. The fact that the opinions of the people significantly weigh in brings more attention and elevates the level of trust of the government hence promoting its image.

(c) The project provides a better platform for drawing investment

This project is co-sponsored by World Bank and Shaanxi Province. The success of the program will surely further draw more international attention and create better opportunity for national and international collaboration for economic development in under-developed areas.

2. Potential Risks

(a) Project Management Risk

The risk in the project management mostly lies in the division of responsibility of the management and of the functions, the constitution of the management board and the change of the above. During the project implementation, it is imperative to make clear of the responsibility division and employ a managerial board with years of experience, in consideration of the advanced idea, the complex process and strict regulations. The very success heavily relies on managerial skills and sense of responsibility of the managers while the local officials, including those at county-level and village-level, are subject to frequently transferring out of their managerial position after massive training in which the concept, implementation standard and management

requirement are taught. Such situation poses significant potential risk to the program as well.

(b) Policy Risk

Macro policies that affect the program include industry policy, land policy, export/import and currency exchange policy. The changes of macro policy are not subject to our efforts. To make concrete policy that benefits the target people and the implementation of the program, it's required for the managing board to fully comprehend the situation in the program-covered area and to understand that there is no better way than making thorough investigation and getting target people fully involved.

(c) Financing Risk

The fund for the program mostly comes from World Bank loan. The fund-raising capability of county government and local people is limited. Despite the loan from financial department, the short period of financing, high interest rate and high admittance standard pose essential difficulty to the program. The scale of investment can be expanded to the assistance of other national projects or other foundation group if possible.

6.3.2 Poverty Alleviation Office

1. Positive Influences

(a) Help project-covered areas to alleviate poverty

Through the Implementation of the project, it can financially benefit people with significant gain and enables impoverished farmers to elevate themselves to better livelihood. An estimated 182,200 people are to be benefited from this program alone. Governmental assistance reflexes mainly in three ways: 1.increase income for the farmers by reducing the cost and increasing productivity of the agricultural activities; 2.Create more jobs both directly and indirectly hence contribute to the employment solution of the surplus labor force in the country and de-employed population; 3.provide training program that enables the impoverished population to at least have basic knowledge of livelihood betterment and self-developing.

(b) Effectively accelerate the progress of the poverty alleviation for the impoverished population

Led by the community development plan, the project aims to develop the community in all dimensions in accordance with the coordinating development of the country and the city, for the purpose of enhancing sustainability in the scientific fashion. The massive effect in both economic and social level will greatly boost the initiative of other communities to join the program and hence make excellent example for the countywide poverty alleviation work of the new stage.

(c) Upgrade the idea and model of poverty alleviation

As China quickly adapts to global integration, the poverty alleviation work also proceeds to a new open pattern where social efforts are welcomed. In light of this, the work should adapt to the new time and keep calling for new ideas. With the assistance and guidance from the World Bank, new concept and work method have been introduced to the work that aims at solving the problem with overall community promotion and adopting community-wide self-governing model. The ability of self-organizing, self-managing and self-developing will dramatically override the traditional “blood transfusion” way of making investment and help to develop valuable experience for the work of new era.

2. Potential Risks

(a) The risk of equal benefits

This country development project involves many parties with invested interests. The program values all parties and pays extra attention to ensure the disadvantaged groups are equally benefited for further prosperity. However, the complexity of the program is likely to make vulnerable the interests of the disadvantaged group such as impoverished families, elder people and women. In light of this, it is required that the interest protection mechanism be founded to put their interests at high priority and get them willingly involved to achieve common prosperity.

(b) The risk of land acquisition and management

The land needed for the project is to be acquired through coordinating and land exchange among the members themselves. Since the location and the influence of part of the program have not yet been determined, the land acquisition and structure demolition, if there is any, might affect the work and life. Moreover, some enterprises and cooperatives might need set up or expand the production base through conveyance of land or using land as shares of the cooperative. The possibility of such situation might lead to risk of some members joining against their will or vulnerable members not being able to be rewarded fairly.

(c) The risk of sustainable development

Developing appropriate industries in the program area helps local farmer to elevate the livelihood, but only for a limited period of time. The area might be confronted with the problem of insufficient fund, follow-up efforts and insignificant sustainability, which demand attention from the local government as well.

6.3.3 Other Related Departments

1. Positive Effects

(a) Implementing the project would increase utilization rate of

resources and protect the environment

While implementing the project, by means of land consolidation, mechanized operation, irrigation area increase, and co-op operation, the utilization rate of land would be increased, the output rate would be raised, and the environment would be significantly improved so as to develop towards a better way.

(b) Basic living condition of farmers in the project area would be significantly improved

In the project area, public infrastructure for production and living is poor, infrastructure construction input is great, transportation, water conservancy, and housing construction costs are high, and production and living condition of the poor is extremely bad. All of the above factors greatly restrict the development of the poor area. Therefore, infrastructure construction is an important part of the project. Road, irrigation, drainage, and public market which connect villages and groups are all essential for farmers in the project area, which is especially true for the poor as well as for industry development in the area. By implementing the project, infrastructure condition in the area will be improved, providing necessary basic qualifications for the poor to develop special and competitive industries. Particularly, the improvement of infrastructure for planting and animal farming industry will raise the production and living condition of the project area, and provide more opportunities for the poor. This is also true for the development of supporting facilities for commercial, warehousing, and processing industry.

(c) Women's social status will be improved

In the project area, a great number of men go out to work while women stay at home. As a result of the low cultural level and traditional perception, women are living in a rather low social status. By implementing the project, women can get trained on agricultural and management skills, so that they can increase their family income, and participate in the management of the co-ops by offering ideas for operating the co-ops. By presenting their abilities, women will be able to acquire social recognition, so that their social status can be improved. Also, their ideas and perceptions will be changed.

2. Potential Risks

(a) Cooperation Risks

During project construction and use, if cooperation terms of the land use, water, power, and gas supply, or transportation change significantly, project construction and operation would be challenged. Therefore, during the process of project construction and operation, cooperative organizations should construct stable and long-term relationship to effectively prevent cooperation risks.

(b) Technical Risks

Technical risks primarily stem from two aspects: technology of supporting facilities construction and new technology of agricultural production (new species). On one hand, supporting facilities construction is an important part of the project. If the supporting facilities were poor, the project would not succeed. If any of the construction units were irresponsible, the facilities would be with poor quality, or even cannot be normally used. On the other hand, success of the project cannot live without advanced planting and animal farming techniques and new superior species. However, if some of the new techniques are immature, or some of the new species do not adapt to the soil or climate in the project area, it will be hard for the new species and techniques to bring in benefits to the farmers. In some cases, the new techniques would even make the farmers suffer from loss. Therefore, agriculture, water conservancy, electricity, and animal husbandry department should actively cooperate, and designate professional staff to guide the farmers, so as to decrease the technical risk as much as possible.

6.4 Project Responsibilities and Management

6.4.1 Project Organization System and Responsibility Division

Implementation of the project depends on close coordination between government departments. Thus, it is necessary to construct a thorough series of leadership system, project execution system, and project support system. Currently, clear work division and efficient cooperation mechanism have been established in each project area. Table 6-1 shows detailed responsibility of each government department in project activities.

1. Project Management Unit

Project management units include county-level governments, Development and Reform Bureau, Finance Bureau, Housing and Urban and Rural Construction Bureau, and Poverty Alleviation and Development Office, etc. For our project, each of the 11 counties sets up a county-level project joint conference system to guide and manage the project operation in the county. Each project joint conference system is led by the chief leader of the county's government, with relevant departments of the people's government, the Commission, the office and other units as the members. Responsibilities of the systems include:

- (a) Studying, reviewing and approving alternatives in the project area,
- (b) Reviewing and approving county-level project plans and structures,

- (c) Allocating project funds,
- (d) Coordinating work responsibilities of each department, and
- (e) Checking and supervising the project process.

2. Poverty Alleviation Office

Each county involved in the project sets up a county-level project office in the County Poverty Alleviation Office of Foreign Investment Project Management Center. The office is charged by the county-level project joint conference system, and is responsible for enforcing and managing the project, and managing the corresponding personnel. Each county-level project office is composed of 5 to 8 people. Under the office are the Project Monitor Unit, Integrated Planning Unit, and Financial Purchasing Unit, etc. The office is in charge of:

- (a) Guiding or organizing the construction and evaluation of the project community development plan,
- (b) Reviewing and approving the project proposal,
- (c) Compiling project's annual plan,
- (d) Setting up necessary project management rules, organizing project enforcement, supervising engineering quality, and checking implemented works,
- (e) Monitoring the project, summarizing the project progress, report forms and reports, reporting to the municipal and provincial project office, and compiling the project completion report and project summary,
- (f) Accounting and financial allocation, guiding or enforcing project supplies purchase and allocation,
- (g) Managing, Guiding, and accessing the work of community facilitators,
- (h) Organizing technological service, institutional construction, personnel training, and experience exchange, and
- (i) Guiding and supervising country and community works.

3. Other related departments

Each of the 11 county-level project offices organizes 3 to 7 technical personnel from related departments to set up County-level Project Technical Support Guidance Committee. The personnel mainly come from transportation, water conservancy, animal husbandry, agriculture, and forestry departments. They provide necessary technical support for the project management, and offer market-oriented and professional technical service to the county and community in the project. Their primary responsibilities are:

- (a) Accessing community project plans, designing engineering work, and measuring the investment of the involved institutions,
- (b) Involved in technical support of the project, as well as monitoring, checking and accepting the work, and
- (c) Providing practical technical training, design, and counseling

services to the communities and farmers.

Table 6-1 Project Responsibilities of Relevant Government Departments

Project	Executing Institution	Responsibilities
Farmer Cooperatives and Value Chain Development		
Cooperative Establishment	Project Management Institution, Project Management Office, Relevant Technical sections	(a) Establish special institutions to provide farmer cooperative with assistance and service; (b) Increase support for farmer cooperatives and launch a batch of key projects, such as technical training for farmers, promotion of Agricultural technology, facility agriculture, cold chain system and processing, and E-business platforms; (c) Offer Technical training to impoverished households and designated products in terms of risk-prevention and agricultural insurance.
Agricultural Infrastructure Construction	Project Office, Relevant Technical sections	(a) Assist poverty-stricken areas in land improvement and carry out projects such as road construction, weirs, and terraced field; (b) Upgrade water conservation infrastructure and improve water-saving irrigation technologies; (c) Enhance technical advisory and training for cooperatives and farmers.
Cooperative Development Fund	Project Management Institution, County-level PMOs	(a) Offer conditional grants to qualified newly-established cooperative enterprises and existed enterprises; (b) Allocate cooperative development funding
Economic Infrastructure and Services Support		
Facilities Construction	PMOs, Project Office	Leverage more investment in infrastructure and public service facilities in project areas, including pipeline, cellars, garbage collection, education institutions, cultural and sports, medical and health, welfare facilities and commercial finance.
Services	County-level PMOs	Provide capital and training on project management; publicity and promotion in project areas.
Technical and Capacity Building		

6 Analysis of Government Departments

Project	Executing Institution	Responsibilities
Community Capacity Building	PMOs, relevant technical sections	(a) Project Operation should be standardized; (b) Procurement should be completed in accordance with commodity procurement contracts to prepare facilities; (c) Training targeted at community management staff will be provided in manners of lecturing by experts and on-site problem analysis based on circumstances, with the training including: knowledge of policies and law for community leaders and project management for community project management staff.
Cooperative Capacity Building	County-level PMOs, Relevant technical sections	(a) Procurement should be completed in accordance with commodity procurement contracts to prepare facilities for cooperatives; (b) Management staff worked in cooperatives should be trained, and the training includes: Cooperative Law of the People's Republic of China, Operation Guidance for World Bank Loaned Cooperatives in Shaanxi Poor Rural Areas Community Development Project, World Bank Aide Memoire financial management, marketing, e-commerce, cooperative operation and management and the policies on industry development; (c) Evaluation should be carried out among staff in charge of key positions in cooperative management.
Farmers Capability Building	County-level PMOs, Relevant technical sections	(a) Improve project guidance and take household participation ratio, participation degree and quality of performance of each task in all rounds as the key indicators; (b) provide training to households, covering law and sociocultural knowledge, productive skills, daily life skills, skills for migrant workers and computer knowledge.
Project Facilitator Capacity Building	County-level PMOs	(a) Project Facilitator training will be incorporated into annual plan, and the incapable Project Facilitator after training will be dismissed; (b) Intensify inspection on Project Facilitator's management.
Management and Monitoring Evaluation		
Project Management Training and Capacity Building	County Project Office, Relevant technical sections	(a) Provide training to management staff and technical staff in terms of project procurement, project execution, drawings, reimbursement and records management; (b) Organize management staff to other provinces or cities to learn experience of implementation of poverty alleviation projects; (c) Drafting documents
Community Public Infrastructure and Service Construction, Operation Management Training and Institution Capacity Building		

Project	Executing Institution	Responsibilities
Training on Management of Infrastructure Operation of Industry Development Project and Management Operation of Institution Execution		such as Management Regulation, Implementation Plan, to improve project implementation.
Project Management and Monitoring System Development	County Project Office	(a) Detailed terms and conditions will be formulated in accordance with Project Implementation and Management Regulations and a system of internal approval and monitoring will be put into place; (b) Designating personnel for project monitoring; (c) Regular meeting on monitoring and evaluation will be held annually.
Maintenance Management After Implementation	Project Management Institution, County Project Office	(a) Direct, inspect, monitor and assess follow-up project management; (b) Implement follow-up project management regulations and obligations; (c) Coordinate, assist community project management committee to settle issues in follow-up project management.

Data Source: Project Implementation and Management Manual

6.4.2 Project Implementation and Operation Management

1. Project Implementation Management

(a) The process of constructing the project is to achieve its objectives and improve the capability of communities and farmers. Farmers in communities would take part in plan the entire process of project implementation, and they are able to make decisions on and manage the ways and procedures of implementing the project. Project offices at all levels, technical sections and community facilitators are expected to involve, monitor the process with identity of mentors, coordinators and service providers, and aid relevant communities to standardize ways and procedures.

(b) Project execution agencies at all levels are responsible to the implementation of the project. Community infrastructure and public service projects, community development fund projects are implemented by the Project Implementation Committees of project communities; Technical and Capacity Building projects are implemented by county Project offices or township PWSs; Project management and land sustainable development are implemented by provincial project offices, municipal project offices and county-level project offices.

(c) Project construction of community projects are implemented by the Community Project Implementation Committees in accordance with principles and measures.

(i)Community Project Implementation Committees should decide measures of project construction in accordance with Project Procurement terms under the guidance of county project offices or township PWSs

(ii)County project offices or township PWSs should intensify coordination and monitoring in project construction, and conduct project safety management.

(iii)Relevant technical sections should intensify technical direction to project construction and monitor the project quality.

Community project monitoring groups conduct the supervision of project construction, guarantee the quality and construction process of projects and safeguard external environment of project implementation.

2. Project Operations and Management

(a) The follow-up management after project implementation is crucial to sustainably exert benefits of projects. When projects are completed, county project offices should begin completion accounting on a timely basis, overall assess and summary the process of project implementation, and draft a completion report.

(b) When project construction is completed, economic infrastructure and services should be managed and operated by corresponding institutions respectively, with the infrastructure being operated and managed by community committee and agricultural infrastructure by community cooperatives.

(c) Project operation units should formulate project operation plan for the coming years and monitor operation in real terms in accordance with the plan. Meanwhile, relevant local sections of road, water conservation, finance and housing construction should participate in drafting project operation plan. These sections should inspect and monitor the implementation of the operation plan, enquiry and track and foresee the performances of projects.

(d) For the sake of project sustainability, the cooperative project, a sub-component, will be assigned to and operated by corresponding agricultural cooperatives. Agricultural insurance and extended foundation for improving living standards are projected to introduce in project community.

3. Project Management Cost

See table 6-2 for the cost allocation of county management agencies in project implementation and operation.

Table 6-2 Capacities of County-level Management Units and Cost Allocation (10,000 RMB)

County	Managing Agency Capacity Building	Community Development Research	Cooperative Directive Center	Management and Monitoring	Total
Linyou County	43			173	216

Long County	43			173	216
Changwu County	43			173	216
Heyang County	43			173	216
Baishui County	43			173	216
Fuping County	43			173	216
Michi County	43			173	216
Dingbian County	43			173	216
Yichuan County	43			173	216
Yanchuan County	43			173	216
Yanchang County	43			173	216

Source: County-level Project Management Offices

6.5 Summary

1. Government departments have made obvious progress in all kinds of poverty alleviation work, and they will keep moving on in the following aspects: (a) Planning: continue push forward “One County One Strategy, One Household One Method” poverty alleviation project; (b) Construction: expand invest in infrastructure, “Internet +”, anti-poverty industries and impoverished households; (c) Management: make sure all departments’ rights and responsibilities, strengthen governments’ supervision, and promote Sunshine Government Administration; (d) Training: continue with farmers’ technical training and career training; (e) Benefit: while focus on economic benefit, it is important to maintain social benefit and ecological benefit.

2. Government departments all support this project, and details are as follow: (a) Project Management Office: it is required to strengthen leadership, innovate new anti-poverty methods and ensure funds; (b) Poverty Alleviation and Development Office: PADO have to enhance infrastructure, technical service facilities construction, business service facilities construction, demonstration park construction and structure construction; (c) Other related departments (Bureau of Agriculture, Bureau of Livestock, Bureau of Fruit, Bureau of Forestry, Bureau of Water, Bureau of Tourism, Women’s Federation, etc.): Enhance land control and water conservation infrastructure, strengthen training of cooperative members, and respect women’s thoughts, etc.

3. The project will bring positive effects to government departments:

(a) Project Management Office: it helps with changing governments' function and expanding channels for attracting business and investment; (b) Poverty Alleviation Office: upgrade anti-poverty ideas and poverty alleviation models to help impoverished households; (c) Other related departments: improve basic living and production condition for impoverished households, improve ecological environment, and improve women's status. Meanwhile, this project will also bring in potential risks, such as management risks, policy risks, household equal income risks, technical risks, etc., all of which requires all department to take efficient methods to prevent from happening.

4. Currently, 11 project counties have set up all-round leadership system, implementation system, and project support system: (a) Project Management Units (County government, Development and Reform Bureau, Financial Bureau, Housing and urban-rural construction Bureau, Poverty alleviation and development office, etc.) Set up county projects joint conference system to manage and govern local projects; (b) County Project Office reports to project joint conference and be responsible for the implementation and management of projects; (c) County project technical support committee (constituted by special technical personnel from county-level transportation, water conservation, livestock, agriculture, forestry departments) provides necessary technical support for project management. Also, county project technical support committee clarifies all institutions' responsibilities in Farmers' cooperatives and value chain development project, economic infrastructure and service support project, technical and capability construction project and management and monitoring project.

7 Analysis of Gender and Disadvantaged Groups

7.1 Development Status of Women in Shaanxi Province and Project areas

According to the statistics in the Shaanxi Statistical Yearbook-2015, the population of Shaanxi province reached 37,750,000 in 2004, with a male population of 19,490,000 and female population of 18,260,000. Female population made up 48.37% of the total population and the male-female sex ratio was 106.74. The population of senior citizens aged 65 and above was 3,205,000(8.5%). By the end of 2014, the number of employed persons reached 2,0580,000 and was 0.1% lower than the previous year. The number of employees working in non-private urban entities was 4,710,000 and was 21.9% higher than last year. The average wage of employees in non-private urban entities was RMB 47,446, 10.2% higher than the previous year. For those working in the private urban entities, the average wage was RMB 26,454 and was 16.3% higher than the previous year. The number of female employees working in non-private urban entities of Shaanxi province was 1,731,900(8.42% of the total employed population), as well as 37.92% of employees of non-private urban entities. Besides, the total number of registered people owning industrial business was 210,600, and the registered unemployment rate in urban areas was 3.32%.

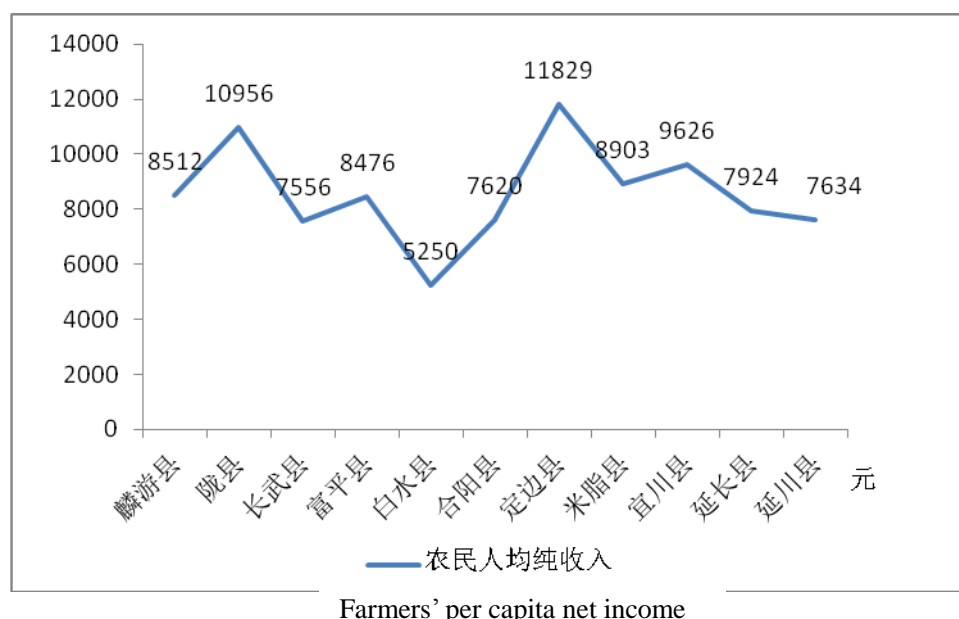
SA statistics show that, the total population of 11 project counties is 140,000, including 1,520,000 of female and 1,620,000 of male. The male-female sex ratio was 106.58. The total number of labor in project countries was 1,510,000, including 770,000 of female workers (50.99%). The total population of 29 project areas was 77,578, including 83,480 of female and 94,098 of male. The male-female sex ratio was 112.72, as is shown in the table 7-1.

Table 7-1 Census of Shaanxi Province and project areas

Quantity Areas	Total Population	Male Population	Female Population	Percentage of Female Population
Shaanxi Province	37750000	19490000	18260000	48.37%
11 project counties	3140000	1620000	1520000	45.54%
29 project areas	177578	94098	83480	47.01%

Data Source:: Shaanxi Statistical Yearbook-2015; SA Statistics

The average net income of farmer in the 11 project counties is RMB 8,571. Among them, farmers from Dingbian County have the highest average net income: RMB 11,829. And farmers from Baishui County are the lowest, with an average net income of only RMB 5,250, as is shown in the chart 7-1. The net income per peasant in 29 project areas is about RMB 5,348. Among them, the Zhaoxian project area has the highest net income per peasant, which is RMB 9,738. The Shiyao project area is the poorest, which is RMB 2,500.



Data Source: SA Statistics

Figure 7-1 The net income per peasant in project counties

7.2 Analysis of Women's Development in the First Project Areas

With the rapid development of economic and urbanization, more and more rural male labor force in project areas moves into cities for jobs. Thus female have become the main force in the agricultural production and management activities. The agricultural production has shown a tendency of feminization. This kind of feminization has boosted the demand of interactive cooperation among farmers to resist the risk in production and market altogether. In other words, the agricultural feminization has boosted the farmer's demand for rural cooperative economic organizations.

7.2.1 Women's Development Status

1. Population Distribution

By the end of 2014, the total population of 11 project counties was 3,140,000, with 1,520,000 of female (45.54%). Total labor population was 1,508,400, with about 664,800 of female (44.07%). The first 13 project areas that are put in practice contain a population of 83,847, with 39,267 females which made up 46.83% of total, as is shown in the table 7-2 and table 7-3.

Table 7-2 Population census for women in 11 project counties (per ten thousand people)

Project Counties	Linyou	Long County	Baishui	Fuping	Heyang	Changwu	Yichuan	Yanchang	Yanchuan	Mizhi	Dingbian	Total
Total Population	8.74	27.14	29.48	80.35	45.63	18.69	12.30	15.49	19.83	22.02	34.50	314.16
Male	4.94	14.27	15.20	40.78	23.11	9.76	6.47	8.11	10.31	11.55	17.92	162.42
Female	3.80	12.87	14.28	39.57	22.52	8.93	5.83	7.38	9.52	10.47	16.58	151.74
Total Labor	3.18	16.75	11.23	41	23.35	11.62	4.08	5.96	5.95	10.82	16.9	150.84
Female Labor	1.38	8	5.02	17.2	10.82	5.50	1.63	2.13	2.24	4.46	8.1	66.48

Data Source: SA Statistics

Table 7-3 Population census for women in 12 project areas

Project Area	Changfeng in Linyou	Liangquan in Long County	Linggao in Baishui	Shiguan in Baishui	Cao Village in Fuping	Ganjing in Heyang	Tingkou in Changwu	Heerchuan in Yichuan	Leichi in Yanchang	Shiyao in Yanchuan	Longzhen in Mizhi	Yangjing in Dingbian	Total
Total Population	5655	6729	8186	4576	14755	5685	3356	2447	4213	5371	5883	12521	79377
Male	2910	3634	4165	2100	8502	2877	1733	1447	2232	2710	3041	6909	42260
Female	2745	3095	4021	2476	6253	2808	1623	1000	1981	2661	2842	5612	37117

Data Source: SA Statistics

2. Age Composition

In the project areas, there were 6664 of males aged under 14, 28301 of males aged between 15 and 64, and 7295 of males aged over 65; there were 6021 of females (45.79%) aged under 14, 25467 of females (47.36%) aged between 15 and 64, and 6021 of females (45.21%) aged over 65. This indicates that the percentage of females aged between 15 and 64 is relatively high, which is the main age group of female labor force. Also, the gender distribution shows that the percentage of males is relatively high in these areas. This illustrates that the population structure in the project areas is not completely reasonable. There might have been a son preference, as is shown in the table 7-4.

Table 7-4 Age Distribution of Women

Age	Female Population	Male Population	Total	Percentage of Females
Under 14	5629	6664	12293	45.79%
15-64	25467	28301	53768	47.36%
Above 65	6021	7295	13316	45.21%

Data Source: SA Statistics

3. Education Status

From the point of horizontal comparison, most of males' education level is middle school, while females mainly had an education level of primary school or even illiteracy. Female has a lower proportion of education level than male in every different education level. This shows that males' education level is generally higher than females in project areas. From the point of vertical comparison, the research shows that in females, 17244 of them (47.10%) were with middle school education level; 9460 of them (46.46%) were with primary school education level or illiteracy; 17164 of them (46.52%) were with high or technical school education level; 5460 of them (43.92%) had college degree or above, as is shown in the table 7-5.

Table 7-5 Female Education Status

Gender Education Level	Male	Female	Total	Percentage of Females
College degree or above	3062	2398	5460	43.92%
High or Technical School	9179	7985	17164	46.52%
Middle School	19085	17244	36329	47.10%
Primary School or illiteracy	10934	9490	20424	46.46%

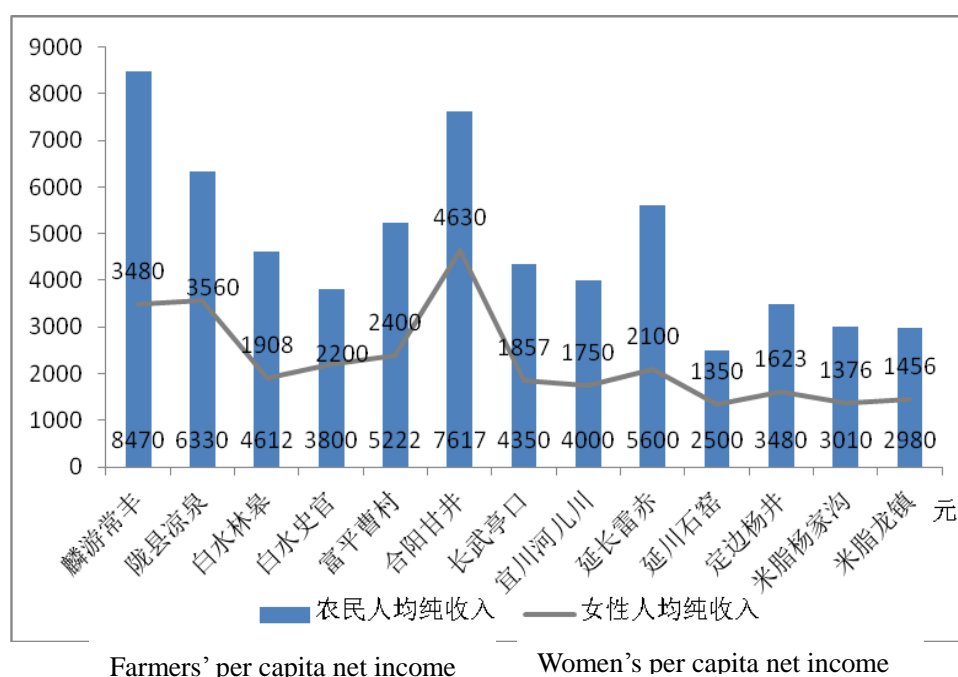
Data Source: SA Statistics

The employment, health status and source of income of females were not included in the basic data of project areas. This report uses the related data from the Questionnaire of Farmers. Although the data can't fully coverage project areas, it can provide some reference value. The sample size of this questionnaire is 730 (more than 50 for each community), and 693 questionnaires were validated (94.9%). Among those, we got 581 male samples (83.8%) and 112 female samples (16.2%). Besides, we got 213 samples (30.7%) of poor rural families.

4. Income and Source

By the end of 2014, the average net income per peasant in 12 project areas was RMB 4767. And the average net income of female peasants

was RMB 2284, which accounts for 47.89% of the total. Among them, the Changfeng project area in Linyou County had the highest net income per peasant, which was RMB 8470. The Longzhen project area in Mizhi was the poorest, which was RMB 2980. The Ganjing project area in Heyang County had the highest average net income for female peasants, which was RMB 4630. The Shiyao project area in Yanchuan County was the lowest, which was RMB 1350, as is shown in Chart 7-2.



Data Source: A Basic Information List of the Project Communities of Shaanxi Poor Rural Areas Community Development Project (P153541)

Figure 7-2 The net income per peasant in project areas

b. The Income Source of Females in Project areas

Questionnaires show that, the main source of income of females is farming (66.33%), then is labor (21.61%), and the least one is the service industry (5.34%). Comparing with females, the main income source of males is still farming (63.64%), and then is labor (21.69%), which fits in with the peasants' regular income pattern in the small-scale peasant economy, as is shown in the table 7-6.

Table 7-6 The Income Source of Females in Project areas

Proportion Gender	Farming	Labor	Individual Enterprise	Others
Female	66.33%	21.61%	4.34%	7.72%
Male	63.64%	21.69%	4.61%	10.06%

Data Source: Questionnaire of Farmers

5. Employment

Questionnaires show that 69.67% of females choose to stay at home for farming, which is 3.36% higher than the proportion of male. More women choose to stay in their homes than men. There are 24.48% of males choose to leave the home as migrant workers, but only 23.11% females choose the same way. There are fewer women choosing to leave for labor than men, which fits in the China's traditional social culture: the "male lord outside homemaking women" model. Besides, there are some who make a live from individual enterprise business, and 4.67% of them are female. Clearly, farming, labor and individual enterprise business are the three main options for female employment. This is essentially in agreement with the information from the conversations with villagers, village officials and PADO members, as is shown in the table 7-7.

Table 7-7 Women's Employment

Proportion Gender	Farmers	Migrant Workers	Individual Business	Staff of Enterprise	Civil servants and Employee s of public institution s	Students	Others
Female	69.67%	23.11%	4.67%	1.24%	0.16%	0.12%	1.03%
Male	66.31%	24.48%	3.21%	4.04%	0.51%	0.33%	1.12%

Data Source: Questionnaire of Farmers

6. Health Status

Questionnaires show that, 67.35% of villagers say they are healthy, 29.59% of them say they are weak and sickly, and 3.06% of them are disabled. 66.67% of females and 67.47% of males are healthy. There isn't a significant difference between male and female, which means most of farming villagers are in a good health condition. Though there are about 30% of sickly villagers who can barely do any labor, and there are more female sickly villagers than male, as is shown in the table 7-8.

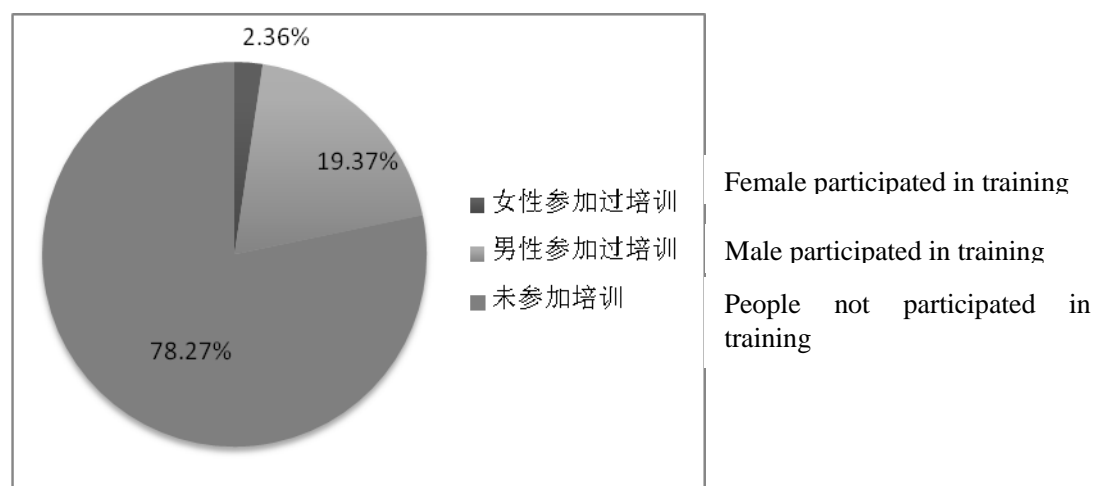
Table 7-8 Women's Health Status

Proportion Gender	Healthy	Sickly	Disabled
Female	66.67%	32.91%	0.42%
Male	67.47%	30.92%	1.61%

Data Source: Questionnaire of Farmers

7. Training Experience

Questionnaires show that, the number of females who have training experience accounts for 2.36% of the total population, and trained males are 19.37% of the total. Besides, there are 78.27% of villagers who were surveyed that had no trained experience, as is shown in the chart 7-3.



Data Source: Questionnaire of Farmers

Chart 7-3 Women's Trained Experience

7.2.2 Women's development activities in Project Areas

In the respect of women's development, Shaanxi government has developed *the Woman Development Plan (2011-2020)*, to play a good role in guidance and carry out further efforts to help the development of women. Also, the Women's Federation starts a series of development activities for women during the twelfth five-year-plan period, and has achieved a lot. The overall quality of women has been improved, as well as their social and family rank. The legitimate rights and interests of women have been effectually vindicated. Including the following 6 points:

1. Establish the perfect the financial support system of woman development.

- (a) Implementing the small secured loans with discount policy for women's enterprise

Shaanxi government started the small secured loans with discount policy for women's enterprise from Jan1, 2010. Women's federations at all levels in Shaanxi have been focusing on the four key links: "Publicity, Training, Recommendation and Coordination" Shaanxi Provincial Women's Federation set up special column on the News column in Shaanxi People's Broadcasting, and send special promos about the policy to the Women's Homes in villages and communities, in order to furthering the universal coverage of this policy around the province. According to statistics, the total amount of women's guaranteed small loans in Shaanxi has reached to RMB 2,548,390,000,000 till the end of June, 2011, which accounted for 35% of the total amount of personal loans, and was 65% higher than last year. This provides the financial support for women to start their own business, and effectively push forward the development of women in Shaanxi province. Over the past 4

years, Women's federations at all levels in Shaanxi have totally released over RMB 5 billion of small amount loans. And help about 320,000 of women to start own business or get employed. Shaanxi has started over 1000 of entrepreneur training workshops and has trained over 30,000 of women. 60% of women have certain understanding or mastery of the small loans policy. With the help of loans, 80% of women in some areas can manage 1 or 2 practical skills, and 50% of farmers have changed their farming from single production into diversified economy. After loaning, the income of rural families had increased about RMB 2000, on average. And urban families' income had averagely increased about RMB 3000.

(b) Making use of social capital to promote the development of women

During the twelfth five-year-plan period, Shaanxi Provincial Women's Federation followed the basic purpose and principles in the Woman Development Planning, and kept carrying on the developing and finical managing of some social projects, such as "Hong Feng Project", "HeChongBen's Livelihood Project for Women and Children", "Potential Development Project for Female Teenagers" and so on, to maximize the social capital's huge promoting effect on the development of women. Women's Federation also played an active role in helping those women who have trouble in employment to get employed, such as those who are labor migrants or back to hometown to start own business.

2. Women's Charity

Till the end of 2015, around RMB 896 million had been invested into the public welfare project of "Water Cellars for Mothers", and the project had built 139,400 of rainfall collecting cellars in 25 provinces (including areas and cities), as well as 1698 of centralized water supply systems. This has improved the sanitary of drinking water for 543 of schools in rural areas, and solved the drinking water problem for 2,900,000 people who are living in poverty. Also, together with other non-governmental organizations, the Shaanxi province government and Shaanxi Provincial Women's Federation have started a series of woman charity activities during the twelfth five-year-plan period. In 2011, with the support from enterprises and people, the Chaiyu village in Baimiao, Fuping county of Weinan had carried out the "Water Cellars for Mothers" project successfully, to solve the drinking water problem of women, and significantly improve the net income per woman. In march, 22th, 2013, with the arrival of the 21th World Water Day, China Women's development foundation started the experiencing program named "Water Cellars for Mothers: Trip of Desire" in Shaanxi. With the help from Shaanxi Provincial Women's Federation, women's federations at all levels in project areas keep developing the women's charity in Shaanxi, such as "Hongfeng Project ", "Spring Bud Project" and so on. Keep

focusing on the caring and assisting work for local women who has lost the property or has a low income, as well as for those vulnerable female groups such like single poor mothers, unattended and migrant women and disabled women.

3. Skills Training

Women's federations in project areas have started different kinds of women skill competition, and further deepen skill activities like "Learning and Competing Campaign", "Women's Establish Achievement", "Woman Civilization Station" and so on, to lead the women from rural area to contribute for accelerating agriculture modernization and speeding up the new socialism rural reconstruction. For instance, providing the home service training for women, which has helped a lot of poor rural women is able to work in the urban families. Now, home service has become one of the most importance ways for poor women to join the non-farm payrolls in cities.

4. Raising the level of Education

The governments in project areas have carried out some preferential policies related with poor women, including "The Two Exempt and One Subsidy" policy and Rural Boarding School Construction system. For the former, it would help to reduce the educational burden of the poor families, and ensure the right to education of girls, as well as reduce the drop rate for girls and the illiteracy rate for women. For the latter, it has improved the education condition of children left behind, and reduces the psychological burden of their migrant parents, especially for mothers. Besides, a series of plans have also been carried out to promote girls 'enrollment, such as "Spring Bud Project" which would provide special subsidies for those families who have difficulties to send their daughters into school. Women's federations are also carrying out literacy education for adult women.

5. Health Education and Assistance for Disease

The Government of Shaanxi province has launched a package of programs for the purpose of improving the health condition for women and children. For the low rate of childbearing in hospital, the government provides financial support for pregnant women from poor rural areas, to help them have standard health examinations and give birth in hospitals. Due to this, the death rate of both pregnant women and infants has been significantly reduced. Stations of health care for women and children have been widely set in the project areas, to provide health service for women and children. Also, keep carrying on the pilot free-check project of "the Two Cancers"(breast cancer and cervical cancer) for women from poor rural areas, and keep exploring the rescue mode for women, which combined the financial support from government with the help from women's federations and social charities, and eventually set up a long-term

mechanism of the treatment for women with serious diseases.

6. Legal Aid

To improve the legal awareness of women, the women's federations has launched some relevant training, which mainly comes in two ways: one is handing out information materials for women to read; another is inviting experts to provide legal training for women face to face, which is more intuitive. These projects can improve women's consciousness and ability of law-learning, law-abiding and law-using, to help women deal with the detrimental to their rights, and provide quality and convenient legal aid.

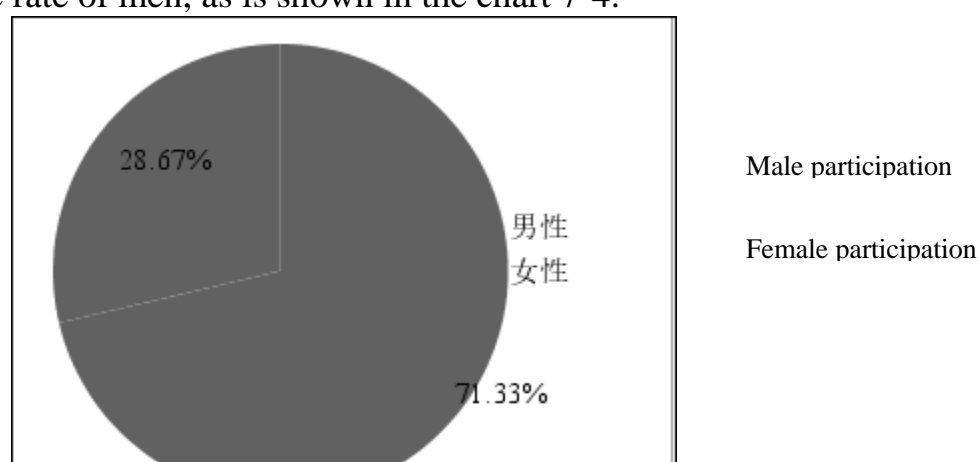
7.3 Women's Participation and Cognition status in Cooperatives of the First Project Areas

SA investigation teams have visited and interviewed 33 cooperatives in project areas, and studied the basic condition of women's participation and cognition status, as well as their needs, and analyzed the influence on women.

7.3.1 Cooperative Participation

1. Number of participating cooperatives

The data shows that 1981 of women (28.67%) and 4928 of men (71.33%) have participated cooperatives. The total number is 6909(8.15%), which shows that the participation rate of cooperatives is very low. Particularly, the participation rate of women is significantly lower than the rate of men, as is shown in the chart 7-4.



Data Source: SA Statistics

Chart 7-4 Women's Participation in Cooperatives

2. Women's Participation in Cooperatives' Management

The data shows that; 13 members of the administrative committee

are women (14.61%); 13 members of the supervisory committee are women (15.85%); 4 of the finance staffs are women (8.7%). This can tell us that compared with men, women's participation in cooperatives' management is relatively low, as is shown in the table 7-9.

Table 7-9 Distribution Situation of Women in Cooperatives' Management

Gender Position	Male	Female	Total	Percentage of Females
Members of the Administrative Committee	76	13	89	14.61%
Members of the Supervisory Committee	69	13	82	15.85%
Finance staffs	42	4	46	8.70%
General Members	4741	1951	6692	29.15%

Data Source: SA Statistics

Case Study of Women's Participation in Cooperative: Guoxianju Fruit Cooperative in Lei Chi Village, Yanchang County.

Guoxianju Fruit Industry Cooperative in Lei Chi Village, Yanchang County was founded in March 11th, 2015. Till now, 66 rural families have joined the cooperative, including 64 farming families and 60 families in poverty. The participation rate of poor families has reached to 90.9%. The number of woman members is 8(12%). The registered capital was RMB 5 million.

The person in charge of the preparation of cooperative is Zhange, who was born local in December, 1955. She has been growing apple in the village until now since she graduated from the Middle School of Yanchang in 1975. June 10th, 2015, as the director, she took in charge and founded the Guoxianju Fruit Industry Cooperative in Lei Chi Village, Yanchang County. With enough capital accumulation, she dedicated herself to the local construction and aspired to contribute to the local development. In project areas she has got a high prestige among communities.

According to the preparation of the cooperative, the total assets at present is RMB 11,903,000, and the specific construction is as follows: (i) Members planning to absorb: 1526.89 mu of cultivated land in circulation; 6903 mu of economic forest(apple orchard), including 600 mu of young apple orchards whose total assets value RMB 6,903,000 (58% of the total assets) (ii) Original founder members of cooperative: 6 original founder members of the cooperative have contributed RMB 5 million(42% of the total assets). (iii) Local township government: Provides fields for production and construction for free.

Following goals can be achieved through the project:

(a) Industry Development

a. Improving the industry development in project areas The acreage of apple in the project area has reached 7000 mu, and the output has reached 10500 tons.

b. Extending the industry chain The project extends the farmer's role in the production of apple, from planting-only to planting, processing and facing with costumers. Instead of only providing apples, they can provide apples after sorting and packing.

(b) Poverty Alleviation: It is estimated that the annual agricultural income of project area will reach to RMB 63 million yuan through the cooperation. Income of

farmers will increase RMB 78,700 per year, which is RMB 21,300 per person. Families in poverty will be benefited preferentially. Their income is expected to increase RMB 84,000 annually, and RMB 22,700 per person. All the poor families have been liberated from poverty after joining the cooperative.

7.3.2 Cognition in Cooperatives

1. Awareness of cooperatives

The data shows that, 91.6% of surveyed had heard of the Poor Rural Areas Community Development Project of World Bank, including 92.56% of males and 90.64% of females. It is clear that women have less awareness of public affairs than men. Traditional family division of labor is the main reason behind this. China's "breadwinning men and homemaking women" model exists in the public affairs like rural cooperatives, as is shown in the table 7-10.

Table 7-10 Women's Awareness status of the World Bank Poor Rural Areas Community Development Project

Proportion Gender	Have heard of the project before or not?	
	Yes	No
Male	92.56%	5.44%
Female	90.64%	9.36%

Data Source: Questionnaire of Farmers

2. The Level of Support of Cooperatives

The data shows that 85.41% of males and 84.26% females supported the development of cooperatives. Only 1.89% of females and 1.62% of males were against the establishment of cooperatives. After the investigation, the survey group learned that most males who were against the cooperatives' development were out of caution, and remained a conservative attitude to it. They thought that those powerful people and families can gain some advantage from the cooperatives, and it would be difficult for them to make a profit. Generally speaking, local villagers are holding a quite positive attitude towards the establishment of cooperatives. After interviewing locals, SA investigation teams found out that there were quite many left-behind women in project areas. And most local villagers grow and sell agriculture products all by their own, and lack a unified way to purchase seeds or sell their products. Developing local cooperatives is one of the solutions to these problems, as is shown in the table 7-11.

Table 7-11 Women's Level of Support of Cooperatives Supported by World Bank's Poor Rural Areas Community Development Project

Proportion Gender	Support the project or not?				
	Strongly support	Support	Don't care	Don't support	Strongly Don't

					support
Male	36.57%	48.84%	12.24%	1.34%	0.28%
Female	33.14%	51.12%	2.04%	1.55%	0.34%

Data Source: Questionnaire of Farmers

3. Willingness of Participating Cooperatives

The data shows, that most of local farmers have a strong will to participate in the cooperatives. 89.22% of women are willing to participate. According to the field survey, the principal reason for women to participate is to sell the agricultural products in a unified channel. The risk of farming can be minimized if cooperatives can contact with the market, which will bring some protect for the income of women, as is shown in the table 7-12.

Table 7-12 Women's Willingness to Participate cooperatives

Gender \ Proportion	Want to join or not?		
	Yes	No	Don't care
Male	91.50%	2.04%	6.46%
Female	89.22%	6.72%	4.06%

Data Source: Questionnaire of Farmers

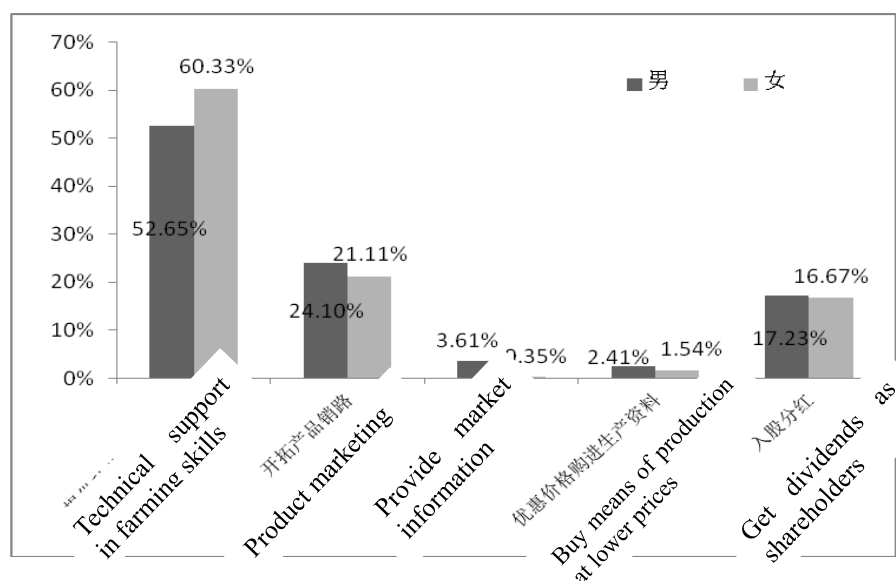
● Interview with women from the Shiyao Community in Yanchuan County.

7 women joined the talk, 4 of them are left-behind and 3 of them had just come back home as migrant workers. 70% of the labor force had left the village as migrant workers, only kids and old people were left in home, and the women taking care of the family. The main job of these women is doing housework and some farming, with very little of extra income. They didn't have much understand of the project, but supported it after introducing. They agreed that the project can provide a chance for left-behind women to gain more extra income. And they would like to participate in the project if it can provide a job, which is a good way to gain some extra money.

4. Needs of Cooperatives

The data shows that, 60.33% of women thought that the peasant's specialized cooperatives should provide some technical guidance for farming. less than women, 52.65% of men had the same desire. Besides, 21.11% of women hoped to extend the market of their products, and 16.67% of women wanted to hold share and receive bonus. What the farmers wanted most in project areas was to have technical guidance for farming from cooperatives. SA investigation teams learned that they couldn't have much economic benefit of farming, which is due to the lack of technical guidance, as well as the high risk in farming, as is shown in

the chart 7-5.



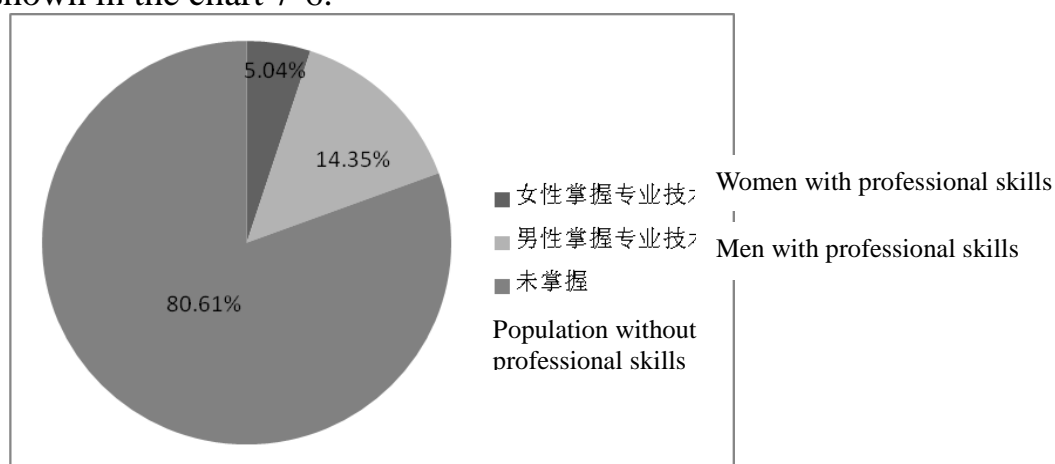
Data Source: Questionnaire of Farmers

Chart 7-5 Needs of Cooperatives

7.4 Analysis of Women's Needs in the First Project areas

7.4.1 Technical Training

The data shows that, only 19.39% of farmers had mastered the technical skills for developing the local special (or dominant) industries. The level of mastery is pretty low among the locals, both men (5.04%) and women (14.35%); most of farmers hadn't mastered any professional skills, as is shown in the chart 7-6.



Source of data: Questionnaire of Farmers

Chart 7-6 Professional Skill Mastery of Women

The data shows that, 93.33% of women demanded professional skills training (including "want to have" and "strongly want to have"), which is a little more than men (92.77%). This indicates that most

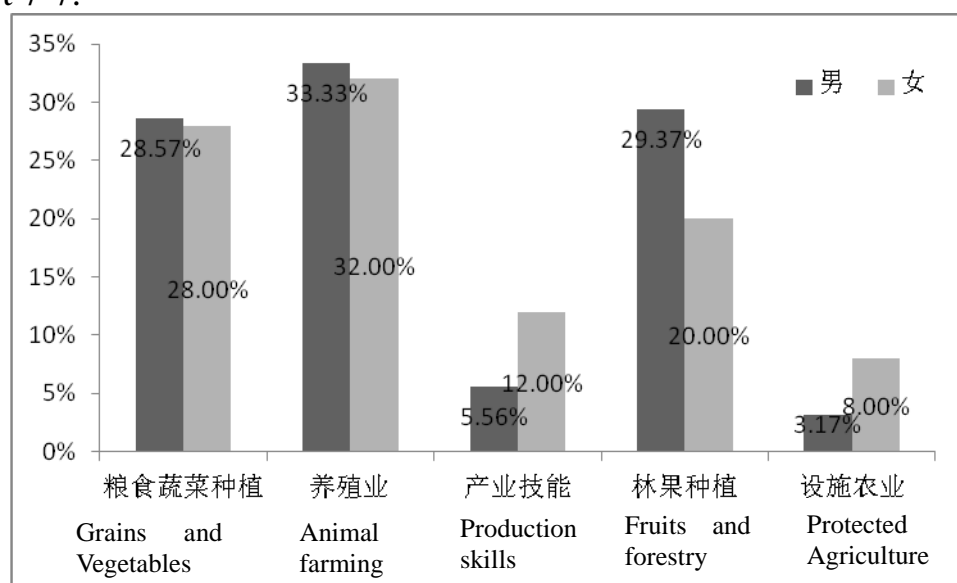
farmers are willing to participate into the professional skills training about local special (or dominant) industries. After interviewing local women, SA investigation teams knew that they had a poor mastery of professional skills about developing local special industries. Most women were using traditional skills in farming, and they have a strong desire for having training, as is shown in the table 7-13.

Table 7-13 Women's Willingness of Technical Training

Proportion Gender	Want to participate the training of local special industries or Not?			
	Strongly want to	Want to	Don't care	Not want to
Male	36.74%	56.03%	3.15%	4.08%
Female	40.14%	53.19%	3.02%	3.65%

Source of data: Questionnaire of Farmers

The data shows that, women from project areas wanted animal farming skill training the most (32%), which is nearly the same with men's demand for animal farming skill training. 20% of women wanted to have skill training for forestry and fruit farming, which is less than men (29.37%). Besides, 12% of women wanted training for facility agriculture and 8% of women wanted training for industries skill, as is shown in the chart 7-7.



Source of data: Questionnaire of Farmers

Chart 7-7 Demand Analysis of Technical Training

7.4.2 Improving the Infrastructure

The data shows that most of farmers were willing to have infrastructure renovation, including 93.33% of local women and 93.98% of local men. According to the field visits, the condition of infrastructure in project area was very deficient, including the deficient of roads for production use/hard-faced roads, lack of cellars, the inconvenience of highways and other problems. These problems bring a lot of burden to

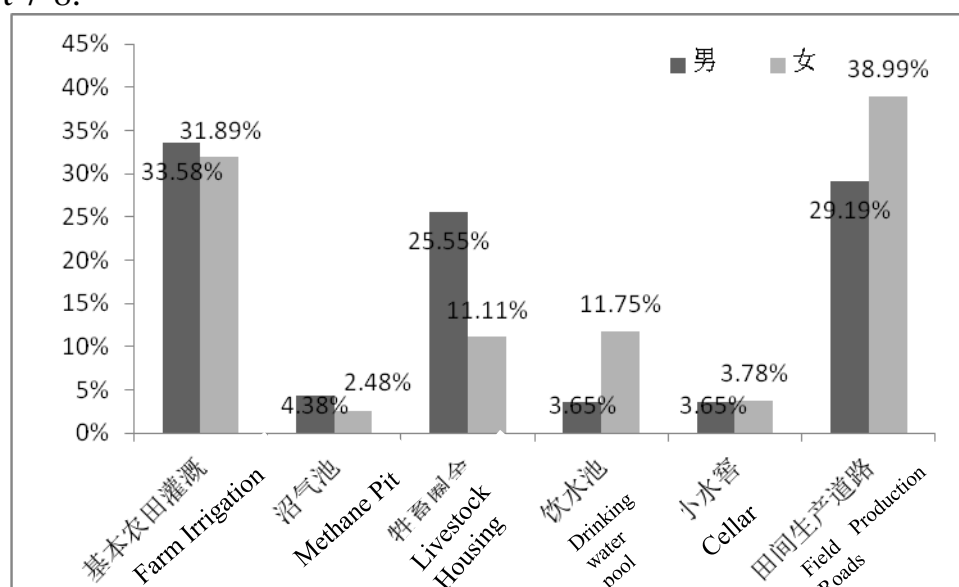
women during the busy farming season, especially for their body health. As shown in the table 7-14.

Table 7-14 Women's Willingness of Improving the Infrastructure

Proportion Gender	Want to Improve the Infrastructure or Not?		
	Want to	Don't care	Not want to
Male	95.98%	1.04%	2.98%
Female	93.63%	2.02%	4.35%

Source of data: Questionnaire of Farmers

The data shows that the infrastructure women most wanted to improve was production roads, accounting for 38.99%. Besides, they also wanted to improve the irrigation system in fields (31.89%). Few of them wanted to improve the methane tanks and small cellars. As shown in the chart 7-8.



Data Source: Questionnaire of Farmers

Chart 7-8 Demand Analysis of Improving the Infrastructure

7.5 Content of Women's Participation of Project in First Project areas

Women's participation had been fully concerned in project areas, to improve the participate rate of women in the process of project, and encourage them to join cooperatives, as well as to create employment for them and improve their social status. Women had different degrees of participation in all 13 kinds of project components. (Details are shown in the Table 7-15) Among them, women had participated in following 7 kinds of components, including 20 specific contents:

(a) Cooperative Establishment and Development: Facility construction, storage and processing of agriculture products, and marketing development. 11 communities had women joined the facility construction; 2 communities had women joined the storage and processing of agriculture products and 7 communities had women joined marketing development.

(b) Agricultural infrastructure: Production insurance, soil amelioration, production roads, irrigation system, and seedling greenhouses. 1 community had women joined the construction of production insurance; 3 communities had women joined the construction of production roads and 7 communities had women joined the construction of irrigation system, and 2 communities had women joined the construction of green houses.

(c) Cooperative Development Fund: Farming, Animal farming and Service Industry. 6 communities had women joined the crop farming industry; 5 communities had women joined the animal farming industry; 5 communities had women joined the service industry.

(d) Public Private Partnerships: Cooperating with leading enterprises(households) and technology units. 6 communities had women joined the cooperation with leading enterprises(households); 7 communities had women joined the cooperation with technology units.

(e) Infrastructure Construction: Water supply and drainage project、road project, electricity project, environment project, and rural energy project. 4 communities had women joined the construction of irrigation and drainage infrastructure; 7 communities had women joined the road construction; 1 community had women joined the construction of electricity project; 2 communities had women joined the construction of environmental project.

(f) Farmer Capacity Building: 7 communities had women joined the Farmer Capacity Building.

Table 7-15 Women's Participation of Project (%)

Proportion Project Area Name of Project Component	Baoji		Weinan				Xianyang	Yan'an			Yulin	
	Linyou County — Changfeng Project Area	Longxian County — Liangquan Project Area	Baishui County — Shiguan Project Area	Baishui County — Lingao Project Area	Fuping County — Huimin Project Area	Heyang County — Ganjing Project Area	Changwu County — Tingkou Project Area	Yanchuan County — Shiyao Project Area	Yanchang County — Leichi Project Area	Yichuan County — Heerchuan Project Area	Dingbian County — Yangjing Project Area	Mizhi County — Longzhen Project Area
Facility Construction for Farmer Cooperative	47	46	20	25	11.10	15.40	50	38.50	3	30		20
Storage and processing of agricultural products		34	80									
Marketing Development		52		30			100	24.50		50		20
Production Insurance		41										
Land Management		24										5
Rural Road		26		5		40		50.50		30		5
Irrigation Infrastructure		26		5		50				30		5
Green Houses	20	42										
Development Funds for Farming		20		36			80	38.50				30
Development Funds for Animal farming		17						38.50		30		30
Development Funds for Service Industry		38			80			27.50				30

7 Analysis of Gender and Disadvantaged Groups

Proportion Project Area Name of Project Component	Baoji		Weinan				Xianyang	Yan'an			Yulin	
	Linyou County — Changfeng Project Area	Longxian County — Liangquan Project Area	Baishui County — Shiguan Project Area	Baishui County — Lingao Project Area	Fuping County — Huimin Project Area	Heyang County — Ganjing Project Area	Changwu County — Tingkou Project Area	Yanchuan County — Shiyao Project Area	Yanchang County — Leichi Project Area	Yichuan County — Heerchuan Project Area	Dingbian County — Yangjing Project Area	Mizhi County — Longzhen Project Area
Solidarity Fund		33	40		50							
Cooperation with Leading Enterprises(households)	20	23			80					30		20
Cooperation with Technology Units		20			50	30		17.50		30		20
Construction of Irrigation and Drainage Infrastructure		47		5								5
Construction of Rural Roads		38		5		40		27.50		30		5
Construction of Electric Power		31										
Environmental Construction		37				50						
Construction pf Rural Energy Resources		37										
Capacity Building of Local Farmers		35				50	70	38.50		30		30

Data Source: County-level PMOs

The summary sheet above only lists the ratio of participation in the project construction among women in the community. Followings are the specific details of women's participation into the construction. (as shown in Sheet 7-16)

Lin'gao community (7 entries): women here mainly participate into the construction of Crop Farming, market development, and cooperatives, the percentages of which are 36%, 30%, and 25% respectively. The cooperatives mentioned above involve the Fengxiang Keyuan Apple Professional cooperative. Besides, women also work on the development of production roads, productivity, irrigation works, water supply and sewerage works, and road system with identical percentages of 5%. The content of women's participation is quite different from the one of men. Comparatively, the former one requires more patience and circumspection.

Shiguan community (2 entries): Women here have a participation ratio in the storage and process of agricultural products with a percentage of 80%. The institution involved is Jinhong Apple Professional cooperative. Their main tasks are packaging and fruit sorting, different from men's work with relatively low labor intensity. Besides, women also work on the construction of mutual fund with a percentage of 40% and the construction of the cooperative with a percentage of 20%. Their works are associated with finance, which are not so different from men's.

Changwu community (4 entries): women here participate in market development with 100% involvement. They are working on the electrical business consulting because females are more gentle and patient. The next major participation is the Crop Farming with a ratio of 80%, the work content of which is about planting, harvesting, and fruit and flower sorting. Another major participation is the capacity building of farmers, the work content of which is about training because women are willing to receive all sorts of training while men only want to receive the training about their own occupation. The lowest ratio of women's participation is found in the construction of cooperatives institutions with a ratio of 50%, the main work content of which is procurement of office supplies and accounting. In that work, women are more careful and practical. All of the 4 entries are involving the Langrun Apple Professional Cooperative.

Fuping community (5 entries): women here mainly participate in the service industry and the cooperation with leading enterprises with a ratio of 80%. The major work content of that is about the sale of dried persimmons and the training of manufacturing workers. The involving institution is Dafu Persimmon Professional Cooperative. The reason why so many women are participating in this work is that they have their natural advantages of patience and carefulness. Working with leading enterprises (big clients) will help women to determine the type of work

and the work content. Next major participation is to raise mutual fund and cooperate with technical units with a ratio of 50%. Mutual fund is the basic for female entrepreneurship, which can aid women with development of persimmons industry. To cooperate with technical units is to train the female workers and enhance their ability to plant persimmons. Last comes women's participation in the construction of cooperative institutions. And their job is to help the committee members to manage the cooperative. The participation ratio of this part is 11.1%. It mainly aims at increasing the social status of women.

Heyang community (7 entries): women here get higher participation ratios of 50% each in irrigation engineering, environmental engineering, and the capacity building of local villagers. Women's main tasks are monitoring the quality, gathering garbage, and joining the study, same as men's. Women work in the Jiujia Crop Farming Professional Cooperative of Heyang county. The next major participation is the production road and road system with a ratio of 40%. They share the same work content of quality supervision with men. The following is the cooperation with technical unit with a percentage of 30%. The work content is to organize masses to construct the cooperative. The lowest participation ratio is 15.4% in the area of the construction of the cooperative institution. Women work as vice presidents on the construction of the Jiujia Crop Farming Professional Cooperative.

Linyou community (3 entries): Women share a higher participation ratio of 47% in the construction of cooperative institution. Their job is to working as Project Facilitators on the construction of the Wenfeng Edible Fungi Professional Cooperative. Second higher participation ratio is 20% appearing respectively in the cooperation with seedling greenhouses and leading enterprises (major clients). They work as ordinary workers in the Changfeng Watermelon Professional Cooperative, sharing the same work content with men.

Liangquan community of Long county (20 entries): women participate in multiple works with different ratios. The higher ones are about market development (52%), water supply and drainage engineering (47%), the construction of cooperative institutions (46%), greenhouse for young crops (42%), and production insurance (41%), all of which are over 40%. Their work contents are productions according to standards, quality supervision, engaging in discussions and constructions, with little difference comparing with men. Relative lower participation ratios appear in the cooperation with counting units and leading enterprises (major clients), which respectively are 20% and 23%. What's more, women work in the Qingquan Chili Cooperative.

Longzhen community of Mizhi county (13 entries): Women have higher participation ratios of 30% each in planting industry, husbandry

industry, service industry, the capacity building of local villagers. Women mainly join in the technical training. Their work contents are relatively light comparing with male. Participation ratios of 20% appear in construction of cooperative institutions, market development, and cooperation with leading enterprises (major clients) and cooperation with technical units. In the process of constructing cooperative institutions and promoting market development, women mainly work on lighter workloads such as accountants and telephone operators for the online platform. In the process of cooperating with leading enterprises (major clients), women work on archives management. Besides, the projects with lower participation rates are assisting in land matters, improving production roads, building irrigation system, constructing water and sewage system, and developing road system. Women work in the Longzhen Laigou Tourism Professional Cooperative.

Yangjiagou community of Mizhi county (13 entries): The newly built cooperative in the community of Yangjiagou is Yangjiagou Tourism Professional Cooperative that shares not only a close location since those two both belong to Mizhi county but also a similarity in the landscape and cultural environment, so the report shows the same things with the one in Longzhen when it comes to distribution plan for women's participation. The details are showed in Sheet 7-19.

Yanchang community (1 entry): Women here join in the construction of cooperative institution with a ratio of 0.03%. They are working in Zhongxin Animal Farming Professional Cooperative on daily routine such as feeding pigs and cooking.

Yanchuan community (9 entries): women here get the highest participation ratio of 50% in improving the production road. Their work content is to provide labor. Next major participations are the construction of cooperative institutions, Crop Farming, husbandry, and capacity building of local villagers. The main job is sanitation. Women participate with lower ratios of 24.5% and 17.5% in the market development and cooperation with technical units. Their works of market development are mainly about selling.

Yichuan community (9 entries): Women's participation ratios are basically around 30%. The only 50% is in market development. They mainly work as managerial personnel in the Yichuan Fuyuan Animal Farming Professional Cooperative and Jiyi Tianmimi Apiculture Professional Cooperative of Yichuan county.

7 Analysis of Gender and Disadvantaged Groups

Sheet 7-16 the content of women's participation into projects

Project Area	Project Activities	The name of cooperative involved	Detailed work content	Any difference between women's work and men's and the details of differences	Women's proportion
Lingao	The construction of cooperative (work place, office supply, and so on)	Fengxiang Keyuan Apple Professional Cooperative	Office routine and office support	Yes, requiring more patience and circumspection	25%
	Market development (site, online business platform, brand certification, and so on)	Fengxiang Keyuan Apple Professional Cooperative	online sales	Yes, requiring more patience and circumspection	30%
	Production road		Propaganda, logistics	Yes, requiring more patience and circumspection	5%
	Irrigation system		Propaganda, logistics	Yes, requiring more patience and circumspection	5%
	Crop Farming development fund		Propaganda, logistics, flower thinning, fruit thinning, apple picking, and so on	Yes, requiring more patience and circumspection	36%
	Water and sewage system (domestic water, drainage, and so on)		propaganda, logistics	Yes, requiring more patience and circumspection	5%
	Road project		propaganda, logistics	Yes, requiring more patience and circumspection	5%
Shiguan	The construction of cooperative (work place, office supply, and so on)	Jinhong Apple Professional Cooperative	Finance	None	20%
	The storage and processing of farming products (factory building, equipment, cold storage, and so on)	Jinhong Apple Professional Cooperative	Packaging, fruit sorting	Yes, lower labor intensity	80%
	Mutual aid fund		Finance	None	40%
Changwu	The construction of cooperative (work place, office supply, and so on)	Langrun Fruit Professional Cooperative	Procurement of office supplies, accounting	Yes, female tends to be more careful and practical	50%
	Market development (site, online business platform, brand certification, and so on)	Langrun Fruit Professional Cooperative	E-business advisory service	Yes, female tends to be more gentle and less afraid of trouble	100%
	Crop Farming development fund	Langrun Fruit Professional Cooperative	Planting, picking, flower thinning, fruit thinning	Yes, women are more careful.	80%

7 Analysis of Gender and Disadvantaged Groups

	Capacity building of farmers	Langrun Fruit Professional Cooperative	Training	Yes, women are more willing to accept all kinds of training while men only accept the one relevant to their career	70%
Fuping	The construction of cooperative (work place, office supply, and so on)	Dafu Persimmon Professional Cooperative in Fuping county	Members of supervisory board	Yes, the rise of women's social status	11.10%
	Service industry development fund	Dafu Persimmon Professional Cooperative in Fuping county	Sale of dried persimmon	Yes, women have natural advantages	80%
	Mutual aid funds	Dafu Persimmon Professional Cooperative in Fuping county	Persimmon industry	Yes, female entrepreneurship is more fundamental	50%
	Cooperation with leading enterprises (major clients)	Dafu Persimmon Professional Cooperative in Fuping county	Manufacturing worker	Yes, the certainty of occupation	80%
	Cooperation with technical units	Dafu Persimmon Professional Cooperative in Fuping county	Cooperative training and study	Yes, in need of technical training	50%
Heyang	The construction of cooperative (work place, office supply, and so on)	Jiujia Crop Farming Professional Cooperative in Heyang county	Vice president	None	15.40%
	Production road	Jiujia Crop Farming Professional Cooperative in Heyang county	Quality supervision	None	40%
	Irrigation engineering	Jiujia Crop Farming Professional Cooperative in Heyang county	Quality supervision	None	50%
	Cooperation with technical units	Jiujia Crop Farming Professional Cooperative in Heyang county	Organizing the masses	None	30%
	Road system	Jiujia Crop Farming Professional Cooperative in Heyang county	Quality supervision	None	40%
	Environment engineering (compost, waste collection, and so on)	Jiujia Crop Farming Professional Cooperative in Heyang county	Waste collection	无 None	50%
	Capacity building of farmers	Jiujia Crop Farming Professional Cooperative in Heyang county	Taking courses	无 None	50%

7 Analysis of Gender and Disadvantaged Groups

Linyou	The construction of cooperative (work place, office supply, and so on)	Wenfeng Edible Fungi Professional Cooperative	Facilitator	None	47%
	Seedling greenhouse	Changfeng Watermelon Professional Cooperative	General worker	None	20%
	Cooperation with leading enterprises (major clients)	Changfeng Watermelon Professional Cooperative	General worker	None	20%
The community of Liangquan in Long county	The construction of cooperative (work place, office supply, and so on)	Qingquan Chili Cooperative	Participating in discussions	None	46%
	The storage and processing of farming products (factory building, equipment, cold storage, and so on)	Qingquan Chili Cooperative	The construction of cold storage	None	34%
	Market development (site, online business platform, brand certification, and so on)	Qingquan Chili Cooperative	Production according to the standard	None	52%
	Production insurance	Qingquan Chili Cooperative		None	41%
	Land improvement	Qingquan Chili Cooperative	Preliminary preparation	None	24%
	Production road	Qingquan Chili Cooperative	Grading the roadbed	None	26%
	Irrigation engineering	Qingquan Chili Cooperative	Quality supervision	None	26%
	Seedling greenhouse	Qingquan Chili Cooperative	Participating in the construction	None	42%
	Crop Farming development fund	Qingquan Chili Cooperative	Participating in discussions	None	20%
	Animal Farming development fund	Qingquan Chili Cooperative	Participating in discussions	None	17%
	Service industry development fund	Qingquan Chili Cooperative	Participating in discussions	None	38%
	Mutual aid fund	Qingquan Chili Cooperative	Participating in discussions	None	33%
	Cooperation with leading enterprises (major clients)	Qingquan Chili Cooperative	Participation	None	23%
	Cooperation with technical units	Qingquan Chili Cooperative	Participation	None	20%
	Water and sewage system (domestic water, drainage, and so on)	Qingquan Chili Cooperative	Quality supervision	None	47%

7 Analysis of Gender and Disadvantaged Groups

	Road system	Qingquan Chili Cooperative	Quality supervision	None	38%
	Electric engineering	Qingquan Chili Cooperative	Quality supervision	None	31%
	Environment engineering (compost, waste collection, and so on)	Qingquan Chili Cooperative	Active participation	None	37%
	Rural energy engineering (methane, solar energy and so on)	Qingquan Chili Cooperative	Active participation	None	37%
	Capacity building of farmers	Qingquan Chili Cooperative	Participating in courses	None	35%
community of Longzhen in Mizhi county	The construction of cooperative (work place, office supply, and so on)	Longlaigou Tourism Professional Cooperative in Long county	Cooperative finance	Yes, females work with lighter physical labor	20%
	Market development (site, online business platform, brand certification, and so on)	Longlaigou Tourism Professional Cooperative in Long county	Operator for E-business platform, website operator	Yes, females work with lighter physical labor	20%
	Land improvement	Longlaigou Tourism Professional Cooperative in Long county	Investing labor	Yes, females work with lighter physical labor	5%
	Production road	Longlaigou Tourism Professional Cooperative in Long county	Investing labor	Yes, females work with lighter physical labor	5%
	Irrigation engineering	Longlaigou Tourism Professional Cooperative in Long county	Investing labor	Yes, females work with lighter physical labor	5%
	Crop Farming development fund	Longlaigou Tourism Professional Cooperative in Long county	Office work training	Yes, females work with lighter physical labor	30%
	Animal Farming development fund	Longlaigou Tourism Professional Cooperative in Long county	Office work training	Yes, females work with lighter physical labor	30%
	Service industry development fund	Longlaigou Tourism Professional Cooperative in Long county	Office work training	Yes, females work with lighter physical labor	30%
	Cooperation with leading enterprises (major clients)	Longlaigou Tourism Professional Cooperative in Long county	Practical agricultural technique training	Yes, women work on management of files and such	20%
	Cooperation with technical units	Longlaigou Tourism Professional Cooperative in Long county	Practical agricultural technique training	Yes, women work on management of files and such	20%

7 Analysis of Gender and Disadvantaged Groups

	Water and sewage system (domestic water, drainage, and so on)	Longlaigou Tourism Professional Cooperative in Long county	Investing labor	Yes, females work with lighter physical labor	5%
	Road system	Longlaigou Tourism Professional Cooperative in Long county	Investing labor	Yes, females work with lighter physical labor	5%
	Capacity building of farmers	Longlaigou Tourism Professional Cooperative in Long county	Practical agricultural technique training	Yes, females work with lighter physical labor	30%
Yangjiagou in Mizhi county	The construction of cooperative (work place, office supply, and so on)	Yangjiagou Tourism Professional Cooperative	Cooperative finance	Yes, females work with lighter physical labor	20%
	Market development (site, online business platform, brand certification, and so on)	Yangjiagou Tourism Professional Cooperative	Operator for E-business platform, website operator	Yes, females work with lighter physical labor	20%
	Land improvement	Yangjiagou Tourism Professional Cooperative	Investing labor	Yes, females work with lighter physical labor	5%
	Production road	Yangjiagou Tourism Professional Cooperative	Investing labor	Yes, females work with lighter physical labor	5%
	Irrigation engineering	Yangjiagou Tourism Professional Cooperative	Investing labor	Yes, females work with lighter physical labor	5%
	Crop Farming development fund	Yangjiagou Tourism Professional Cooperative	Office work training	Yes, females work with lighter physical labor	30%
	Animal Farming development fund	Yangjiagou Tourism Professional Cooperative	Office work training	Yes, females work with lighter physical labor	30%
	Service industry development fund	Yangjiagou Tourism Professional Cooperative	Office work training	Yes, females work with lighter physical labor	30%
	Cooperation with leading enterprises (major clients)	Yangjiagou Tourism Professional Cooperative	Practical agricultural technique training	Yes, women work on management of files and such	20%
	Cooperation with technical units	Yangjiagou Tourism Professional Cooperative	Practical agricultural technique training	Yes, women work on management of files and such	20%
	Water and sewage system (domestic water, drainage, and so on)	Yangjiagou Tourism Professional Cooperative	Investing labor	Yes, females work with lighter physical labor	5%

7 Analysis of Gender and Disadvantaged Groups

	Road system	Yangjiagou Tourism Professional Cooperative	Investing labor	Yes, females work with lighter physical labor	5%
	Capacity building of farmers	Yangjiagou Tourism Professional Cooperative	Practical agricultural technique training	Yes, females work with lighter physical labor	30%
延长 Yanchang	Animal Farming	Zhongxin Animal Farming Cooperative	Yes, women actively participate in the construction of cooperative and daily routine such as feeding pigs and cooking	None	0.03%
Yanchuan	The construction of cooperative (work place, office supply, and so on)	Shuguang Crop Farming Cooperative in Yanchuan county	Cleaning	None	38.50%
	Market development (site, online business platform, brand certification, and so on)	Shuguang Crop Farming Cooperative in Yanchuan county	Selling	None	24.50%
	Production road	Shuguang Crop Farming Cooperative in Yanchuan county	Labor	None	50.50%
	Crop Farming development fund			None	38.50%
	Animal Farming development fund			None	38.50%
	Service industry development fund			None	27.50%
	Cooperation with technical units		Technical personnel	None	17.50%
	Road system		Labor	None	27.50%
	Capacity building of farmers			None	38.50%
Yichuan	The construction of cooperative (work place, office supply, and so on)	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Member of institution	无 None	30%
) Market development (site, online business platform, brand certification, and so on)	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Director	None	50%
	Production road	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Participating in project decision-making	None	30%

7 Analysis of Gender and Disadvantaged Groups

	Irrigation engineering	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Participating in project decision-making	None	30%
	Animal Farming development fund	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Participating in project decision-making	None	30%
	Cooperation with leading enterprises (major clients)	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Participating in project decision-making	None	30%
	Cooperation with technical units	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Participating in project decision-making	None	30%
	Road system	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Participating in project decision-making	无 None	30%
	Capacity building of farmers	Fuyuan Livestock Professional Cooperative in Yichuan county; Jiye Tianmimi Apiculture Professional Cooperative	Participating in project decision-making	无 None	30%

Data Source: County-level PMOs

7.6 Project Impact on Women

7.6.1 Positive Impact

1. Enhancing women's ability and promoting their social status

The survey shows that women's social status in areas with better infrastructure is higher than the ones in areas with poor infrastructure. The promotion of their status depends on the rising of education level and economical independence. Also it hinges on the transformation of their mindset. All of these contribute more or less to women's rise.

The field survey shows that women in project area have some basic knowledge about the Crop Farming and livestock but they are in need of scientific training. Through this project, they can train their agricultural technique and managerial skills. Women in project area already master skills in planting but are deficient in husbandry skills. Quite a few say that they don't know how to breed livestock. Rural labor skill training can help women with their ability for scientific farming and animal farming, change the traditional farming and animal farming method, improve the output, and reduce harmful insects and diseases.

2. Increasing women's economic income and ameliorating working environment

The project execution plan covers infrastructure construction. During the executing process, jobs are preferentially provided for women in order to increase their income. By buying stocks of the cooperative or working in the cooperative, women can obtain more wealth. By pooling land as share, they can increase family income from the shares and rent they earned. The project ameliorates the working environment, easing women's workload like irrigating, fertilizing, and harvesting. The field survey shows that men go as migrant workers and women stay at home in the project area. The infrastructure construction involves the construction of production roads, irrigation pool, trading market and more. It improves the working environment to a great extent and lightens the workload.

3. Improving family environment and external status

Through the project, women improve their family status and expand their voice. They have improved abilities and receive more respect from their husbands. Through agricultural training, women enhance farming and animal farming skills and provide more income for the family. The enhancement of women's mindset and their constructive advice will surely change what their husbands think of them, therefore facilitate gender equality in the family. The improvement in women's ability is conducive to promoting women's social status in the village. And by participating in the cooperative's management, providing advice for

running the cooperative and solving problems, women earn more respect and higher social status while showing their competence. The project develops special industry that will bring back more migrant workers, help with the maintenance of family relations and alleviate women's burden.

4. Improving the quality of life and living standard

Through the implement of the project, industry projects set the cooperative as enforcing body, attracting women into production activity of the cooperative. It enables women to benefit from labor without influencing housework and earn more money. Their living standards are greatly improved.

7.6.2 Negative Impact

Under the condition of market economy, with the expansion of industrialization and urbanization, more and more male labor move to work in cities and women are becoming the main force of agricultural production that shows a clear tendency of feminization. The agricultural feminization increases the demands for farmers to unite, cooperate, and stand together against production and market risks.

1. Women's low participation in the cooperative

The field survey shows that women in project area get a low ratio of participation in the cooperative.

(a) The number of women participating in the cooperative is low. According to "questionnaire on rural professional cooperatives", the number of female participators is only 1981, accounting for 2.03% of the whole population. The number of men participating in the cooperative is 4928, much higher than the one of women. Due to w

(b) Women's participation in the management of cooperative is low. Due to the limited ability of decision-making and managing public affairs, few of them make to the management level. According to the survey, the ratio of women acting as members of administrative committee is 14.61%, the ratio of ones acting as members of supervision committee is 15.85%, and the ratio of ones acting as members of financial management group is only 1.83%.

(c) Women's participation in the cooperative's activities is low. When it comes to the activities of the cooperative, women show a low participating percentage. In the training held by the cooperative, if household based, most of the time it will be the male who presents as the representative. In terms of work, women's hiring proportion and wage are much lower than the ones of men. During the process of sharing out the bonus, few women know how the bonus is shared or how much the bonus is.

2. Women's weak subject consciousness

According to the need-hierarchy theory of Maslow, women's physiological needs have not been fully satisfied. Women earn low income and consume mainly low-end durable goods. Although most low-income families could manage to level their balance with women's careful calculation and strict budgeting, but little money would be left for development. In the meanwhile, a reasonable quantity of low-income farmer families could not cover their expense and are in debt. The field survey shows that there is no cooperative run by women. Women show little enthusiasm for working in the cooperative and mostly rely on their husbands or sons. Plus, women have a low average of levels of education, no independent thought on agricultural development, and inadequate insight and skills to invest in the management. Therefore, it is needed to promote women's subject consciousness and enhance their awareness of managing or planning for the cooperative.

3. Women's work in cooperatives is of low economic benefits and heavy workload.

Women work in cooperatives mostly as general staff. Only 30 women hold posts in departments but seldom involve in the management. In the cooperative, often men control those production links with high profit, high outcome, and high technology. Women usually work in mid-production link with heavy workloads, low economical profit, and less interaction with the market. For instance, the packaging of fruit needs much manpower. Women are more dexterous, so in harvesting season women's participation ratio is normally 99%.

4. The defective democratic management system restricts women's participation.

The essential condition or basic premise of women's effective participation in the cooperative is the implement of a sound democratic management scheme and women's presence in the manger level. Cooperative is a self-managing institution. One person one vote and the minority obeying the majority. Under current circumstance, on one hand, many cooperatives are controlled by the sponsor. Therefore, it is hard to carry out the democratic management system. On the other hand, even if the system is implemented, women cannot have an effective participation owing to the majority of male representatives and the lack of female managers.

7.7 Suggestions of projects on improving women's development

7.7.1 Reform and Improve Membership Registration

In the project areas, farmers join the cooperatives as a family and that is male householder registration system in which women depend on their husband. For another, it is men that normally make decisions rather than women, so it is hard for women to participate as an individual. The inequality of membership system leads to the scarcity of female members and also prevents women from joining the cooperative as an individual member without their husbands' consent. So SA investigation team recommends a reform, perfecting the existing family-unit membership system, canceling householder registration system, and implementing a new registration system based on natural individual. Only in this way can women gain a leading position in the cooperative and become more motivated and active.

7.7.2 Including “women's participation” into the establishment and operation standards of the cooperative

For one thing, women's participation in the project should be encouraged and their opinions and needs should be taken seriously during the process of establishing and picking the direction of industry development. It should be guaranteed that 30% of the cooperative preparatory group, industry preparatory group, purchasing team, and the meeting of establishment and industry planning should be made up of women. The trainings held in the project must have a 30% of women. For another, women's consciousness about the cooperative and project should be strengthened. In the whole process, information should be completely open and clear. We should make sure a 30% of women's participation in the trainings. The choice of time and location should be settled according to women's convenience and calendar. The trainings should adopt local language especially in the minority enclaves. Women should also be guided and directed to set up cooperatives. Women have great potential in promoting self-development and rural development. By providing them with more funds and preferential policies, we can foresee a growth of the cooperatives.

7.7.3 Carrying out various forms of training for women

Considering the low education level of women, cooperatives alter the traditional teaching way to a much easy and understandable method

while organizing trainings and publicize the technology, attracting more women to be a part of the trainings. For example, experts are dispatched to teach and train right in the field. Women are encouraged to take the training courses. Also the women's federation should make full use of their advantages in propaganda and training and cooperate in organizing publicity and trainings.

7.7.4 Creating a good external environment for women's participation in the governance of cooperatives.

From social level, traditional cultural values, such as "man is superior to woman", "man is stronger than woman", "breadwinning men, homemaking women", still affecting people's mind and behaviors. The direct result of that is women's low participation in cooperatives and marginal position of their participation in management and decision-making. Although laws and regulations explicitly stipulate gender equality, when it comes to practical exercise, especially in remote and impoverished rural areas, traditional culture and customs still have their influence, hence, hampering the realization of equality and women's participation. Therefore, all level of society should take their full advantage and unit as an alliance, working together to help women attain an utterly equal status. News media should also publicize social main sense of gender equalization, contributing to the realization of it and overcome the bondage of traditional ideas. In the end, we could establish a social and cultural environment in favor of women's development.

●Interview with the women federation of Fuping County in Weinan.

During the construction of our cooperative, we do think of the disadvantaged group (For example, when holding a meeting, the ratio of women and elders should at least 1/3). And we encourage female leaders to work on the construction of our cooperative and lead older young women to participate. In the department of management and supervision, there should be female representatives, realizing the goal of 30% women. We also endeavor to raise the voice of the poor and subsidize the elders and the disabled. The small-amount loan, disease aid, and legal support (100,000 Yuan per year) provided by the World Bank have been implemented. We want to achieve a flexible operating system of cooperative, that takes women's family status (such as taking care of children or escorting them to school) into consideration. Production should not interfere with daily life.

7.8 Summary

1. The total female population of Shaanxi Province is 18.26 million, accounting for 48.37% of the total population. The female population of 11 project counties is 1.52 million, accounting for 45.54% of the total population of the counties. The female population of 29 project areas is 83480, accounting for 47.01% of the total population of the areas. The

female population of the first 12 project areas is 37117, accounting for 46.76% of the total population of the areas. Women's population is apparently lower than that of men. That shows unbalanced development of men and women and probably an idea of "males are better than females". The average net income of farmers in 11 project counties is 8571 Yuan, the one of farmers in 29 project areas is 5348 Yuan, and the one of farmers in the initial 12 areas is 4767. Farmer's income shows a down trend that means the selection of poverty alleviation project areas is reasonable.

2. From the perspectives of population distribution, age structure, education level, income and sources, employment situation, health situation, and training experiences, women share a relatively low level of development and a great disparity comparing with men.

3. Few women in 12 project areas participate in the cooperatives with a low degree of participation. The total number of female participants is 1981, accounting for 28.67%, and the number of male participants is 4928, accounting for 71.33%. Women compose a low proportion of the manager level of the cooperative, taking up 14.61% of administrative committee, 15.85% of supervision committee, and 8.7% of finance group. Most women know the existence of the cooperative and are willing to join it. They have different demands, though. 93.33% women want to take part in the professional technique training with a strong demand to the animal farming and farming training. 93.63% females want to help with perfecting infrastructure such as field production roads and irrigation system.

4. Project areas organize activities for women's development, promote the general quality of women and their social and family status. It mainly carries out in the following 6 ways. (a) Establish a comprehensive fund support system. (b) Develop women's philanthropy. (c) Skills training. (d) Raise the level of education. (e) Health education and disease aid. (f) Legal support.

5. The positive effects of project development on women include: (a) Enhance women's ability and their social status. (b) Increase women's economic income and ameliorate their working environment. (c) Improve family environment and change their external status. (d) Perfecting their living quality and raise living standards. However, women's current participation also shows some deficiencies such as low participation in the cooperative, weak subject consciousness, and working with low profit and heavy workload. Therefore, project areas should assist women's development in the following ways: (a) Reform and perfect membership registration system. (b) Include "women's participation" into the establishing and operating standards. (c) Carry out multiform trainings for women. (d) Create a fine external environment for women's participation

in the cooperative.

8 Research and Analysis on Project Land Use

8.1. Current land use condition in project area

In order to understand the land use in the project area, the evaluation team conducted surveys and interviews on current land management of the farmers. The researches show that the lands in the project area are substantially typical contiguous mountainous areas, which are poverty-stricken, fragile in ecological environment, and inadequate in foundation facilities. Therefore, farmers in the project area have pressing needs and interest in industry development and infrastructure improvement.

According to the surveys, current land management in the project area includes cultivation by the farmers, abandoned land, land leased to individuals, and to the company. The proportions were 93.1%, 4.08%, 1.47% and 1.35% respectively. The land turnover rate is thus very low, with most farmers cultivate their own land, and ways of land management is limited as shown in Table 8-1.

Table 8-1 Managing mode of land

Ratio gender	abandoned	Farming on one's own	Leased to others for farming	Leased to businesses
male	3.06%	78.81%	1.02%	1.02%
female	1.02%	14.29%	0.45%	0.33%
total	4.08%	93.1%	1.47%	1.35%

Data source: SA investigation statistics

The evaluation team also carried out in-depth research on the status quo of the land use in the project area. The result shows that among the 11 items of Construction projects, seven items acquired the land through land transfer, and five of them are through leasing way, while the other two are through share purchasing. All have entered into an oral or written agreement with farmers. Four other projects are doing expansion in their original land with no need of new land. The basic cost of the transfer is in accordance with the market price or based on an agreement with farmers at the price of 500 yuan / mu. Thus, the main form of land use is renting, along with shares purchasing, farming on one's own, and project expansion on the original piece of land. There is no special land acquisition, as is shown in Table 8-2.

Table8-2 Current land use

Transfer mode				No new land acquisition	
Number		Ratio %		Number	Ratio %
7		63.6%		4	36.4%
Leasing mode		Shares purchasing		Expansion on original land	
Number	Ratio%	Number	Ratio %	Number	Ratio %
5	45.4%	2	18.2%	4	36.4%

Land use of each community is as follows, with details shown in Table 8-3:

Shiguan Community of Baishui Prefecture: expansion project on the original land of 12 km's paved road occupying a land area of 55 mu; laying of water-saving irrigation pipe network covering 800 mu of land, which was former forest land acquired in the form of shares purchasing based on verbal agreement with the local village; hardened road construction of 17.5 kilometers using 92 mu of land. The project was built on the existing road.

Tingkou Community of Changwu Prefecture: apple production base construction at Santai, Fanluo, and Xiyuan Villages covering 1326 mu of land. It was the village collective's farmland, and has been leased to the project after a written agreement signing with the farmers. The cost is 663,000 Yuan.

Ganjing Community of Heyang Prefecture: 1050 mu of land use of water-saving drip irrigation, 600 mu' new apple orchard, and 450 mu' updated version of apple orchard. The orchard farmers become shareholders of the cooperatives with their right to orchard management right. In addition, paving 13.6 kilometers' road with 70.05 mu of land use, which was basically conducted in the original land.

Changfeng Community of Linyou Prefecture: construction of 30 solar greenhouses involving land area of 63 mu. The former farmland was leased from the village collective at a cost of 40,95 thousand Yuan. Written agreement still awaits signing. The land use also involves community road upgrading for 28 mu.

Leichi Community of Yanchang Prefecture: the land use totals 30 mu, with projects of fruit production cooperative institution-building, cold storage of apples, apple processing lines, marketing venue construction, cooperative e-commerce platform, ditch filling, and river embankment. The occupied land was acquired from the village collective farmland based on a 30-year contract agreement with Hejiahe village at a

cost of 720, 000 yuan. Another project named Zhongxin Livestock Raising Cooperative has started constructions for slaughtering, preservation, processing equipment and plant, the point of pork sales, animal farming pens and farm, and methane gas engineering on a total area of 11.4 mu. The 30-year land use agreement has already been signed with the Wapenyaozi Village.

Table 8-3 Current land use

8 Research and Analysis on Project Land Use

Project area	Construction items	Land area (mu)	Land use mode 1.transfer (share buying, leasing) 2.requisition 3.borrowing 4.transaction	Contract signing (verbal, written)	Cost(10,000 yuan)	categories: 1.farmland 2.forest 3.homestead 4. wasteland	Nature of the land-collective, national	Execution process (the transferring, requisition, borrowing and transaction)	Remarks column
Shiguan, Baishui	Road paving 12km	55	/	/	0	/	collective	/	Expansion on original land
Shiguan, Baishui	Water-saving irrigation network 800mu	800	1share buying	verbal	40	2	collective	/	
Shiguan, Baishui	Hardened road 17.5km	92	/	/	/	/	collective	/	Expansion on original land
Tingkou, Changwu	Apple production base in Santai, Fanluo, Xiyuan	1326	1 leasing	written	66.3	1	collective		
Ganjing, Heyang	Road paving 13.6 km	61.2	/	/	/	/	national	/	Expansion on original land
Ganjing, Heyang	1050 mu' land use of water-saving drip irrigation, 600 mu' new apple orchard, and 450 mu' updated version of apple orchard	1050	1 share buying	No					Share buying with the managing right of the orchard
Ganjing, Heyang	13.35km road	70.05	/	/	/	/	National		Expansion on original land
Changfeng, Linyou	30 solar greenhouse	63	1 leasing	No	4.095	1	collective		Farming on the farmer's own
Leichi, Yanchang	fruit production cooperative institution-building, cold storage of apples, apple processing lines, marketing venue construction, cooperative e-commerce platform, ditch filling, and river embankment	30	1 leasing	written	72	4	collective	a 30-year contract agreement with Hejiahe village at a cost of 720,000 yuan	
Leichi, Yanchang	slaughtering, preservation, processing equipment and plant, the point of pork sales	6.9	1 leasing	written	6.21	4	collective	30-year land use agreement with the Wapenyaozi Village.	

8.2 Planned land use in the project areas

8.2.1 Summary of the land use condition

To better understand the planned land use condition of Poor Rural Communities Development Projects by the World Bank in Shaanxi Province, the evaluation team conducted in-depth research on relevant government departments. Surveys show that there are a total of 57 projects requires land use, covering a total area of 2718.1825 mu.(see Table 8-4)

The construction content involves the following four areas: 1. Cooperative construction and development, including cooperatives institution-building, storage and processing of agricultural products and market development; 2. Agricultural infrastructure construction, including land management, production road building, and rain-harvesting facilities.;3. Cooperative development fund, construction of crop farming base and livestock pens, and animal farms; 4. Economic Infrastructure and Services support, and road projects.

8 Research and Analysis on Project Land Use

Table 8-4 Summary sheet of project land use

Project items		Baoji City		Weinan City				Xianyang City	Yan'an City			Yulin City			Land use area (mu)
		Changfeng, Linyou	Liangquan, Longxian	Shiguan, Baishui	Lingao, Baishui	Caocun, Fuping	Ganjing, Heyang	Tingkou, Changwu	Shijiao, Yanchuan	Leichi, Yanchang	Heerchuan, Yichuan	Yangjing, Dingbian	Longzhen, Mizhi	Yangjiagou, Mizhi	
Cooperative construction	Institution construction		13.8	1.2	0.675	3.53		0.39	0.1875	0.36	0.24	0.6	0.24	0.144	47.1765
	Storage and process of farm produce			0.75	2.19		0.15	9.97		1.8			0.3		
	marketing						0.15			3		7.5			
Infrastructure construction	Soil management												1100	1500	2600
	roads														
	Young crop greenhouse	56	60		9.75									570	695.75
Development fund for cooperatives	Crop farming				300		1050								1680
	Livestock raising									1.8	30	56	3.6	9	100.4
Facilities construction	Road project														
	Rural energy project			2.7	0.4					0.9					4
total		56	73.8	4.65	313.015	3.53	1050.3	10.36	0.1875	10.86	30.24	64.1	1104.14	2079.144	4797.3265

Data source: SA investigation statistics

8.2.2 Analysis of project land use

The project's planned land use generally follows the basic principle of avoiding or reducing land acquisition and resettlement of farmers. First batch of 57 construction items of the project requires land of 2718 mu in total, as shown in table 8-5 and table 8-10.

Based on classification of land for agricultural facilities and construction land in the *Notice about Further Support to Protected Agriculture Development* (No.127, 2014) released by the Ministry of Land and Resources of China, 48 items involve protected agriculture land use with a total of 2681.2125 mu, which are land for agriculture owned collectively by the villages and can be obtained through land transfer without the need for land acquisition nor getting through agricultural land transfer approval procedure. Nine land uses fall into the category of land use for non-agriculture construction, which covers an area of 36.97 mu, which are land for agriculture owned collectively by the villages. They have to be obtained through land acquisition or getting approval for transferring agricultural land to non-agriculture construction, see table 8-6. Therefore, we have formulated the "Resettlement Policy Framework" for the project.

Table 8-5 Classification based on construction content

Protected agriculture land use			Construction land use		
Number	ratio%	Total area (mu)	Number	ratio%	Total area (mu)
48	98.64	2681.2125	9	1.36	36.97

Data source: SA investigation statistics

Table 8-6 Estimate for construction land use project items

No.	Project area	Construction content	Planned land use area(mu)
1	Lingao, Baishui	Cold storage construction	1.8
2	Tingkou, Changwu	2000T air-conditioned cold store	8.47
3	Yangjing, Dingbian	5000m ² Transaction point of livestock	7.5
4	Gnaging, Heyang	100m ² shiitake cold storage	0.15
5	Gnaging, Heyang	Marketing development	0.15
6	Liangquan, Longxian	Processing plant, storage, open-air storage	13.8
7	Leichi, Yanchang	Cold storage plant of apples	1.8
8	Leichi, Yanchang	slaughtering, preservation, integrated processing facilities and plant, sales point of pork	3
9	Longzhen, Mizhi	Integrated plant for preservation, storage and packaging of Jiami donkey	0.3

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land use area(mu)
Total			36.97

Data source: SA investigation statistics

Survey shows that of the 57 project items, 37 plan to acquire land through transfer, including 28 by leasing and 9 by share purchasing; 5 projects will be offered free land, 14 projects are reconstruction done in the original land without newly occupied land. One project item has no clear plan of land acquirement yet, no land requisition and borrowing involved. 57 project items are of collective nature. Thus, the projects intend to focus on land transferring through leasing and shares purchasing, as well as part of the land was wasteland and private plots supported by the villages for free, and original land based road reconstruction without occupying new land, as is shown in Table 8-7. So the project does not involve land expropriation, and demolition. There is no centralized dwelling of ethnic minority families in the region.

Table 8-7Planned land use mode of the project

Transfer				Acquisition		Borrowing		Reconstruction on original land		Others	
Number		ratio		Numbe r	Rati o	Numbe r	Rati o	Numbe r	Ratio %	Numbe r	Ratio
40		63.5%		0	0%	0	0%	14	24.56 %	6	10.53 %
Leasing		Share buying									
Numbe r	Ratio	Numbe r	Ratio								
28	49.12 %	9	15.79 %								

Data source: SA investigation statistics

14 project items have no new land acquisition. Apart from that, 38 of the other 43 items have signed land use agreements. 7 of them are oral form, and 31 in written form, with still five have no agreement yet (as shown in Table 8-8). 88.37% of the construction items has witnessed no land use problems, and most of them are in a written agreement.

Table 8-8 Planned land use agreements sheet

Agreements signed				No signed agreements	
Number		Ratio		Number	Ratio
38		88.37%		5	11.63%
Verbal		Written			
Number	Ratio	Number	Ratio		
7	18.42%	31	69.95%		

Data source: SA investigation statistics

Of the planned land use of 43 construction contents, eight are arable land type, one is a garden, two are for commercial use, eight are homestead, three are public facilities land, 16 are vacant land, four are protected agriculture land use, and one is still unidentified in type (see Table 8-9). There is no woodland, grassland, water conservancy facilities land. Land use types of the project are mainly vacant land, arable land and homestead.

Table 8-9 Planned land use types sheet

Land types															
Arable land		Garden		Commercial use		homestead		Public facilities		Vacant land		Protected agriculture		unidentified	
Number	ratio	Number	ratio	Number	ratio	Number	ratio	Number	ratio	Number	ratio	Number	ratio	Number	ratio
8	18.6 %	1	2.3 %	2	4.6 %	8	18.6 %	3	6.98 %	16	37.21 %	4	9.3 %	1	2.3 %

Data source: SA investigation statistics

Land use cost in certain project area have already been estimated in accordance with relevant agreements or market price. Calculation of arable land transfer fees are mostly based on 500 yuan/mu, with homestead transfer at 1000 yuan/mu. Some land is temporarily offered free as a support of the projects. Only a few project items have not reached concrete agreements with the villages yet, hence no estimated fees.

8 Research and Analysis on Project Land Use

Table 8-10 Planned land use of project items

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requisitions 3.borrowing 4.transfer 5.others	Agreement signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-owned or collective)	remarks (state reasons for no land use)	total (mu)
1	Lingao, Baishui	Management office (facility, administrative offices)	0.675	1lease	written	675yuan/year (1000yuan/mu)	7	/	collective	Dilapidated homestead	313.015
2	Lingao, Baishui	Temporary storage for agricultural machinery and asset	0.39	1 lease	written	390yuan/year (1000yuan/mu)	7	/	collective	Dilapidated homestead	
3	Lingao, Baishui	Cold storage construction	1.8	1 lease	written	1800yuan/year (1000yuan/mu)	7	/	collective	Dilapidated homestead	
4	Lingao, Baishui	Fertilizer station construction	0.4	1 lease	written	400yuan/year (1000 yuan/mu)	7	/	collective	Dilapidated homestead	
5	Lingao, Baishui	Fruit tree bonsai shaping places	0.45	1 lease	written	225 yuan/year (500 yuan/mu)	1	/	collective		

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requitio ns 3.borrowing 4.transfer 5.others	Agreeme nt signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-ow ned or collective)	remarks (state reasons for no land use)	total (mu)
6	Lingao, Baishui	Participatory plastic greenhouse	9.3	1 lease	written	4650 yuan/year (500 yuan/mu)	1	/	collective		
7	Lingao, Baishui	Sand machine-cultivated road with the width of 3.5 m and the length of 22.5 km	/						collective	Based on original road	
8	Lingao, Baishui	300 mu of new planting garden with standard of high level demonstration park	300	1 share buying	Written	150000 yuan/year (500 yuan/mu)	1	Wheat, corn	collective		
9	Lingao, Baishui	2 wells with the depth of 260m, aperture of 300mm、 water pumping volume of 20m3/h	Little amount	5	No	/	unidentified	/	collective	No specified location yet	
10	Lingao, Baishui	Access road to village with a width of 4m, length of 2.5m, ally with a width of 3.05m, length of 21.35km	/							Reconstructi on on original land	
11	Shiguan, Baishui	Managing office room	1.2	1 leasing	Written	20000 yuan/year	5	/	national	expansion	4.65
12	Shiguan, Baishui	Temporary storage for agricultural machinery and asset	0.75	1 leasing	Written	10000 yuan/year	5	/	national	expansion	

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requisitions 3.borrowing 4.transfer 5.others	Agreement signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-owned or collective)	remarks (state reasons for no land use)	total (mu)
13	Shiguan, Baishui	Fertilizer storage station	2.7	1 leasing	Written	1200 yuan/year	1		collective	expansion	
14	Shiguan, Baishui	Community roads	/						collective	Reconstruction on original land	
15	Shiguan, Baishui	Community roads	/						collective	Reconstruction on original land	
16	Shiguan, Baishui	12km farmland road	/						collective	Reconstruction on original land	
17	Tingkou, Changwu	Managing offices	0.39	1 leasing	written	390 yuan/year (1000yuan/mu)	11 protected agriculture land use	/	collective		10.36
18	Tingkou, Changwu	farmland road	/						collective	Reconstruction on original land	
19	Tingkou, Changwu	Pole staking up project in Santai, Xiyuan	/						collective	Reconstruction on original land	

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requitio ns 3.borrowing 4.transfer 5.others	Agreeme nt signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-ow ned or collective)	remarks (state reasons for no land use)	total (mu)
20	Tingkou, Changwu	Drainage, irrigation project of 5.45km	/						collective	Reconstructi on original land	
21	Tingkou, Changwu	Road construction within Santai, and between Santai and Fanluotong Villages of 3.71km	/						collective	Reconstruction on original land	
22	Tingkou, Changwu	2000T air-conditioned storage	8.47	1leasing	written	8470 yuan/year	11protected agriculture land use		collective		
23	Tingkou, Changwu	Sorting packaging	0.45	1leasing	written	450 yuan/year	11protected agriculture land use		collective		
24	Tingkou, Changwu	Temporary storage of material and equipment	1.05	1leasing	written	1050 yuan/year (1000yua n/mu)	11protected agriculture land use	/	collective		
25	Caocun, Fuping	Managing office of cooperative, producing, sorting, packaging and storage place of Persimmon	3.53	1 leasing	written	5333 yuan/year (160,000/ 30year)	11vacant land	/	collective		3.53
26	Yangjing, Dingbian	Goat raising	10	1 leasing	written	15500 yuan/year (1550yuan/	11 vacant land	/	collective		

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requisitions 3.borrowing 4.transfer 5.others	Agreement signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-owned or collective)	remarks (state reasons for no land use)	total (mu)
						mu)					64.1
27	Yangjing, Dingbian	Managing office of cooperative	0.3	1leasing	written	465 yuan/year (1550yuan/mu)	11 vacant land	/	collective		
28	Yangjing, Dingbian	Deep well	0.3	1leasing	written	465 yuan/year (1550yuan/mu)	11 vacant land	/	collective		
29	Yangjing, Dingbian	dens, rain harvesting pit	46	1share buying	No	No need	7	/	collective	Separate raising of 295 households	
30	Yangjing, Dingbian	Livestock transaction point of 5000m ²	7.5	1 leasing	No	750 yuan/year (100yuan/mu)	11vacant land	/	collective	In planning	
31	Yangjing, Dingbian	Village road	/							Reconstruction on original land	
32	Ganjing, Heyang	100 m ² cold storage of shii-take mushroom	0.15	5	written	/	11 vacant land		collective	Free offer by village	1050.3

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requitio ns 3.borrowing 4.transfer 5.others	Agreeme nt signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-ow ned or collective)	remarks (state reasons for no land use)	total (mu)
33	Ganjing, Heyang	marketing	0.15	5	written	/	11 vacant land		collective	Free offer by village	
34	Ganjing, Heyang	Farmland road 13.6km	/			/			collective	reconstructio n on original land	
35	Ganjing, Heyang	Reconstruction of 450mu	450	1 share buying	verbal		2	Apple, ,sh ii-take mushroom	collective		
36	Ganjing, Heyang,	New Crop Farming of 600mu	600	1 share buying	verbal		1	Corn, wheat	collective		
37	Ganjing, Heyang	13.35km's village road	/			/			collective	Original dirt road	
38	Changfeng, Linyou	30 solar greenhouse	50	1 leasing	No	30000yuan (600yuan/mu)	1	corn	collective		56
39	Changfeng, Linyou	Mushroom greenhouse	6	5	No	free	7	Abandone d school building	collective		
40	Changfeng, Linyou	Community road	/							reconstructio n on original land	

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requitio ns 3.borrowing 4.transfer 5.others	Agreeme nt signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-ow ned or collective)	remarks (state reasons for no land use)	total (mu)
41	Liangquan, Longxian	Processing plant, warehouse and open-air storage	13.8	1leasing	written	500yuan/mu	11vacant land	/	collective	Reserved construction land	73.8
42	Liangquan, Longxian	Chili seeding greenhouse	60	1share purchasing	written		1	Chili	collective	To be improved	
43	Leichi, Yanchang	Institution-construction of cooperatives	0.36	1 leasing	written	432 yuan/year (720,000 yuan/30year/20mu)	11 vacant land	/	collective	30 years' contract with Hejiahe village of Leichi county at a cost of 720,000 yuan	7.86
44	Leichi, Yanchang	Cold storage plant of apples	1.8	1 leasing	written	2160 yuan/year (720,000 yuan/30year/20mu)	11 vacant land	/	collective		
45	Leichi, Yanchang	Integrated slaughtering, preservation and processing equipment and plant, sales point	3	1 leasing	written	900 yuan/year (900,000y	11 vacant land	/	collective	30 years' contract with	

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requitio ns 3.borrowing 4.transfer 5.others	Agreeme nt signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-ow ned or collective)	remarks (state reasons for no land use)	total (mu)
						uan/30year/100mu)				Wapenyaozi village at 900,000 yuan	
46	Leichi, Yanchang	Den of Improved breed of pigs	1.8	1leasing	written	540 yuan/year (900,000 yuan/30year/100 mu)	11vacant land		collective		
47	Leichi, Yanchang	Living water sources construction, drainage and bio-gas project	0.9	1leasing	written	270 yuan/year (900,000 yuan/30year/100 mu)	11vacant land		collective		
48	Leichi, Yanchang	Farmland road	/						collective	Reconstructi on of original road	
49	Shiyao, Yanchuan	Office of cooperatives	0.1875	1leasing	written	2500 yuan/year	11	/	collective		0.1875
50	Heerchuan, Yichuan	Office building of Jiyl beekeeping cooperative	0.12	1share purchasin g	verbal		7	/	collective	Land of one's own	30.24

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requisitions 3.borrowing 4.transfer 5.others	Agreement signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-owned or collective)	remarks (state reasons for no land use)	total (mu)
51	Heerchuan, Yichuan	Farm of Jiye beekeeping cooperative	20	1share purchasing	verbal		11vacant land	/	collective		
52	Heerchuan, Yichuan	Offices of Fuyuan cooperatives	0.12	1share purchasing	verbal		7homestead		collective		
53	Heerchuan, Yichuan	Livestock raising	10	1leasing	written	5000/year	1arable land		collective		
54	Yangjiagou, Mizhi	Offices of cooperatives	0.144	5	written	Free	8abandoned school	renovation	collective		3183.284
55	Yangjiagou, Mizhi	Poultry sheds construction	9	1 share purchasing	verbal		11vacant land		collective	vacant land construction	
56	Yangjiagou, Mizhi	Terracing fields	1500	1share purchasing	verbal		11vacant land		collective		
57	Yangjiagou, Mizhi	Farmland road construction	/						collective	reconstruction on original land	
58	Yangjiagou, Mizhi	Fruit picking park, greenhouse	570	1share purchasing	verbal		11vacant land		collective		

8 Research and Analysis on Project Land Use

No.	Project area	Construction content	Planned land area (mu)	Land use mode 1.transfer (share buying、leasing) 2.requitio ns 3.borrowi ng 4.transfer 5.others	Agreeme nt signing (verbal, written)	Planned land use cost	Land types: 1.arable land 2. garden3. forest 4.grassland5. commercial use land 6.industrial warehouse 7.homestead 8. Public facilities9. transportation10. irrigation11. others (vacant land, protected agriculture land, raised path through fields)	Land attachment	Land nature (state-ow ned or collective)	remarks (state reasons for no land use)	total (mu)
59	Yangjiagou, Mizhi	Community road construction	/						collective	reconstructio n on original land	
60	Longzhen, Mizhi	Offices of cooperatives	0.24	5	written	free	8abandoned school	Renovatio n of the school	collective		
61	Longzhen, Mizhi	Integrated preservation, storage and packaging plant of Jiami donkey	0.3	5	written	free	8abandoned school	renovatio n	collective		
62	Longzhen, Mizhi	Land managing	1100	1share purchasin g	verbal		11vacant land		collective		
63	Longzhen, Mizhi	Raising of Jiami donkey	3.6	1share purchasin g	verbal		11vacant land		collective		

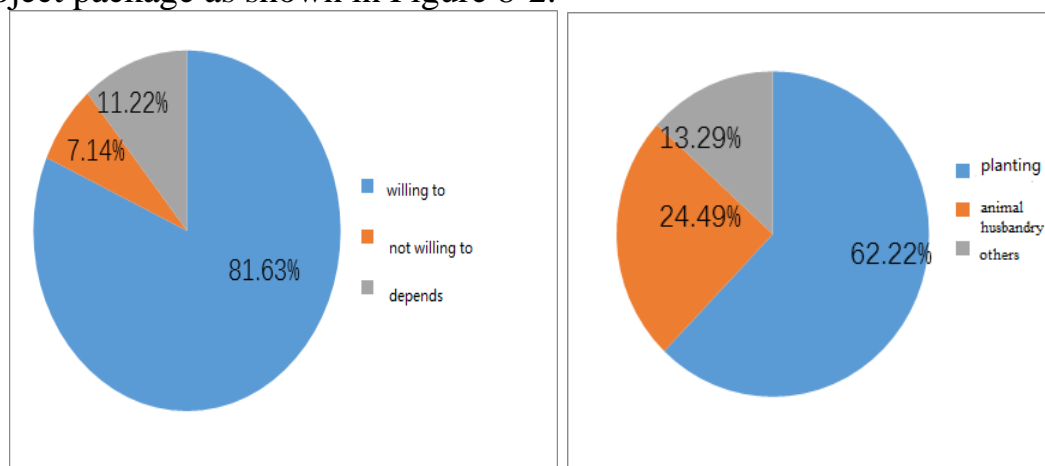
Data source: SA investigation statistics

*Note: gray labeled contents are planned construction land, 9 items in total.

8.2.3 Wishes of the farmers concerning land transfer

The evaluation team has done questionnaires and interviews to the farmers on their ideas about the proposed project land transfer. According to the survey, 81.63% of the farmers are willing to transfer their land. Most farmers are in favor of this proposal, and support project construction. As a result, the future completion of the project will effectively help lift the farmers out of poverty through improving local industrial development and infrastructure, promoting local economic development and working and living conditions of local and surrounding areas' farmers, and creating a good information and infrastructure for the operation of other industries as shown in Figure 8-1.

The evaluation team learnt that the majority of projects communities are in mountainous area or barren land, and vulnerable to unfavorable geographical environment including landslides and low-lying ground. Agricultural production and rural incomes therefore developed slowly. Moreover, most of the lands are mountainous dryland with poor capacity to conserve water and soil fertility, hence a low output efficiency. Therefore, farmers are more willing to transfer the land to benefit, and prefer to participate in the project construction by leasing and share purchasing of the land. As for land development projects, most farmers expressed a willingness to support the planting projects. Among them, 62.22 % of farmers are willing to support the planting project of World Bank's Poor Rural Communities Development programs, and 24.49% support cultivation and livestock raising project items of the development project package as shown in Figure 8-2.



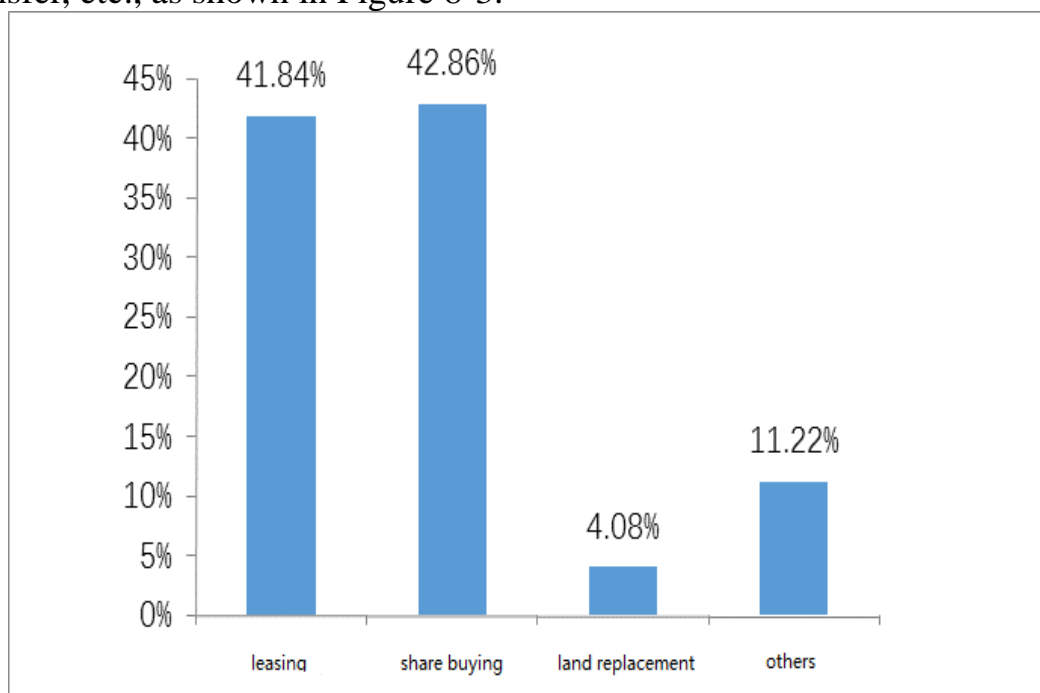
Data source: questionnaire to farmers

Table 8-1 Willingness to transfer land

Table 8-2 Preferences on land development projects

On land transfer forms, the survey shows that land transfer in forms of share purchasing and leasing are preferred by farmers. 41.84% of farmers choose leasing; 42.86% of farmers choose transfer their land by

share purchasing. In addition, there are also some farmers willing to become part of the project construction by ways of land exchange, transfer, etc., as shown in Figure 8-3.



Data source: questionnaires to farmers

Table 8-3 Land transfer forms

This chapter only focuses on analyzing the content of projects, so other issue concerning laws and policies on land use, allocation of funds, monitoring and complaints need to refer to the "Resettlement Framework", which has formulated principles and guidelines on some inevitable problems in the implementation of the project such as land requisition and resettlement compensation, and thus provided comprehensive legal support to minimize the negative social impact. The framework also will guide the follow-up preparation and implementation of *Action Plan of Resettlement of Farmers*. Local project management office should therefore follow the requirements of the framework to carry out related activities.

Overall, most of the land for the project activities has been under agreement through land transfer; farmers show relatively strong willingness for land transfer, which increases household income and reduce the burden on agricultural land; the villager committee also show high readiness to cooperate and support land projects construction; furthermore, the project area currently has no land requisition. As a result, the social risks of the project land use are relatively small and potential resettlement has limited impact.

8.3 Summary

1. The land management mode in project areas are mainly cultivation by farmers on their own, with a rate of 93.88%. Land transfer rate is very low, and most farmers are farming their own land. According to research on the land use of 11 items of construction in the project area, seven pieces of land for the project is acquired by the transfer, including five leasing and two are shares purchasing. All seven have entered into verbal or written agreements with the farmers. The other four projects are reconstruction in the original land without taking new land. The basic cost of the transfer is executed in accordance with the market price or an agreement between farmers at 500 yuan / mu. Thus, the main form of land acquisition is leasing, with a small number of share purchasing, cultivation on the farmers own, reconstruction or expansion in the original land, which does not involve land expropriation.

2. The summary of the fact sheets of planned land use in the project shows that the land construction area totals 2681.2125 mu, including the following four aspects: (a) cooperative construction and development with a land area of 47.0325 mu; (b) agricultural infrastructure construction with a land area of 1225.75 mu; (c) the development and construction by cooperatives with a land area of 1441.4 mu; (d) the construction of facilities with a land area of four mu.

3. Based on a close analysis of the planned land use, there are 63 projects items involving no land reacquisition. According to the classification of land use for agricultural facilities and construction, 48 items are for protected agriculture covering a total area of 2681.2125 mu; nine items use land for construction projects with a total of 36.97 mu. Another classification is based on the proposed land use modes. This divides the project items into types including: 37 items with planned land transfer, of which 28 are leasing and 9 are resorting to share purchasing; six items with land provided free; 14 items with reconstruction in the original piece of land without occupying new land; one item not yet clear. Finally, with the classification based on the nature of the land, 57 are using the land of collective nature.

These show that the project intends to generally rely on land leasing and share purchasing to acquire land. Road construction projects are basically reconstruction in the original land instead of taking new land. The project does not involve land expropriation and demolition. There is no centralized dwelling of ethnic minority families in the region. Apart from the 14 reconstruction projects with no new land occupying, 38 have seen contract signing for land use with 7 in oral and 31 in written forms, and the other five have not yet entered into agreements. It is thus visible that 88.31% of the land use problem has been solved with mostly written

agreements. As for the proposed land use types of the 43 project, eight projects use arable land, one construct with garden land, two with land for commercial use, eight use homesteads, three use public facilities, 16 with vacant land, four with agricultural facilities land, and one project with land of unidentified type. There will be no occupation of woodland, grassland, water conservancy facilities land. In conclusion, the main types of planned land use of the projects are vacant land, farmland and homestead.

4. Part of the project area have conducted appraisal of the cost of land use in accordance with relevant agreements or the market price. Arable land transfers are mostly estimated in accordance with the current market price of 500yuan / mu, while 1000yuan / mu for homesteads transfer. Some land is temporarily provided for free by villages to support the project, and still certain project items have not reached agreements with the village, hence no cost estimates.

5. The evaluation team has conducted questionnaires and interviews to learn about the farmers' willingness on land transfer for planned project construction. It shows that the majority of farmers are in favor of the land transfer and the project construction, the supporters accounting for 81.63%. As for the projects of land development, 62.22% of the farmers show willingness to support the planting type items of the Poor Rural Communities Development Projects of the World Bank with their own arable land, and 24.49% are willing to support livestock raising and Aquaculture development projects with their farmland. The survey also shows that farmers are inclined to transfer land with share purchasing and leasing, with 41.84% of farmers choosing leasing for land transfer; and 42.86% choosing the form of share purchasing.

6. Project items mostly acquire their land by land transfer, and most have signed agreements; villagers show relatively strong willingness for land transfer, as land transfer can increase household income and reduce the burden on agricultural land; villager committees are enthusiastic to cooperate, and have shown proactive support to land construction project; there has been no land requisition in the project area. In conclusion, we propose that the social risks of the project land use are relatively small, with limited resettlement impact on farmers.

9 Project Participation and Complaint

9.1 Project Participation of the Stakeholders

The participation of the stakeholders runs through the project. From the project application stage, preparation stage, to the project implementation stage, and then to project follow-up management stage, different stakeholders should participate as much as possible in the activities such as the information publicity, propaganda and mobilization, program design, land use, project construction and operational maintenance of the system, so as to improve the project attention and participation of different stakeholders, and ensure the smooth operation of the project as well as the full exertion of benefit, try as hard as possible to reduce or avoid the potential negative effects and to realize the sustainability of the project.

9.1.1 Information Publicity

For all the important events involved in the whole process such as the project preparation, implementation, acceptance check of the county-level publicized content, and follow-up management, the project area is supposed to publicize all that should be displayed, and accept the supervision of the masses and the Project Supervision Committee. At present, the information publicity of the project area is as shown in the Table 9-1.

1. Channels of the project information publicity

This project could publicize the significant matters by the means of media, the network, the villagers' Congress and village publicity, etc.

- ◆ Media publicity: for the information that is related to project construction and implementation, the county project office will publicize on television, radio and other news media.
- ◆ Network publicity: County Project Office will publicize the project content in the Poverty Alleviation Office, in the relevant business departments and other government affair website.
- ◆ Villager's congress: Each village (village group) send 3 to 5 representatives to participate. Under the coordination of township, County Project Office holds Villager's Congress to inform the project content and approve the relevant schemes.
- ◆ Village Publicity: Village bulletin board will be made use of to publicize the key project content. The publicity must be in the foreground of village affair public board and each village group.

The period of publicity is no less than 2 weeks.

2. Content of Project Publicity

(a) County-level publicized items

(i) County Project Office should publicize the allocation of project funds and the launch programs through various valid forms within the whole county.

(ii) Publicize the selected and recruited project Facilitators.

(iii) If necessary, handling results of complaints could be publicized in project area.

(2) Township-level publicized items

(i) Township Project Office publishes to project area about its appropriation of project funds every half a year.

(ii) If necessary, handling results of complaints could be publicized in project area.

(3) Project-area publicized items

(i) Publicize the labor division and campaigning methods of the project's Implementation Committee and Oversight Committee.

(ii) Publicize the list of the selected members, the division of labor and various working systems of project's Implementation Committee and Oversight Committee

(iii) Publicize the investment state of the project in the project area quarterly.

(iv) Publicize the problems identified in the implementation of the project and the suggestions for improvement quarterly.

(4) Cooperative publicized items

(i) Cooperative Regulations

(ii) The investment plan and the implementation plan of the project.

(iii) The fund management regulations of the project

(iv) The implementation of the procurement project;

(v) The state of income, expenditure and distribution in the cooperative;

(vi) The farmers' complaints and the handling results.

Table 9-1 Project Area Information Publicity

Publicity phase	Publicity content	Publicity subject	Publicity channel
Content publicized	allocation of project funds and the launch programs	CPO	media, network, meeting
	recruit of the project Facilitators	County PMOs	Media, network, bulletin board
	division of labor and campaigning methods of project's Implementation Committee and Oversight Committee	Township government	Media, network, villager's Congress
	the list of the selected members, the division of labor and various working systems of project's Implementation	Township government	Media, network, villager's Congress

9 Project Participation and Complaint

Publicity phase	Publicity content	Publicity subject	Publicity channel
	Committee and Oversight Committee		
	Cooperative regulations	Project Implementation Committee	project-area bulletin board
	the investment plan and the implementation plan of the project.	Project Implementation Committee	project-area bulletin board
	the fund management regulations of the project	Project Implementation Committee	project-area bulletin board
Not publicized	Publicize the investment state of the project in the project area quarterly.	Project Implementation Committee	project-area bulletin board
	Publicize the problems identified in the implementation of the project and the suggestions for improvement quarterly.	Project Oversight Committee	project-area bulletin board
	the implementation of the procurement project;	Project Implementation Committee	project-area bulletin board
	the state of income ,expenditure and distribution in the cooperative;	Project Implementation Committee	project-area bulletin board
	Farmers' complaints and the handling results.	County-level PMOs	Media, network, propagandizing board

Source: Project Implementation Manual and Regulations

During public notice, we consulted stakeholders about sensitive infrastructures, including matching bio-digesters, solid waste disposals and other facilities. The stakeholders said recent matching facilities basically meet their demands; and this project has little effect on environment.

●Interview with Farmers from Ganjing Project Area, Heyang County , Weinan

When asked about whether they are worried about the environmental problem that construction may bring if there launches rural community development project, farmers said they had no such concerns, for waste collections which were constructed recently had met the needs and solid waste could be cleaned up properly, thus causing little effect on producing and living.

9.1.2 Consultation

A symposium, conducted by county PMOs, was held for consultation. Participants involved all stakeholders including county government office, sales departments, representatives from agricultural cooperatives, officials in village, and representatives of villagers. Before the consultation, government visited and invested in the village for several times resulting in understanding the wills stakeholders had on the

project construction. At the symposium, stakeholders shared their opinions and advices. We reached a consensus on the basis of discussion. The major respects are as follow:

1. Meet the interest demand of impoverished farmers; (a) Enhance construction of infrastructures in project sites, especially the construction of roads, irrigation and large farm machinery and implements.; (b) Offer industry skill training for peasant households; (c) Offer employment opportunities; (d) Cooperatives shall offer farmers cultivation technique training to help them open potential sales and build bands.

2. Meet the interest demand of cooperatives. (a) Establish specialized agricultural cooperative conduct and service agencies; (b) Strengthen the support of cooperative projects. Create a group of key projects targeting the features of specialized agricultural cooperatives, for example, training of technique for farmers, popularization of agricultural technology, facility agriculture and cold chain systems and process.

3. Arrangement of institutions. We identified the responsibilities and specific duties of government authorities in project activities. Departments shall fully coordinate and communicate, integrate sources, improve administrative efficiency, furthermore, strengthen the supervision on project.

4. Finance structure. Allocation of funds was defined at county, township and village levels to earmark funds. We conducted regular public notices on expenditures and uses of project funds to make sure of the transparency of finance. Budgets of funds of each part had been passed.

Consulting democratically, stakeholders reached an agreement on the project design, project development objectives, scope, design structure, financing resources, and institutional arrangements. This represents wills of villagers making sure of “real poverty alleviation” and “precise poverty alleviation”. In addition, it fully encourages incentive ensuring that every cent spent wisely, thus promoting the development of poverty alleviation.

9.1.3 Participation

The project characteristics highly depend on the participation from farmers, cooperatives and service providers. The design of project, construction and management apply the form of participation. By investing the stakeholders, key participation fields have been decided, including:

- Real demands of farmers, agricultural producer and service providers;

- How to set up and operate standard cooperative in terms of the Cooperative Law;
- How to attract farmers, especially poor groups, to join cooperatives and other activities.
- Linkage mechanism between standard cooperatives and beneficiaries especially poor households;
- Proper irrigation method and establishment and operation cost;
- Activity selection and design.

On details of project completion and plan, please see Table 9-2 and Table 9-3.

Table 9-2 Project Participation of Stakeholders

Implement ation Phases	S N	Time	Implementation Content	Executive Principal Representa tives	Participant	Note
Project Application	1	2012.5.22- 2014.9.11	Confirmation of the project area	County-leve 1 PMOs	Township government, local people	
	2	2014.9.25- 2014.10.20	Preparation of the project plan of the project area	County-leve 1 PMOs	Advisory Unit	
	3	2014.11.2-2 014.12.28	Project application	County-leve 1 PMOs		
	4		Project approval	Provincial and municipal PMOs		
	5	2015.1.2-2 015.2.12	Project Facilitator selection	County-leve 1 PMOs		
Propaganda and Mobilizatio n	6	2015.2.20- 2015.3.6	Project concept and principle publicity	Project Facilitator of township PMOs	Local people of project area	Attach great importance to the propaganda for poor families and women
	7	2015.3.10- 2015.3.31	Analysis of the resource characteristic and industry development of the project area	Advisory unit, Project Facilitator, managemen t staffs of the township project	Local people of project area	
	8		Propaganda of the project plan of the project area			
	9		Mobilization of all the people to participate in the project			

9 Project Participation and Complaint

Implement ation Phases	S N	Time	Implementation Content	Executive Principal Representa tives	Participant	Note
	1 0		Propaganda of the project management and executive process			
Mechanism Constructio n of the Project Area	1 1	2015.4.3-2 015.5.15	酝 Preparation of the project executive mechanism of the project area	Township project workstation	Facilitators, local people of the project area	1. Attach great importance to the opinions of the poor families, the representatives of the poor households and representatives of women; 2. Pubility of the constitution and work division of the personnel
	1 2		Election of the project executive mechanism by the village administrative representatives			
	1 3		Election of the project executive mechanism by the villagers' representatives' assembly			
	1 4	2015.5.18- 2015.6.5	Establishment of the preparatory group of the specialized farmers cooperatives			
	1 5	2015.6.12.2 016.2.21	Establishment of the registration by the cooperatives			
Project Preparation	1 6	2016.2.23- 2016.2.28	Participatory in confirmation of project content, position and scale	Implementa tion committee of the project area, project supervisory committee, Project Facilitator of	Local people of the project area, project design unit, Project Facilitator of	1. Publicity of the final implementati on plan of the project 2. Organize project procurement committee and publicize information.
	1 7	2016.3.1-2 016.3.31	Project engineering design and investment budget			
	1 8		Confirmation of the rights and interests of the project beneficiaries			
	1 9		Completion of land exchange			

9 Project Participation and Complaint

Implement ation Phases	S N	Time	Implementation Content	Executive Principal Representa tives	Participant	Note
			and other project work			
	2 0		Confirmation of the project implementation mode			
	2 1	2016.4.2-2 016.4.18	Confirmation of the procurement mode of every project			
	2 2	2016.4.20- 2016.4.30	Construction of the procurement committee			

Source: Project Implementation Plans of project counties

Project Completion of Stakeholders

Implement ation Phases	S N	Time	Implement ation Content	Executive Principal Representa tives	Particip ant	Note
Project Application	1	2012.5.22-2014. 9.11	Confirmatio n of the project area	County-leve l PMOs	Townshi p governm ent, local people	
	2	2014.9.25-2014. 10.20	Preparation of the project plan of the project area	County-leve l PMOs	Advisory Unit	
	3	2014.11.2-2014. 12.28	Project application	County-leve l PMOs		
	4		Project approval	省市项目办 Provincial and municipal PMOs		
	5	2015.1.2-2015.2 .12	Project Facilitator selection	County-leve l PMOs		
Propaganda and Mobilizatio n	6	2015.2.20-2015. 3.6	Project concept and principle publicity	Project Facilitator of township PMOs	Local people of project area	Attach great importance to the propaganda for poor families and women
	7	2015.3.10-2015. 3.31	Analysis of the resource characteristi c and industry	Advisory unit, Project Facilitator, managemen t staffs of	Local people of project area	

9 Project Participation and Complaint

Implement ation Phases	S N	Time	Implement ation Content	Executive Principal Representa tives	Particip ant	Note
			developmen t of the project area	the township project		
	8		Propaganda of the project plan of the project area			
	9		Mobilizatio n of all the people to participate in the project			
	10		Propaganda of the project management and executive process			
Mechanism Constructio n of the Project Area	11	2015.4.3-2015.5 .15	西云 Preparation of the project executive mechanism of the project area	Township project workstation	Project facilitato rs, local people of the project area	1.Attach great importance to the opinions of the poor families, the representati ves of the poor households and representati ves of women; 2.Pubility of the constitution and work division of the personnel
	12		Election of the project executive mechanism by the village administrati ve representati ves			
	13		Election of the project executive mechanism by the villagers' representati ves' assembly			
	14	2015.5.18-2015. 6.5	Establishme nt of the preparatory			

9 Project Participation and Complaint

Implement ation Phases	S N	Time	Implement ation Content	Executive Principal Representa tives	Particip ant	Note
			group of the specialized farmers cooperatives			
	1 5	2015.6.12-2016.2.21	Establishment of the registration by the cooperatives			
Project Preparation	1 6	2016.2.23-2016.2.28	Participatory in confirmation of project content, position and scale	Implementat ion committee of the project area, project supervisory committee, Project Facilitator of	Local people of the project area, project design unit, Project Facilitator of	1. Publicity of the final implementation plan of the project 2. Organize project procurement committee and publicize information.
	1 7	2016.3.1-2016.3.31	Project engineering design and investment budget			
	1 8		Confirmation of the rights and interests of the project beneficiaries			
	1 9		Completion of land exchange and other project work			
	2 0		Confirmation of the project implementation mode			
	2 1	2016.4.2-2016.4.18	Confirmation of the procurement mode of every project			
	2 2	2016.4.20-2016.4.30	Construction of the procurement committee			

Source: Project Implementation Plans of project counties

Table 9-3 Project Participation Plan of Stakeholders

9 Project Participation and Complaint

Implementation phases	SN	Implementation Content	Executive Principal Representatives	Participant	Note
Project Approval	23	Writing project application report	Implementation committee of the project area, project supervisory committee, project facilitators	Local people of the project area, project design unit, project facilitators	
	24	Submitting for approval	Provincial, municipal and county PMOs		
	25	Certification in the preparation phase	Municipal PMOs		
Project Implementation	26	Project procurement	Implementation committee of the project area, project supervisory committee, project facilitators	Local people of project area, cooperatives	1. Publicity of the procurement results; 2. Publicity of the certification results
	27	Project construction			
	28	Capital injection of the cooperatives			
	29	Cooperatives operation			
	30	Project certification	County PMOs, township project workstation		
Completion Certification	31	Participatory in completion certification	Implementation committee of the project area, project supervisory committee, project facilitators	Local people of the project area	Publicity of the certification results and the asset transfer list
	32	Writing project completion report	project facilitator	Implementation committee of the project area, project supervisory committee, local people of the project area	
	33	Preliminary certification by county-level PMOs	County-level PMOs	County project workstation, project facilitators	
	34	Certification of the municipal PMOs	Municipal PMOs	County-level PMOs, township workstation, project facilitators	
	35	Asset transfer	Township project workstation, project users and administrators		

Implementation phases	SN	Implementation Content	Executive Principal Representatives	Participant	Note
Follow-up Management	36	Participatory in arrangement of the follow-up management of every project	County project workstation, project facilitators	Local people of the project area	Publicity of the results
	37	Settle down the responsible people for management and protection of every project			
	38	Financial sources			
	39	Establishment of the people supervisory system			
	40	Project after-verification	The World Bank	Various levels of project administration, project facilitators, local people of project area	

Data sources: Project Implementation plan of every project county

9.2 Complaints Mechanism

9.2.1 Complaint Content

Some problems may arise during the project preparation, implementation and operation, which would cause the villagers who live in the area of the project complaints, mainly in the following aspects:

1. The issues of government finance and government affairs openness. (a) The funds provided and used for the project. Because of the weak supervision, some government officials abuse their power for personal gains, and occupy, embezzle, and misappropriate the compensation fee of contracting and transferring rural land as well as special funds of poverty alleviation, disaster relief, water conservancy, conceding the farmland to forest, and transferring payment. Some government officials falsify project expenditures to illegal withdrawal of cash, to meet selfish desires. Economic disciplines take place frequently which makes strong reflection of the masses. (b) Non-transparent invitation of tender. They play tricks in bid documents in the dark, "tailored" to develop tendentious provisions, give the green light for the

"intentional" bidders which make some low-quality firms bid. And then in the process of construction, civilized construction and safe production are not guaranteed. The poor quality of construction seriously affects the villagers' interests. (c) Dissatisfaction with the government policies, measures which cause petitions. During formulating policies and measures, if the government can't combine them with the actual situation and take full account of the needs of every stakeholders, they may cause social conflicts.

2 The problems of non-standard behavior of cooperatives.

They are mainly embodied in: (a) The ownership of property is not clear, the assets of some cooperatives have not been clearly defined, causing disputes within the cooperatives in the process of sharing dividend; (b) Many cooperatives have no dividends, even some have dividends or get return of profits by a certain standard. However the proportion of the return did not meet the requirements of 'the law of farmers' professional cooperatives; (c) Farmers can't get benefits fairly. Ordinary farmers get less shares due to the little investment funds, so they are belong to the subordinate position in the organization and haven't too much right to speak which cause the ordinary farmers, especially the poor households, the elders and women and other vulnerable groups obtain limited profits from the cooperative surplus; (d) Some farmers reflect that some cooperatives which have non-standard operations gang up merchants and buy the product with lower prices. They don't play its due role while helping farmers of selling agricultural products.

3. The negative influence of project construction to the villagers' living environment. Construction units will produce noise, dust, water, solid waste and other issues in the process of construction which have a bad effect on the living environment of nearby villagers. Although in the villagers' interview we learned that this kind of problem has little effect on the environment, but it also should be properly handled.

9.2.2 Complaint channels

In view of the problems, it is necessary to establish a set of specific complaints mechanism. The complaint mechanism is as follows:

Stage 1: Project department at all levels should shall appoint someone as complaint acceptance to handle the problems of villagers' complaint of the project area; Before the implementation of the project, they should announce the people who are in charge of complaints and their mailing address, telephone number, fax and email address of national, provincial, municipal and county levels of PMOs to the villages which do the project; If people who are responsible of the complaints in all levels of PMOs are changed, their information should be updated in a

variety of ways, and inform the parties concerned.

Stage 2: Villagers in the project area can reflect problems to the village committee through letters, telephone, mail and other forms, and then the village committee deal with the reflected problems and make written records. The village committee should reply to them and solve the problems within 15 work days.

Stage 3: If the villagers in the project area are not satisfied with the result of the treatment of stage 2, they can renew their complaints to the complaint office of township station, county PMOs and provincial projects step by step after receiving the results, the administration should make a decision within 15 work days. The complaints and appeals of the villagers should be accepted by all agencies freely, and the resulting reasonable costs will be paid from the project's unforeseen expenses. The telephone and the office address of the staff who take charge of the complaints can be disclosed through the website, the poster, the broadcast and other forms.

Rules of complaint settlement

(a) Complaint acceptance follows level-by-level responsibility system.

(b) After accepting complaint, PMOs of different level should do detailed registration and completely record the process of handling complaint, processing result and related information.

(3) PMOs should in principle complete the handling the complaints within 15 work days, send the feedback of processing result to complaints and publicize it in related villages.

(d) The person of dealing complaint must be strictly confidential and forbidden to tell information of complaints to respondents

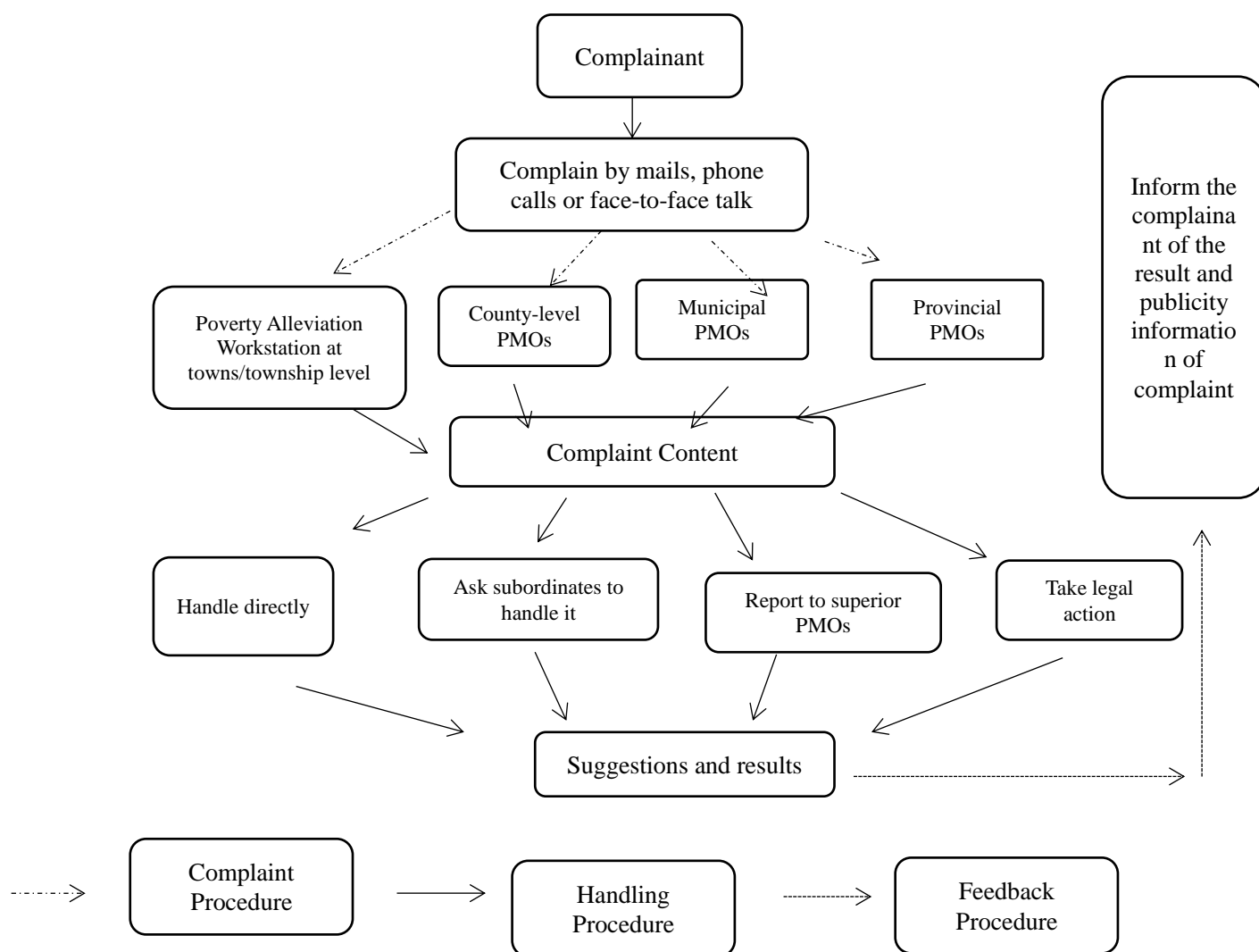


Chart 9-1 Complaint Procedure

9.3 Summary

1. County- and township-level PMOs, township government, project implementation committee, oversight committee and some interest groups should do publicity on important affairs of the whole process by various valid paths. Until now, the contents of publicity included funds allocation and delivery strategy, selection of project Facilitator, payments and allocation of cooperative, project financial management and so on. PMOs were aimed at the environmental problems of construction to accept the opinion of different stakeholders. They all showed that related facilities satisfied the basic needs of the construction, which had little or no adverse impact on daily production and life.

2. Involved parties of project had a discussion about related project

construction problems by seminars. They mainly include: (a)interest demands of poverty-stricken families problem(b)interest demands of cooperative problem (c)government arrangement problem (d)all kinds of fund allocation problems of county, township and village. By democratic consultation, every stakeholder achieved consensus on project design, developing target, depth of project, structure of design, sources of funding and institutional settlements and so on.

3. So far the stakeholders have involved in project application, propaganda and mobilization, establishment in project area and project preparation. The specific involvements mainly included organization of project schedules in project areas, selecting project Facilitator, mobilizing all the people to participate, implementation structure of election project, formation of cooperative, ensuring responsibility of interest-related parties, ensuring the project implementation and procurement methods and so on.

4. There were several problems arising complaints of villagers in project areas. The problems were mainly included:(a)problems of government financial and government affair opening, which was mainly seen in project fund allocation, opaque bidding, complaint about government policy and so on (b)problems of cooperative running irregularly, which was mainly seen in unclear ownership of property, unfair benefit for farmers and so on.(c)Adverse impact of project construction on the living environment of the villagers. Although the influence was small, it should be solved well. Aiming at the problems, it needed a set of specific complaints system. PMOs of all level should set a person in charge of the complaint and obey progressive responsibility system.

10 Social Risks and Monitoring

10.1 Main Social Risks

In poor areas of Shaanxi province, the main construction contents of development projects in rural community include the development of livelihood and industry, economic infrastructure and services, and technology and capacity construction which belong to agricultural projects. Due to the variability, complexity and uncertainty of its internal and external factors, the main social risks include the risk of natural resource, policy adjustment, natural disaster, market, technology, management, exchange rate, and fair benefit.

1. The risk of natural resources

The natural features of agricultural production are closely tied to the quality and quantity of the resources (especially water and land). The risks of natural resources include the risk of water shortage or unsatisfactory water and the quality of the soil and water resources.

2. The risk of policy adjustment

The stability, continuity and controllability of the agricultural economic policy will also bring risks to the agricultural investment. The factors affecting project's policy adjustment mainly include industrial policy, import and export policy, etc.

3. The risk of natural disaster

Because of the characteristics of agricultural production, the influence of natural factors to the agricultural industry is more sensitive and serious than others. The risks of natural disaster mainly include floods, drought, hail, frost, diseases and pests etc.

4. Market risks

In the project areas, the developing industry is mainly the crop and animal farming of agricultural production. Agricultural production has a larger market risk. And the farmers, especially the poor households, lack the ability of accessing market information, and have poor judgment and grasp of market information. Their ability of dealing with market risk is relatively limited. Lower or long-term depressed prices of farm products will seriously affect the enthusiasm of crop and animal farming, which finally will affect the sustainability of project development. After the implementation of large-scale production in the project area, part of the villages that do the project may have single industrial structure, so as to increase the market risk.

In addition, the labor force, raw materials, and price of the equipment required for the project development might be influenced by

market prices and rise, which not only can lead to increase the costs of project construction and earned profit so as to affect the project benefit or earned profit, but also can produce some unstable factors.

5. Technology risks

Due to the production mode of poor householders is relatively backward, they still mainly adopts the traditional farming technology. Planting technology is simple and extensive. The yield is low; Breeding technology is not science and doesn't reach the degree of fine breeding; The productive and processing technology is primitive and extensive. The technical level of preventing and controlling disease is low. Although in project construction, farmers especially the poor will get high strength of related technical training, their original technological level is low. How is the effect of training. After training, can the farmers master the related technology. If the training effect is poor and technology isn't been mastered well, it would have negative influences on the sustainable development of the project.

6. Management risk

Agricultural project involves a broader benefit aspects, it not only contains cooperatives, but also includes many of farmers and the difficulty of coordination work between departments. And each subproject content within this project also has diversity, complexity, which makes project management and supervision more difficult. The management risk influence the final result of the project through the prolonged construction period, increased investment and production costs and reduced quantity and quality of the products.

7. Exchange rate risk

This project is financed by World Bank loans so that there is the exchange rate risk.

8. Fair benefit risk

The project implementation involves the distribution of benefits. The choices of project family cannot be absolutely fair, which may cause internal contradictions and negative influence in the village. There are different benefit group involving in the project, so that when it comes to the distribution of benefits and degree of participation, there may be the risk of taking care of different group and taking advice from others. Besides, the poor family household will face with the problems of distribution in cooperative and development industry. If the benefits of poor household id damaged, the initiative and enthusiasm of poor households will be influenced.

What's more, different farmers, governors, beneficiaries with different genders, and people with different education have different understandings for the project, which will cause different degree of participation and some risk for the project implementation.

9. Environmental risk

During the process of the project construction, the construction of connection roads, production roads, water and wastewater pipeline network and irrigation facilities will produce dust, construction waste and solid waste, which will pollute the air. Besides, the machines will make much noise. There may be some waste water of workers and projects, which will pollute the water.

If the manure of the livestock in the project doesn't have enough earth to carry or is too much, it will become an important pollutant source. The improper using of chemical fertilizer may pollute the underground water and become the Non-point pollution (N, P and organics). The biogas digester, as the product fundamental facility, may produce some harmful gas like H₂S and ammonia. .

10.2 Measures to prevent and reduce risks

1. Risk of natural resources

Concerning the risk of natural resource, water shortage, project plan should be concentrated in strengthening the construction of the water conservancy and irrigation facilities so as to ensure the irrigation water sources in the project area, as well as suiting the measures of application of the sprinkler irrigation facilities and water conservation to local conditions.

2. Risk of policy adjustment

The construction of this project conforms with the local development plan and the industry program. Viewed in the long term of the development of this project, the policy adjustment is of low risk.

3. Risk of natural disaster

The risk will be solved by working with the meteorological department to timely access to the latest news of the weather changes, enhancing the construction and maintenance of the hail suppression net and protective guard to reduce the harm of natural disasters to crops and following the development of crops in different seasons to protect them from diseases and insect pests.

4. Risk of market

Relevant government agricultural sector will provide overall, accurate and timely information through various ways and forms to the farmers. Agricultural cooperatives can be applied to improve the organization degree of farmers and their capacity to defend risk and avoid the concentration to the markets of the agricultural products. The seasonal nature of agricultural production determines that of the price of agricultural products. In order to avoid losses from the risks, it is necessary to match the breeds or sow by stages as well as manage the

products by processing, storage, preservation, selecting targeted markets, etc.

5. Risk of technology

This project area is with years of relevant experience to plant, breed and construct greenhouse. Basically, its technology is viable and of low risk. However, it is still important to enhance training of new technology, introduce new technological facilities and improve the scientific and technological level of the project area so as to reduce the hidden risk.

6. Risk of management

The farmer cooperatives and the value chain development are conducted by the agricultural cooperatives. Specific operation and management plan is laid down by the cooperatives. Relevant regulation should be obeyed and supervision will be conducted so as to reduce the risk of management.

7. Risk of exchange rate

The risk of exchange rate of this project will be solved by the provincial poverty alleviation office. In order to defend the risk, firstly, the project budget should be adequate that domestic supporting funds are to be ensured. Secondly, it is necessary to strengthen the implementation and management of the project, fulfill the project construction plan in high quality and efficiency and quickly complete withdrawal and payment to reduce time lag and avoid losses. Thirdly, coordination and communication should be actively conducted and the information of exchange rate should be further followed. As well, various measures should be taken to withstand and reduce the risk of exchange rate.

8. Risk of fair benefit

Interest sharing mechanism and complaint authority should be improved and interest sharing activities should be inspected. Relevant parties should communicate with each other timely on the relevant problems to ensure fair return of the project by all parties.

9. Risk of environment

Construction side of employer and contractor should ensure the measures of pollution prevention when making the construction plan. For example, transport vehicles cannot be overloaded; shed cloth cover should be taken to avoid material dispersion and dust, and transport vehicles in and out of the construction site should be flushed in time to prevent them from dust pollution. Certain construction material should be covered in time to reduce sewage cause by rain and temporary storage and treatment device should be set up for heavy pollution sewage. Construction side of contractor should utilize the advanced low voice equipment and construction technology. Transportation of construction materials should be avoided during peak period and Vehicle entrances and exits and transport routes should be kept away from residential areas.

Treatments of livestock and poultry farm pollution follows the principle of reducing the production process, conducting harmless treatment and transform the waste into resource. Excrement and water should be diverted in the barn and the excrement should be cleaned by cushioned material manually instead of being managed by water. Fecal sewage and other dirt should be timely removed and treated. Livestock and poultry manure should be conducted by anaerobic treatment and the produced biogas can be used as a clean energy for farmer. Chemical fertilizer pollution should be prevented in the process of crop planting, organic fertilizer should be increased to use as base fertilizer, the amount of fertilizer should be reduced, fertilization should be conducted by recommended formulation and soil testing and reasonable fertilization training of farmers should be strengthened. Integrated management (IPM) method such as biological control, and physical control of the harmful creature should be taken. Pollution-free agricultural products plan should be actively promoted. The discharge of domestic sewage is dispersive, so sewage generated by the life of the construction personnel should be directly discharged. In the process of drilling, produced water is for irrigation, it is dispersive that has no effect on the environment. Biogas should be treated by desulfurization before entering the farm household. Safety education to the users should be enhanced. Technical personnel of the biogas station shall regularly inspect and repair the equipment, pipelines, cooker to eliminate hidden dangers. In addition, the only garbage collection facilities of the project is constructed for garbage collection (instead of garbage transfer station and landfill), which covers very few of area and basically will have no negative effect to the environment.

10. Risk Deflection

We can transfer potential risks by making contract clause or purchasing third-party insurance.

10.3 Monitoring Index

The monitoring and preventing of social impact is crucial for this project. We can establish the monitoring index of social impact by the expectation of social risk. According to this index, we can monitor the social influence of the project and reduce the possibility of risk and ensure the smooth running. Monitoring indexes are listed in Table 10-1.

Table 10-1 Social Monitoring Index

SN	Category	Reference evaluating indicator
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10 Social Risks and Monitoring

SN	Category	Reference evaluating indicator
1	Social development	(i) Poverty incidence rate (ii) Rural per capita net income (iii) Total output value of agricultural industry (iv) Use satisfaction of economic infrastructure
2	Influence on poor household	(i) Project benefit poor population (ii) the proportion of poor households participating in the cooperatives (iii) Population of poor households joining in the training (iv) Population of poor households shaking off poverty
3	Influence on cooperatives	① Legal cooperatives ② Net margin of cooperatives ③ Proportion of cooperatives supporting by project
4	Influence on females	① Population of women joining in the cooperatives ② Women joining in the training (iii) Per capita net income of women
5	Fair benefit	① Proportion of bonus cooperatives ② Proportion of poor households joining in the cooperatives ③ Proportion of income of poor households accounted for the average income of cooperative ④ Proportion of income of female households accounted for the average income of cooperative
6	Project management	② Frequency of complaints ③ Frequency of project officer joining in the training
7	Construction of ability	① Frequency of province training ② Frequency of city and county training

10.4 Monitoring and Evaluation Plan

Monitoring and evaluation is to ensure the practice, the information openness, public involvement of the project. Besides, it is the most important system of error correction and participation. This project has made the Social Monitoring Index (10-1). The monitoring and evaluation will involve the entire important index. For this target, this project has established the monitoring and evaluating system including internal supervision and external supervision.

In the internal supervision, the project office will monitor the implementation, social management plan, information openness, public involvement plan, using of project funds and the implementation of rules and regulations. We will hand in the internal monitoring report half a year.

Besides, the project office will employ independent agency to make

the external supervision of the social management plan. The independent agency will monitor the implementation of social management plan regularly and give the advisory opinion and hand the monitoring and evaluating report once a year.

10.5 Summary

1. This project will combine the local resource superiority and traditional special industry to help the poor accurately by industrialism and modernism of agricultural production. It will achieve the poverty reduction strategy aiming at developing, increase the income and living ability of the poor population in the project area, consolidate development of the poor area, and promote the sustainable development of poverty alleviation industry through the integrated value chain development, supporting the agricultural economic infrastructure, agricultural production system and construction of cooperatives. Therefore, the social negative influence is less and can be controlled as a whole.

2. However, there are still some risks in the natural source, policy adjusting, natural disaster, market, technology, management, exchange rate and Fair benefit. Therefore, we should build more irrigation facilities and dropper facilities; build more anti-hail net and protective guard and prevent from the plant diseases and insect pests; provide with comprehensive, accurate and timely information, increase the degree of farmer's organization, match different suitable agriculture products and sowing by stages and choose the object market reasonably; strengthen the study and training of new technology and purchase advanced facilities; strengthen the construction of operational rules and regulations of the agricultural cooperatives. Pay attention to the preparing of domestic matching funds and finish the cash reimbursement and payment on time and strengthen exchange rate information tracking; establish perfect system of benefit distribution and complaint agency; deal with the pollution of livestock and implement measures of pollution-free farm produce and risk transfer following the principle of reduction of production process, harmless treatment results and utilizing after treatment.

3. In the meantime, the project will monitor and prevent from the social influence on the project through establishing the system of internal supervision and external supervision and set up seven first order index including Social development, Influence on poor household, Influence on cooperatives, Influence on females, Fair benefit, Project management, and Construction of ability and 22 second order index including Poverty incidence rate, Rural per capita net income, Total output value of agricultural industry, Use satisfaction of economic infrastructure, Project

benefit poor population, Proportion of poor households participating in the cooperatives, Population of poor households joining in the training, Population of poor households shaking off poverty, Legal cooperatives, Net margin of cooperatives, Proportion of cooperatives supporting by project, Population of women joining in the cooperatives, Women joining in the training, Per capita net income of women, Proportion of bonus cooperatives, Proportion of poor households joining in the cooperatives, Proportion of income of poor households accounted for the average income of cooperative, Proportion of income of female households accounted for the average income of cooperative, Frequency of complaints, Frequency of project officer joining in the training, Frequency of province training, and Frequency of city and county training.

11 Social Assessment Summaries and Conclusion

11.1 Summaries and Findings

This report takes the stakeholders as the main body and conducted systematic analysis of social economic baselines of the project areas, identification of stakeholders, analysis of poverty households, cooperatives and related government line agencies, gender analysis, analysis of project land acquisition, project participation and complaint system, and policy suggestions, monitoring and evaluation, etc. and has reached the following conclusions and findings:

1. The World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project is another innovative poverty alleviation project Shaanxi province has won over at the turning point of the next decade of poverty alleviation. Scope of Social Assessment includes 253 administrative villages of 29 towns/townships in the 11 counties of five prefecture-level cities covered in the project area. Social assessment subjects include 45,357 rural households in the project area with a total population of 177,578, among which 48,665 are poverty population. There are no villages or clusters of ethnic minorities in the 29 project communities. Therefore, social assessment of the Project will not involve issues of ethnic minorities.

2. Statistics show that, the per capita net income of the farmers in the project area is approximately 5349RMB, mostly from the traditional crop farming. The major grains include wheat, corn, buckwheat, potato, broomcorn millet, millet and mixed beans and the major cash crops include vegetables, apples, dry fruit, etc. The livestock mostly are cattle, sheep, horse, mule and donkey. The current infrastructure in each project area has its weakness in varying degrees. Many striking problems are eager to be solved through the implementation of this project, such as the low rate of road hardening to the village, shortage of agricultural facilities and drainage pipeline, slow development of the agricultural facility construction and the lagging-behind of electricity supplier development. At the same time of the industrial development of the project area, some problems still exist such as the slow industrial structure adjustment, unsound agriculture technological system, great shortage of the development finance, low level of the agricultural industrialization and a lack of leading enterprise, low education of the rural labor and the incomplete agricultural production organization form. The implementation of the project will tackle the above issues in varying

degrees, especially relieve the pressure of local development finance.

3. Stakeholders identified in the project area mainly include: farmers, including poor households, women, the elderly, teenagers, migrant workers, the disabled and other special groups; cooperatives; benefit related enterprises; village officials; project management organization and relevant government department. Different stakeholders such as farmers, village committee, enterprises and relevant department have slight different willingness and expectation to participate into the project, among which farmers are of the most population and this group is most one directly and strongly affected by the project activities. They have a stronger willingness to participate and project, and have a better mass foundation to implement the project activities.

4. The poor population of the project is 48665, with 27.4% of poverty incidence, among which the poor population in the first project area is 20649, with 24.63% of poverty incidence. The poverty incidence in the project area is much higher than that of the whole Shaanxi Province, which is 11.84%. It becomes imperative and urgent to implement the project in each project area to help poor people shake off poverty and achieve prosperity. However, awareness to the project of the poor households is quite different, they still lack understanding of the project and the requirement and preference for the project of the poor household of the project area are also quite different. To view the situation as a whole, they prefer the project of agricultural infrastructure and cooperatives construction. The project will be conducive to improving the production and living conditions of the poor households, increasing production and income as well as enhance their self-developed capacity, but to a great degree, all these depend on a well management on the hidden market, fair return and technological risk.

5. There are 166 cooperatives in the 29 project areas with 33 specialized farmer cooperatives in the first project areas, including 24 crop farming cooperatives, 7 animal farming cooperatives, and 11 service cooperatives, accounting for 57.1%, 16.7%, and 26.2% respectively. The demand for Project Management Training and Capability Building of PMOs, Maintenance Management of Project Operation at the provincial, municipal, county and township level, Cooperative Institution Building including offices and office supplies, Market Development including venue, E-business platform and brand certification, etc., production roads, Production Capability Building, Community Capability Building, facility operation management training and institution operation management, Project Management and Monitoring Platform System Development, is the highest, accounting for over 67%;

Farmers in the cooperatives benefits mainly from: (a) Obtaining agricultural means of production for free or buying them at low prices; (b)

getting land transfer compensation by renting or transferring; (c) becoming shareholders and get dividend rights with land or fruit trees; (d) getting income from working at the cooperative production base; (e) obtaining technical and skill training for free by participating in the cooperatives; (f) selling agricultural and sideline products to the cooperatives at higher prices; (g) getting rebate from transaction volume. The willingness to participate in crop farming of cooperatives, animal farming cooperatives and service cooperatives in the project areas is decreasing in sequence; their recognition of cooperatives with less than 100 members, 100-300 members and more than 300 members are decreasing in sequence; the percentage of their recognition on sharing out bonus according to the investment in capital, returning according to the turnover, sharing bonus according to the rewarding is decreasing in sequence too. So far, specialized farmer cooperatives in the project area have the following problems: (a) farmers have little knowledge of the cooperatives; (b) cooperative operation is poor; (c) internal management system is immature and the operation is not regulated; (d) farmer participation rate is low.

6. Government agencies are generally supportive of the project and they proposed the following measures and suggestions to improve the cooperative operation. For instance, the project management office maintains that organization leadership of the project should be strengthened, ways of poverty alleviation should be innovated and supporting funds should be settled down. Poverty alleviation office holds that it is imperative to strengthening the infrastructure, technological and service facility, business service, demonstration park and system construction. Other relevant departments (agriculture bureau, animal husbandry bureau, forestry bureau, industry bureau, water resource bureau, supply and marketing cooperatives, tourism bureau, women federation, etc.) believe that land management should be enhanced, water conservancy infrastructure should be improved, commune members training should be strengthened and women's opinion should be respected. In general, the project will have a positive impact on the relevant government departments. For the project management office, it is conducive to transferring the government functions and expanding wider way for business and investment. For the poverty alleviation office, it will update the concept and the mode of poverty alleviation and help the poor households to shake off poverty and achieve prosperity. For other relevant departments, it can improve the basic production and living conditions of the farmers, the ecological environment and the status of women. Certainly, the project will also bring about the hidden cooperative, technological and other risks. It needs all the departments to take drastic action to avoid the risks.⁷ The total population of women in

Shaanxi province is 18.26million, accounting for 48.37% of the total provincial population. The population of women in the 11 project counties is 1.52million, accounting for 45.54% of the total county population. The population in the 29 project areas is 83480, accounting for 47.01% of the total project areas' population. The first13 project areas have 39627 women, accounting for 46.83% of the total population in the project areas. In terms of the comprehensive factors such as population distribution, age structure, education level, income and source, employment status, health status and training experience, the development of women is relatively backward, much slower compared with men.

Women participating in the cooperatives in the 13 project areas are less, and the degree of participation is not deep enough (The population of women's participation is 1981 people, while men is 4928 people). Women in the cooperative management occupy less than men, accounting for 14.61% in council, 15.85% in the shareholder meetings and 8.7% in the financial department. Most women in the project area have heard about the cooperatives and have greater willingness to participate in the cooperatives. Women's demands for the cooperatives vary a lot. 93.33% of women are willing to attend the professional technology training, they have strong need for the training of culturing and grain and vegetable planting. 93.63% of women are willing to improve the infrastructure and mostly hope that the field production roads and the basic farmland irrigation can be improved. The development of the project will have the following positive impacts to women: (1) raise women's capacity and social status; (2) increase women's income and improve their working environment; (3) improve their family conditions and their external status; (4) improve their living quality and living standard. But some negative impact such as unfair benefic and heavy labor burden for women can also exist.

8. Based on a close analysis of the planned land use, there are 57 projects items involving no land reacquisition. The specifics are as follows: (a) According to the classification of land use for agricultural facilities and construction, 48 items are for protected agriculture covering a total area of 2681.2125 mu; nine items use land for construction projects with a total of 36.97 mu. (b) Another classification is based on the proposed land use modes. This divides the project items into types including: 37 items with planned land transfer, of which 28 are leasing and 9 are resorting to share purchasing; six items with land provided free; 14 items with reconstruction in the original piece of land without occupying new land; one item not yet clear. (c) Finally, with the classification based on the nature of the land, all of the 57 projects are using the land of collective nature. These show that the project intends to

generally rely on land leasing and share purchasing to acquire land. Road construction projects are basically reconstruction in the original land instead of taking new land. The project does not involve land expropriation and demolition. There is no centralized dwelling of ethnic minority families in the region. Apart from the 16 reconstruction projects with no new land occupying, 38 have seen contract signing for land use with 7 in oral and 31 in written forms, and the other five have not yet entered into agreements. It is thus visible that 88.37% of the land use problem has been solved with mostly written agreements. As for the proposed land use types of the 43 project, eight projects use arable land, one construct with garden land, two with land for commercial use, eight use homesteads, three use public facilities, 16 with vacant land, four with agricultural facilities land, and one project with land of unidentified type. There will be no occupation of woodland, grassland, water conservancy facilities land. In conclusion, the main types of planned land use of the projects are vacant land, farmland and homestead.

9. During the project preparation, implementation and operation, there may be following problems that may be complaint by the villagers in the project areas. (a)Publicity of government finance and government affairs, which is mainly manifested on the allocating and allocated condition of project fund; (b)Non-standard problems of cooperatives, which is mainly manifested on unclear ownership of property and unfair distribution of farmers; (c)Bad influence on villagers' environment causing by project construction. Although the influence is small, it must be solved properly. Aim at the problems; the project office at all levels should designate persons to handle the complaint and implement responsibility system of level by level.

10. This project combined the local resource advantages and traditional special industries to carry out precise poverty alleviation through agricultural industrialization and modernization. It will achieve the development-oriented strategy of poverty reduction; increase the poor population's income and ability to make a living in the project area; consolidate development of the poor area, and promote the sustainable development of poverty alleviation industry through the integrated value chain development, supporting the agricultural economic infrastructure, agricultural production system and construction of cooperatives. Therefore, the social negative influence is less and can be controlled as a whole.

However, there are still some risks in the natural sources, policy adjustment, natural disasters, market, technology, management, exchange rate and fair distribution of benefits. Therefore, we should deal with those problems properly. What's more, the project will monitor and prevent from the social influence on the project through establishing the system

of internal supervision and external supervision and set up seven primary index including Social development, Influence on poor household, Influence on cooperatives, Influence on females, Fair distribution, Project management, and Construction of ability and 22 secondary index including Poverty incidence rate, Rural per capita net income, Total output value of agricultural industry, Use satisfaction of economic infrastructure, Project benefit poor population, Proportion of poor households participating in the cooperatives, Population of poor households joining in the training, Population of poor households shaking off poverty, Legal cooperatives, Net margin of cooperatives, Proportion of cooperatives supporting by project, Population of women joining in the cooperatives, Women joining in the training, Per capita net income of women, Proportion of bonus cooperatives, Proportion of poor households joining in the cooperatives, Proportion of income of poor households accounted for the average income of cooperative, Proportion of income of female households accounted for the average income of cooperative, Frequency of complaints, Frequency of project officer joining in the training, Frequency of province training, and Frequency of city and county training.

11.2 Project Impact

11.2.1 Positive Impact

1. Improve the overall level of the regional economy

This project holds the leadership role of restructuring and modernization of agricultural pillar industries, and builds infrastructure and undertakes capacity building and training, which has important influence on adjustment of industrial structure in the project area and improving the economic power in county area. The implement of the project will promote the special agriculture resource advantages in project area, improve the development of relevant industries concerning to food, beverage, transportation, service and so on, promote adjustment and optimization of the industrial structure and economic structure in project area, and gradually improve the development of the economy in county area. Besides, the industrialization management pattern based on cooperatives will organize the dispersed farmers in one industry chain to form scientific methods of production, management, organization, which will promote the development of agricultural industrialization and improve the development of agriculture, rural area and farmers.

2. Promote industrial upgrading and help the poverty households to increase income

Because of the fund, technology and fundamental facilities, the industries in the project area have not become a chain. The farmers can

only produce and sale primary agricultural products, which has low added value and technological content. According to the resource condition in need, the foundation of the existing industrial development and the development potential in the future, this project develop the special industries with advantages suiting to the local conditions on the principle of prioritizing poverty and paying attention on resource advantages and industrial foundation. It will choose the industries that can aid to the poor in the project area and industries that farmers have strong desire to develop. It will optimize the regional distribution and develop the industries with advantages through combining the project construction and developing special industry and agriculture with advantages. What's more, the project will increase the income of poor households smoothly and consistently through scaled and industrial operation. Besides, when it comes to choose the implementation mode of the project, we focus on the involvement of farmers and lead more and more poor households to devote themselves on the construction of project and creating social value, which will create and provide more jobs for idle labor in rural areas and low-skilled labor.

3. Perfect the infrastructure and improve the production and living conditions farmers

Project implementation will largely improve the backward condition of infrastructure in the project areas and provide necessary infrastructure to develop the special industries with advantages for poor people. Especially the improvement of animal farming infrastructure and relevant food-processing facilities can improve the local producing and living conditions and gives more employing chances to the poor people. Besides, the construction of relevant industries concerning to the agricultural market and storage and processing of agricultural products can promote the development of industries in the project area, increase the income of farmers and achieve the goal for sustainable development, which will fundamentally solve the problems of sale's difficulty, high cost and low price concerning to the agricultural products. Besides, the implement of the project will gradually build and perfect the social service system relating to the industry development in project area, including the agricultural technology extension system, information service system and supply and marketing service system and so on, which will provide a comprehensive range of services for farmers and other production and management units. It will also change the dispersed product and management into cooperative production and joint management uniting and acting together, which will achieve the effective joint of small-scale management and big market to reduce the market risk and natural risk and increase the agricultural benefits.

4. Improve the organizational level of farmers

In the project areas, most farmers adopt the dispersed methods of product and management. They mostly produce and sale primary agricultural products, which lacks in scientific industrial management system, has low output, added value and technological content. Besides, because the infrastructure is backward and the information is asymmetry, farmers are hard to find a good market. This project will be industrialization-oriented and try to develop the specialized farmer cooperatives to improve the organizational level of farmers, which will increase producing efficiency and income, and reduce the cost and risk of agricultural product, and achieve the goal that shake off poor households. Besides, because of the effect of farmer organization, this project will build the benefit connection between farmers and risk coordination mechanism and form a regular and smooth cooperative relation, which makes farmers enjoy the benefits of processing and circulating

5. Improve the labor skill and product management ability of farmers

Compared with ordinary farmers, poor households lack in the planting and breeding product management technology. This project will not only develop the natural resource but also the human resource. Through practice technology training and professional technical backbone of poverty alleviation training, this project will make poor household acquire scientific planting and breeding technology, management theory and market awareness to improve the cultural quality of whole farmers in the project area. Besides, this will be helpful for improving their ability concerning to participate the development of industry and cooperatives and the ability concerning to get out of poverty.

6. Improve the social status and living conditions of disadvantaged groups including women, the old and the disabled

This project will give priority to disadvantaged groups including women, the old and the disabled by providing jobs, becoming a shareholder of cooperatives and working in cooperatives, which will improve their educational and cultural levels and their economic independence and improve the status of them. Besides, through the implement of the industry project mainly consisted of cooperatives, this will push those who are female, old, disabled into product activities to increase the income and improve their living conditions, which benefits them in the nearby cooperatives and does not influence on their family life.

11.2.2 Negative Impact of the Project

1. Market Risks of Agriculture Products and Industry Development

The project areas are usually areas with out-of-date information and poor transportation. Thus, the farmer households, especially the poor, are restricted by their limited judgment and mastery toward market risks, by

their lack of capability in getting information, and by their finite ability to face the market risk. Moreover, the risk of dropping prices from time to time will affect their enthusiasm, and consequently, influence the consistency of the project's development. Meanwhile, due to the industrial structural adjustment, some of the project villages with homogeneous industrial structure lack the stability to face market risks and are easily affected by the fluctuation of market.

2. The Negative Influence on Farmer's Standard of Living

The farmer households' living mode in project areas is mainly traditional crop and animal farming with limited income sources low level of income. The initial investment is rather high, especially in some unique industries (such as sheep and cattle farming) whereas the poverty households usually lack necessary starting fund. Therefore, the cost directly affects the project's economic benefits and motivation. Besides, some industries' production cycle are long with slow profit-yielding process. For the poor farmers in the project area, particularly those with single source of living or households living on the subsistence allowances, the project's initial cost and production cycle will bring challenges to the living mode and affect the low income families' motivation and confidences to take part in the project.

3. The disadvantaged farmer households may face the problem of unfair benefit distribution

Due to the complexity and the chronicity of project implementation, the disadvantaged groups in project villages, including, the poverty households, the old and women are more vulnerable. (a) Because of their poverty, the poverty groups themselves don't like to talk in front of people. Moreover, they feel that no one will listen to their own advices. As time passes, they will lose their confidence, which profoundly intensify the marginalization of the low-income family. Though the implement of the project will can improve the poor condition of the low income family, due to the limit knowledge level and other factors, their power are easily to be affected and they easily to be treated unfairly which will increase the gap between the rich and the poor among villagers. (b) Due to the confine of traditional culture and regional condition, women tend to have less education than men. They are not used to speak in public, especially when men are present. they usually choose to keep silent. Therefore, women's rights of speech and participation rights may not be guaranteed and their demand may not be thought highly of. (c) The old in the project village are easily to be ignored because of their physical conditions and education level. Accordingly, in the project implementation process, how to prioritize their interest and make them take part in the project to achieve shared prosperity is what we have to face and solve.

4. Insufficient Labor Force in Project Construction

Young people usually go out to work, so people in the project area are mainly old people and children. The lack of young labor force causes the aging of industry and therefore has negative impact on the development of the project, in terms of getting information, infrastructure building, product sale, market development as well as application of new technologies. In addition, at the beginning of the project, the benefit is not obvious so the attraction is limited for young men. Thus, instead of taking part in it, young people are more willing to go out to work, which causes the shortage of labor.

11.3 Suggestions and Measures

11.3.1 Improvement Measures

1. Improve Infrastructure Construction and Accelerate Farmer Households' Adaptability to New Facilities.

Firstly, decide the specific programs to be built by holding villager's congress and village group meetings to discuss villagers' needs for production and livelihood infrastructure. Secondly, since the infrastructure construction will lead to changes in production tools, production technology and habits, to ensure the farmers' production and life safety, corresponding security education and technical education should be provided timely to prevent negative consequences. Thirdly, the finished infrastructure, including connection roads, sidewalks, and irrigation facilities will be turned over to the villages as collective assets and will be supervised, managed and maintained collectively. Ownership of facilities related to industrial value chain, including storage, processing, and selling etc. will be turned over to cooperatives to be supervised, managed and maintained.

2. Enhance technical training is to strengthen farmers' self-development capacity

First, organize farmers to participate in all kinds of technical training to foster their subject consciousness. Special attention should be paid to the following aspects: (a) Trainings related to industrial development, cooperative organization operation and management should be arranged according to the urgency of villagers' needs while taking into consideration the characteristics of agriculture activities. (2) The selection of training time should take full account of the time schedule of each seasons avoid national holidays, farming season, and women's housework time. (c) Venues of training should be easily accessible near the habitat and special attention should be paid to farmers in remote areas. (d) Ways of training should be differentiated in different regions with

different trainees. The training should be conducted in local dialects with understandable expressions, supported by video, posters and brochures etc. (e) take random check on the publicity and training regularly, specifically, twice a year the earlier stage of the project and once a year afterwards.

Second, stimulate farmers' incentive of participation to form an interactive public "top down" and "bottom up" participation style. (a) Select members of the cooperative board and board of supervisors through villager's congress and village group meeting. Cooperative membership should be based on the knowledge and consent of villagers, and the needs and ideas of the old, the disabled, and the poverty households have to be taken into consideration. (b) Establish joint-stock cooperatives with extensive participation and democratic management, and put extra effort on solving the problem of insufficient fund of the poverty households. (c) The information publicity should cover at least 80% of the poverty households (and 100% of the listed poverty households) and make sure that 30% of women and 80% of the poverty households participate in the project training program.

Third, provide a variety of training programs to backbone technicians and models in achieving prosperity among farmers to let them play an exemplary role.

3. Promote employment of villagers and increase the farmers' income in the project areas.

(a) Organize training programs in such value chain sectors as crop and animal farming, field management, high-efficiency agricultural technologies, product processing and selling, etc. based on the willingness and needs of industries and farmers in the project villages. and make sure that over 30% of women and 80% of poverty households participate in the training programs. (b) Improve the human resources value of villagers in the project areas by improving the unit value of labor. (c) Organize villagers to participate in infrastructure construction based on their willingness, and offer 30% of the job opportunities to disadvantaged groups including the poverty households, women, the old, and the disabled.

4. Improve the organization order and the organizational level of farmers

Insist on the community-driven development mode, expand the scope of local residents' participation and give communities certain level of direct management authority. The local residents can decide the focus of development, manage the fund and project implementation process. (a) Establish stock cooperatives in which farmers share interests and obligations and make sure that 80% of poverty households on the list participate in the cooperatives. (b) Publicize project information door to

door and let the farmer households know the possible benefits to participate in cooperatives. (c) Mobilize the villager committee in the project villages to play their role in organizing project activities. (d) Encourage the capable brains in the administrative and natural villages in the project areas to set good examples among farmers to promote their incentives. (e) Organize farmers to participate in the industry development by establishing production base and setting exemplary households. (f) Offer technical and management training among cooperative members. (g) Set up fair and transparent benefit sharing mechanism to improve farmers' sense of belonging toward the cooperatives.

5. Strengthen regulations of cooperatives and establish reasonable benefit distribution mechanism.

Currently, the cooperative operation mainly following three modes: "cooperative + base + farmer household", "cooperative+ farmer household", "company + cooperative + farmer household". Due to the heterogeneity among farmers, a small number of core members or enterprises take the actual control of the main residual control rights and residual claims. As a result, this group owns a majority of the cooperatives' assets, which causes a lot of problems. A lot of places have given external support to the cooperatives. For newly founded cooperatives, there is another option that from the start, the new cooperatives include groups with similar conditions such as ordinary farmers and poverty households as principal members. Meanwhile, farmers can build an independent whole product supply chain only by establishing cooperatives of their own which in turn build processing enterprises. In doing so, farmers' interests can be optimized. Such vertical integration should be the final objective of farmer-centered cooperative construction. At last, survey feedbacks show that some households are not very enthusiastic about the cooperative dividend. They are more willing to enjoy the convenience and benefits in purchasing means of production, technical support and stable market prices, which should be considered in building the cooperative benefit distribution mechanism.

6. Establish risk awareness to improve the ability against market risks

(a) Conduct comprehensive assessment of the current situation and demand of agricultural infrastructure in project villages, construct such facilities as production roads and irrigation facilities as needed to avoid the repeated use of funds and to improve the infrastructure condition. (b) Decide the primary products and services of cooperatives according to local conditions and industries with unique advantages in the project areas. (c) Establish risk sharing mechanism between industries with unique advantages and cooperatives, decide the proportions of obligations

of farmers and cooperatives in face of risks to ensure the normal cooperative operation. (d) Establish cooperatives with extensive participation that all members share interests and liabilities and make sure that 80% of the poverty households on the list participate in the cooperatives. (f) Strengthen the training related to cooperative management and industrial development to improve the cooperatives' sustainability. Organize regular training programs in management capability, standard production, high-efficiency agricultural technologies, agricultural product processing and marketing, etc. (g) Build supporting facilities and systems that are needed for agricultural industrialization, including agricultural product acquisition spot, storage nodal point, market, market information platform and agricultural product tracing system, etc. (h) build seed and stock breeding bases to conduct standardization of seedling and breeding, cultivation, field management, selling and processing, provided that it is feasible in terms of technologies and fund.

7. Improve the knowledge of women, the old and the disabled of the cooperatives and project to encourage them to participate.

(a) Reinforce project publicity and training to make sure information on the whole construction process is open and transparent and 30% of women, the old and the disabled participate in the project. The schedule and convenience of the abovementioned group should be prioritized during the selection of training time and venue and the training should try to use local dialects as much as possible. (b) Make use of the advantages of women's federation and the federation of the disabled in information publicity and training to launch the above activities. (c) Listen to the opinions and demand of the disadvantaged group in establishing cooperatives and selecting the direction of industrial development. (d) Make sure that there are at least one women and one senior citizen in the preparation team and procurement team of the cooperatives and that there must be a certain percentage of the abovementioned group participating in the cooperative founding and industrial planning process.

II. Measures for mitigating negative effects

1. Avoid the risk of unfair benefit sharing for the disadvantaged groups

(a) General meetings of cooperative members will be held, where the benefit distribution mechanisms will be designed and released based on thorough discussions and consultations with members. The percentages of and sequence for all types of benefits sharing has to be clarified to ensure the fair sharing of benefits among farmers. (b) The inner organizational structure of the cooperative will be optimized. Cooperatives shall appoint a staff member to be in charge of the management and utilization of cooperative funds. The use and outcomes

of benefits sharing of funds shall be made public on a regular basis. The cooperative financial accounts shall be taken down archived for supervision and questioning of members and the society. (c) Cooperatives shall be established in compliance with related laws. 80% of registered poverty households shall be included into the cooperative and percentage of poverty households shall be increased. (d) The proportion of accumulated public funds in benefit sharing shall be clarified including accumulation funds, public welfare funds, relief funds, risk funds and development funds, etc. followed by the clarification of the specific methods for benefits distribution. (e) Complaint filing channels and mechanisms shall be established that are optimized and easy for implementation.

2. Reduction of market risks

(a) Industries shall be selected based on real local situations and industry chains shall be extended based on the characteristics of the selected industry. (b) Training about the market shall be given to farmers to ensure timely awareness of market information and response to market risks. (c) Supporting facilities shall be constructed so as to drive the development of other industries.

3. Reduction of land management risk

(a) Cooperatives support by this project shall observe the principles of voluntary participation by farmer and equitable arrangement for land management and shares distribution. (b) The rights to participating by farmers in cooperative production based on voluntary basis shall be guaranteed and farmers shall be free of impact of production bases in the vicinity. (c) During project implementation, where land has to be integrated for the building of production bases, all land leasing and management plans shall be reviewed in advance.

4. Reduction of risks of infrastructure management and maintenance

(a) The ownership, operation and management responsibility of finished infrastructure shall be included into the project operations manual and clarified. (b) Measures for operation and management of village-level infrastructure shall be formulated. (c) Supervision and management capacity at county, township and village level shall be strengthened, according to the principle that the beneficiaries are responsible for management and maintenance.

5. Reduction of the risk of shortage in young labor force

Firstly, support policies shall be formulated and publicity campaigns shall be organized to encourage and attract the young labor force to return home and support project construction; Secondly, crop and animal farming technologies shall be upgraded with the view of improving farming efficiency of the project; Thirdly, machinery and equipment shall

be continuously updated to increase the use of machines, thus improving efficiency in project construction and make up for shortage in young labor.

11.4 Adoption of SA Suggestions in FSR

1. In response to problems about farmers' demands specified in SA suggestions, farmers' demands and desires are analyzed in the FSR, including farmers' basic demands, causes of poverty, factors hindering income increase, means of income increase, willingness of relocation, willingness of participating in new type of operational organizations, upgrading of productive infrastructure, development of crop and animal farming, development of forestry and fruit industry and financial support. Finally, the following needs are also proposed in the FSR: increasing such infrastructure construction as productive roads, irrigation facilities and large agricultural machinery, training in technical skills for the development of local key industries, participating in cooperatives, advice and guidance on animal farming skills, assistance in expanding markets for agro-products, brand creation and job opportunities.

2. Based the analysis of key industries and models of industrial value chain in SA, suggestions are provided revolving around the industries of fruits and animal farming through an analysis of the industrial status of project areas, on stepping up support for such industries as animal farming, fruits and vegetable industry, rural tourism, catering and tourism services with as the major industries. Support in financing, skills, seedlings and breed stock shall be given to the above mentioned six sectors. Efforts shall be made to diversify farmers' sources of income and steadily increase farmers' income by means of loan of discounted interest, free trial of new varieties, technical support and subsidies for production insurance.

3. In response to suggestions concerning cooperative development in the SA report, FSR proposes the development idea of speeding up the building of new operation entities such as cooperatives and family farms, stimulating factor mobility and income increase through innovation in agricultural production and operation organizations. It suggests that the project increase its capital investment in cooperatives and family farms in such fields as fruit industry, animal farming, greenhouse vegetables, catering services and tourism and guide the new operation entities to enter agricultural production social services to improve the farmers' resistance against market risks and their bargaining capability. In the meantime, it also encourages farmers to promote scale operation of agricultural production through land lease, shareholding and transfer to formulate large-scale and intensified agricultural production and promote diversity

in the employment of rural labor so as to increase their income.

4. In response to the suggestions concerning major project construction content in the SA report, FSR proposes measures to breaks the bottleneck of natural resources and suggests that production infrastructure construction be advanced to improve irrigation system and field paths and education and skill training be strengthened to gradually change the farmers' ideas of development and improve their capability to get out of poverty.

5. Based on the suggestions to the social assessment in the SA report, FSR conducted analysis in the perspectives of stimulation effect, stakeholders, women and children, social benefit and summary and conclusion. For example, the project helps to meet the urgent demand of the project areas for infrastructure establishment, too improve the capability of farmers and effectively help the poverty population get out of poverty. It helps to improve the social status and living conditions of women, to improve the education level of children. It helps to significantly improve the production and living conditions in the project areas. The poverty alleviation effect and exemplary effect in the project areas are remarkable. In the end, FSR concluded that the project construction has strong public support in the project areas. Since there is no land acquisition and resettlement involved in the project, the project's impact on the public and the environment is temporary and small-scaled. The project construction institutions promise to accept reasonable suggestions and advice from the public and take effective measures to protect the ecological environment.

6. SA report proposes to establish an indicator system and a monitoring and evaluation mechanism that combines external supervision with internal monitoring to monitor the project's social impact and prevent potential negative influence. On such basis, FSR constructs an indicator system to conduct monitoring and evaluation of project development progress, which includes final result indicators, including number of direct beneficiaries of the project, population that have been lifted out of poverty, and the percentage of cooperatives that support dividend to the total number of cooperatives in the project areas, as well as intermediate result indicators, including the number of legitimately founded and registered cooperatives, the percentage of poverty population in cooperatives to the overall poverty population, cooperative development health indicator, the percentage of profitable cooperatives to the total number of cooperatives, direct beneficiaries' satisfaction with the economic infrastructure establishment, the length of constructed roads (including roads for mechanized farming, field paths, village roads and connection roads, etc.) , accumulated number of people participating in training programs at the provincial, municipal, cooperative levels and the

accumulated number of people that have participated in project management training in project management offices of all levels.

Appendix

Appendix 1 : Farmer Questionnaire

World-Bank-Financed Shaanxi Poor Rural Areas Community Development Project Farmer Questionnaire

Code of Interviewee _____ ☐☐☐☐☐☐☐☐☐☐
Name of Interviewee _____ Phone number _____
Address of Interviewee _____ City _____ County _____ Township _____
_____ Administrative village _____ Villager Group _____
Date: _____
If the questionnaire is NOT finished, the reason is that:
The time of interview is from _____ to _____
Name of interviewer _____
Verified by _____
The result of verification Qualified () Unqualified ()

Please read the following words to the Interviewee:

Hello! Shaanxi Provincial Poverty Alleviation and Development Office is conducting a survey among farmers in Shaanxi poor rural areas. There will be some questions about the economic conditions, production and demand of your family. **The research group promises that no one can access to those data except qualified researchers.** Thank you for your cooperation.

Research Group of Farmers' Demand in Poor Rural Areas of Shaanxi Province
November 2015

Attention : (i)FAMILY&YOUR FAMILY in this questionnaire means all members living with you now. (ii)Unless specified otherwise, all the questions in the questionnaire is multiple-choice questions with one answer.

A. Family Information

A1 Which poverty alleviation standard do your family enjoy? ☐

1. National rural poverty alleviation standard
2. Provincial rural poverty alleviation standard
0. Do not enjoy

A2 Do your family participate in the new rural cooperative medical system ☐

- 1.YES 2.NO

A3 Do your family participate in the new rural social endowment insurance? ☐

- 1.YES 2.NO

A4 What about the information of your family members? **(Please fill in The first Member with the information about yourself)**

	Name	A5 Age	A6 Gen der 1.ma le 2.fe male	A7 Rela tion to the head of hous ehol d	A8 Eth nic ity	A9 are you the villag e offici al 1.YE S 2.NO	A10 Degree of education 1.illiteracy 2.primary 3.junior middle school 4.high school 5.secondery vocational school 6.college and over	A11 Health 1.Fit 2.Sickly 3.Disable d	A12 Are you abled to work? 1.YES 2.NO (Please specify the reason if you are older than 16)	A13 Employ ment 1.Farmer 2.Worke r 3.Self-e mployed 4.Others (Please specify)
The 1st member (Yourself)										
The 2 nd member										
The 3 rd member										
The 4 th										

Appendix

member										
The 5 th member										
The 6 th member										

- A14 Your average monthly earning is (including income, bonus & others): ☐
 1.None 2.less than 1000 3.1000-2000 4.2001-3000 5.3000-5000 6.5000 and above
- A15 The housing area of your family is? (m²) ☐☐☐
 A16 The cultivated land area and surface area totals? ☐☐☐
 A17 Which is the way to manage your land ☐
 1.wasted 2.self-farming 3. collective farming 4.renting to individual 5.renting to company
- A18 Do you employ yourself to the animal farming agriculture? ☐
 1.YES 2.NO (**skip to A20**)
- A19 what is the scale of your animal farming farm (number of livestock)?
☐
 1.less than50 2.50—100 3.100—500 4.more than500
- A20 Does your family have the agricultural greenhouse? ☐
 1.YES 2.NO (**Skip to A22**)
- A21 How much do you invest in the agricultural greenhouse? ☐
 1.less than¥20000 2. ¥20000—50000
 3. ¥50000—100000 4.more than ¥100000
- A22 What kind of fuel does your family use mostly? ☐
 1.coal 2.firewood 3.methane 4.gas 5.others (Please specify)
- A23 What kind of water does your family drink mostly? ☐
 1.city water 2.well water 3.river water 4.cistem water
 5.pool water 6. others (Please specify)
- A24 How does your family discharge the waste water? ☐
 1.Discharge directly into sewer 2.Discharege after treating 3.Splash on ground directly 4. others (Please specify)
- A25 Are there any paved roads around your residence?
☐
 1.YES 2.NO
- A26 Are there any farmer's markets around your residence? ☐
 1.YES 2.NO
- A27 How far is your family from the nearest country market (km) ? ☐☐☐
 A28 What's the main source of income for your family? ☐
 1.agriculture 2.labour 3.service 4. others (Please specify)
- A29 How much are the agricultural products sold by your family (kg) last year?
 1 rice () 2 wheat () 3 corn () 4 beans () 5 potato () 6 oil crop ()
 7 cotton () 8 hemp () 10 tobacco leaf () 11 vegetable () 12 beef () 13 mutton () 14 pork () 17 eggs () 18 wool () 19 others () (Please specify)
- A30 The followings are the projects that the world bank is going to construct. Please put them in sequence by the importance of the project based on your actual demand. (PS: Please mark the project you think is the most important with "1", mark the project of the second most importance with "2" and so on. Mark the project in the last place with "15". Your opinions will be an important basis for final project implementation.)

- () Cooperative organization construction project
- () Agricultural Product Storage and Processing Project
- () Market development of agricultural products and processed products project
- () Agricultural land using and management project
- () Agricultural production road construction project
- () Agricultural irrigation facilities construction project
- () Crop Farming industry development support project
- () Animal Farming industry development support project
- () Service industry development support project
- () Mutual support fund construction project
- () Water supply and drainage engineering construction project
- () Village road construction project
- () Electric power facilities construction project
- () Living environment renovation construction project
- () Rural energy construction project

A31 The following items are related to management and monitoring of project construction. Please sort by the importance of project.

- () Management and ability training of instrumentality for the projects in city, county and town.
- () Operation management and ability training of construction of community public service facilities. Construction of maintenance.
- () Operation management and ability training of infrastructure to industry development project
- () Construction of the management and monitoring system project
- () Management and maintenance to the project by province, city, county and town government

B. Farmers' Demand

- B1 What do you think of the cause of poverty? ☐
- 1.disaster 2.disease 3.disability 4. High tuition 5.lack of skills 6.lack of labor
7.lack of funds 8. others (Please specify)
- B2 Is the land of your family acquisition? ☐
- 1.YES 2.NO (**Skip to B4**)
- B3 What do you think of the influence causing by the land acquisition and resettlement? ☐
- 1.better 2.worse 3.no influence 4.unknown
- B4 How many cooperatives have you joint in so far? ☐
- 1.none 2.one 3.two 4.more than two
- B5 Would you like to join in the Specialized farmer cooperatives and make progress with other members? ☐
- 1.YES 2.NO
- B6 What kind of cooperatives would you like to join in? ☐
- 1.Crop farming 2. Animal farming 3. service
- B7 How many members do you think is better for a cooperative? ☐
- 1.<=100 2.100-300 3.>=300

- B8 How do you wish to distribute the surplus of cooperatives? ☐
 1.return by trading 2.distribute bonus by shares 3. distribute bonus by award 4. others (Please specify)
- B9 Do you know about the Specialized farmer cooperatives? ☐
 1. know it well 2.know it 3.know a little 4.not know it 5.not know it at all
- B10 Do you support to build and develop cooperatives by Poor Rural Community Development Project? ☐
 1. Very supportive 2.supportive 3. Don't care 4.not supportive 5.strongly not supportive
- B11 What kind of role do you hope the cooperative has? ☐
 1.providing technology 2. expand market 3.providing with more market information 4.purchasing means of production with preferential prices 5.becoming a shareholder and share out bonus 6. others (Please specify)
- B12 Would you like to join in the industry with unique advantages? ☐
 1.YES 2.NO 3.It depends
- B13 Do you have the professional technology to develop local industry with unique advantages? ☐
 1.YES 2.A little 3.NO
- B14 Would you like to join in the technology training for local industry with unique advantages? ☐
 1.Very willing 2.YES 3.Don't care 4.NO 5.Very reluctant
- B15 What kind of technology do you need? ☐☐☐
 1.vegetable planting 2.animal farming 3.industry technology 4.tree planting 5.protected agriculture 6. others (Please specify)
- B16 Have you heard about the World-Bank-Financed Poor Rural Area Community Development Project ? ☐
 1.YES 2.NO
- B17 Do you support the Project? ☐
 1.YES 2.NO 3.Don't care
- B18 Do you want to join in the Poor Rural Community Development Project of WB? ☐
 1.YES 2.NO 3.Don't care
- B19 What kind of money supporting do you want to get to develop the production and improve your life? ☐☐☐☐☐
 1. Subsidy of labor transfer training 2. Subsidy of practical technical training 3. Subsidy of technical training more than one year or education training 4. Subsidy of new variety planting 5. Subsidy of using of new technology 6. Subsidy of mutual funds 7. Subsidy of loan interest 8. Subsidy of farming insurance 9. Subsidy of education grants 10.others(Please specify)
- B20 What's your occupation? ☐
 1.farmer 2.labor 3.self-employed 4.civil service 5.staff 6.students 7.others
- B21 Have you joint in the professional education or training? ☐
 1.YES (**Skip to B22**) 2.NO (**Skip to B23**)
- B22 What kind of training have you joint in? ☐
 1.agriculture technology 2.employment and reemployment training 3.training of starting a business 4.training of convenient admission for children 5.legal aid 6.others
- B23 Why don't you join in training and education? (multiple choice) ☐
 1.no chance 2.too expensive 3.no suitable place or time 4.it's useless 5.others
- B24 Would you like to join in the jobs provided by cooperatives? ☐

1.YES 2.NO

B25 If the WB is going to acquisition the land of your family, will you agree? ☐

1. YES 2.NO 3.It depends

B26 What kind of project in the Project do you want to support with your land?

☐

1.Crop farming 2.Animal farming 3.others (please specify)

B27 Which way would you like to support the Poor Rural Community Development Project of WB with your land? ☐

1.land renting 2.pooly land 3.land displaced 4. others (please specify)

B28 Do you have the free expression in the village committee? ☐

1.YES 2.NO

B29 Are you satisfied with the jobs of the village committee? ☐

1.Fully satisfied 2.satisfied 3.Don't care 4.dissatisfied 5.strongly dissatisfied

B30 What do you want to improve concerning to living environment? (**multiple choice**) ☐☐☐☐☐

1.Transportation 2.Living conditions 3. Recreational facilities 4. Sanitary condition
5.greening of committees

B31 What kind of help providing by government do you or your family needs? (**multiple choices**) ☐

1. job opportunities 2.training of vocational skills 3.training of financial skills
4.provide with investment opportunity
5.support policy 6.money 7. be despaired of government

This is the end of the questionnaire. Thank you very much for your support.

Appendix 2: Group Interview Outline

Interview Outline for Relevant Departments and Personnel

A. Project management offices & relevant government agencies

1. What's the public opinion about the construction content of the Project?
2. What do the public think about the influence of the Community Development Project on local area? What are the risks?
3. What's your advice on the management and division of responsibility for the Project?
4. How did the county and township government support the development of women, the old and the disabled? (Small loans, skill training, medical aid, legal aid, etc.) Did the government help those people more in the project implementation process? Please talk in details.
5. Is there any land acquisition or resettlement in the project area? What's its size or amount? How many farmers are influenced because of land acquisition or resettlement?
6. Have the land involved been taken over? If not, when will it be? Have the land certificate been processed? If not, when will it be? Are there any problems in the process of land acquisition? Are there any problems?
7. What are the characteristics of the land influenced by the project? What are the characteristics of the land now, opening space, wasteland, working sites or others? What are the things attached to the land? Who does the right to use land belong to? Will the ownership of the right to use land change after the construction?
8. Are there the system to express freely when the farmers fall into troubles or feel unsatisfied with the project, or not? If not, how to build?
9. If the masses petition to higher-level relevant government directly, how to solve the problem? How to take emergency measures? Which department is responsible for handling the problem?
10. Are there new types of agricultural businesses, like leading enterprises (especially the enterprises engaged in processing agricultural products) or the professional cooperatives, etc.? How about the operation of those businesses? How about their influence on production development and shaking off poverty? Do they need further development? Why?
How to improve the operating efficiency of cooperatives (especially the benefits to ordinary farmers and poverty households)? Please share your ideas.
12. Is there the leading industry in the project area now? If there are, what are they and how to develop them in the future?
13. What other kind of industry projects does the county (township) wish to develop to increase the production and improve the living condition of farmers?
14. How about the construction of fundamental service facilities? What's badly in need, such as road, water supply, garbage disposal, greening, integration of three network, etc.?
15. How about the capability of farmers' self-governance and self-development? Which part is badly in need, such as configuring control equipment in the project area, training of manpower, training of farmer's skill, etc.?
16. Are there the counterpart funding for the WB project in county? How does the project management will be? Please talk in detail.

17. What are the main causes of poverty among farmers in the project area?
18. What's the urgent problem to solve to alleviate poverty and increase income in county (town)? Do you have any specific ideas or requirement?
19. Please describe the responsibility for land using of different government departments. (For example, the Agricultural Bureau, the Animal Husbandry Bureau , the Fruit Industry Bureau, the Forestry Bureau, the Water-affair Authority, the Supply and Marketing Cooperatives, the Tourist Administration, the Women's Federation, etc.)

The departments suggested to take part in the interview:

the Agricultural Bureau, the Animal Husbandry Bureau , the Fruit Industry Bureau, the Forestry Bureau, the Water-affair Authority, the Supply and Marketing Cooperatives, the Tourist Administration, the Women's Federation, etc.

B. Farmers (classified according to all types of agriculture, like crop and animal farming, etc.)

1. How about your personal income and your family's income? Does it increase or decline? What do you plant mostly, corns, fruit trees or others? What 's the size and yield of your planting? How about its income?
2. How about the agriculture infrastructure in the village, especially the irrigation works and road? What's the concrete situation?
3. What's your opinion about building and developing specialized farmer cooperatives? How to improve the benefits of normal farmers and poverty households in cooperatives?
4. Are there any other cooperatives in the village?
5. What kind of affects do you hope the cooperatives will have?
6. Are there the agriculture enterprises (especially the enterprises engaged in processing agricultural products) or contracted farmers? Would you like to become farmers like them and develop the production by their leading? Why?
7. Do you agree with allowing WB to construct the Community Development Project? Why?
8. What's your hopes and requirement about the Community Development Project constructing in local area?
9. What do you think of the influence and risk causing by WB's Community Development Project?
What kind of project in Community Development Project of WB do you want to support with your land?
11. If the construction of the project will acquire your land, what affects do you think will cause? What's your concrete requirement?
12. What problems do you think you will be unsatisfied with? How will you solve those problems?
13. What kind of projects do you hope to develop to increase production and improve living condition? What's the concrete form?
14. Have the county government or cooperatives organized technical training? Did you take part in? What kind of skills or ability do you want to get to increase production and improve living condition? How?
15. What influence do you think will cause, if the county government starts the construction of infrastructure, development of production, organizing cooperatives technical training, etc.? Will there be some bad influence? Please talk in details.
16. In your opinion, how to distribute the benefits will really benefit yourself?

C. Women, the old, disabled and the young

1. What's your opinion about building and developing Specialized farmer cooperatives? How to benefit yourself more in the cooperatives?
2. What kind of help do you hope the cooperatives will offer? What's your hope and requirement for cooperatives?
3. Do you agree with allowing WB to construct the Community Development Project? Why?
4. Are there the female developing activities in the project area? (Small loans, training of technology, health service, legal aid, etc.)
5. What do you think of the influence and risk causing by WB's Community Development Project?
6. What kind of project in Community Development Project of WB do you want to support with your land?
7. If the construction of the project will acquisition your land, what affects do you think will cause? What's your concrete requirement?
8. What problems do you think you will be unsatisfied with? How will you solve those problems?
9. If you have a problem that only can be solved by higher-level government, what will you do, reflect to village committee or reflect to higher-level government directly?
10. What kind of projects do you hope to develop to increase production and improve living condition? What's the concrete form?
11. What kind of skills or ability do you want to get to increase production and improve living condition?
12. In your opinion, how to distribute the benefits will really benefit yourself?
13. When it comes to yourself, what's your concrete ideas and requirement for the construction of Community Development Project?

D. Cooperatives & Relevant enterprise

1. Please conclude the involving form and benefiting system of farmers in every cooperatives (especially the system benefits normal farmers and poverty households). Besides, explain good and bad system with example.
2. Please conclude the operating mechanism, advantage and disadvantage of the cooperatives of four types in committee with example, which are company& cooperative& base& farmer, cooperative& base& farmer, cooperative& farmer and company& cooperative& farmer.
3. What's your opinion about the construction of Community Development Project?
4. What's your opinion about the influence of Community Development Project on local area and yourself? How about the risk?
5. What's the main problem of cooperatives(company) now? How about the operation state? How about the effect on increasing production and shaking off poverty? Where need more development?
6. How large is it suitable for a cooperative? How to improve the operating efficiency and distribution of interests? (especially for those who are farmers, poverty households, teenagers, female, old and disabled.)
7. What's the responsibility for land using of cooperative?
8. What's your other concrete idea and requirement for Community Development Project?

E. Village committee

1. What's the village committee's opinion about building and developing Specialized farmer cooperatives? How to bring more benefits to farmers, the poverty households in particular, women, the old or the disabled in the cooperatives?
2. What role does your village hope the cooperatives will play?
3. Does your village want to join in the development of local industry with unique advantages? Why?
4. Does your village support the Community Development Project? Why?
5. What's the village committee's hopes and requirement about the Community Development Project constructing in local area?
6. What does your village think of the influence and risk causing by WB's Community Development Project?
7. If the construction of the project will acquisition your village's land, what affects do you think will cause? What's your concrete requirement?
8. What problems does your village think will be unsatisfied with? How will you solve those problems?
9. What kind of projects does your village hope to develop to increase production and improve living condition? What's the concrete form?
10. What's the responsibility for land using of the village committee?
11. What's the village committee's concrete ideas and requirement for the construction of Community Development Project?

Please keep interviewing about those two sheets:

- 1. Village officials, officials of PADO or other relevant departments, heads of enterprises, and heads of cooperatives**

Project activities	Expectations	Possible Problems & Reasons	Solutions & Suggestion
A Construction of Specialized farmer cooperatives			
1. Institutional construction of cooperatives			
2. Storage and processing of agricultural products			
3. Market development			
B Construction of the agricultural infrastructure			
4. Land management			
5. Construction of production road			
6. Construction of agricultural			

Appendix

irrigation project			
C Cooperatives development fund construction project			
7 、 Development of crop farming supporting			
8 、 Development of aquaculture supporting			
9 、 Development of service industry supporting			
10 、 Construction of mutual aid funds			
D Economic infrastructure and service			
11 、 Construction of water supply and drainage engineering			
12 、 Construction of village road			
13 、 Construction of electric power facilities			
14 、 Construction of living environment renovation			
15 、 Construction of rural energy			

2. Construction of project with women's participation

Project	Dimension of project	Does it need women's participation	If it needs, what's it?	Dimension of women's work
Development of industry	Construction of cooperatives (Institutional construction of cooperatives, storage and processing of agricultural products, market development, production insurance)			

Appendix

	Construction of the agricultural infrastructure (Land management, production road, irrigation works, seedling greenhouse)			
	Cooperative development fund (Crop farming, animal farming industry, service industry)			
	Mutual aid fund			
	Cooperation of private and the public sectors (Award on that rich households lead female household)			
Economic infrastructure and service	Construction of facilities (Water supply and drainage project, road project, power project, environment project, rural energy project)			
	service			
Technology and ability construction project	Construction of production capacity, community capacity, cooperative capacity and farmer's capacity and research on committee development			
Management and monitoring evaluation	Management and maintenance to the project by province, city, county and town government			

Appendix 3: Basic Information on Communities to be built in _____ County World-Bank-financed Rural Area Community Development Project

Basic Information on Communities to be built in
_____ County World-Bank-financed Rural Area Community Development
Project

Community Name _____

Project	Unit	Quantity	Project	Unit	Quantity	Project	Unit	Quantity
I. Population			II. Land Utilization			Source of Water supply		
Number of Towns/Townships Involved			Total Land Area	hectare		Water supply pipelines	km	
Number of Administrative Villages Involved			Farming Land	hectare		Sewage treatment facility		
Key Villages of Poverty Alleviation			Farms with low production output	hectare		Sewage Network	km	
Number of Natural Villages			Forest land	hectare		Power Supply Line	m	
Total Number of Households	household		Available forest land	hectare		Number of Households Using Clean Energy	Household	
Number of Poverty Households	household		Orchard	hectare		Waste Treatment Facilities		
Poverty Caused by: Disaster (multiple choice)	household		Grassland	hectare		Waste Collection Facilities		
Disease (multiple choice)	household		Available grassland	hectare		Communications Facilities	m	
Disability (multiple choice)	household		Total Area of grain for green	hectare		Internet Facilities	m	
High Tuition (multiple choice)	household		Wasteland	hectare		Kindergarten		

Appendix

Lack of Skills (multiple choice)	household		Usable wasteland	hectare		Primary Schools		
Lack of Labor (multiple choice)	household		Water area	hectare		Clinics		
Lack of Fund (multiple choice)	household		Available Water Area	hectare		Supermarket		
Other reasons (multiple choice)	household		Small watershed (5-20 km ²)			Culture and Sports Facilities		
Total Population	Person		III. Agriculture Production			Nursing Homes		
Women population	Person		Total Seeded Area	hectare		V. Social Development		
Poverty Population	Person		Total Seeded Area of Grains	hectare		Number of people in rural cooperative medical service		
Population caused by: Disaster (multiple choice)	Person		Total Seeded Area of Economic Crops	hectare		Population live on social relief		
Disease (multiple choice)	Person		Total Seeded Area of other Crops	hectare		Endemic disease		
Disability (multiple choice)	Person		Total Output of Crops	ton		Categories of Local Arts	Type	
High Tuition (multiple choice)	Person		Total Output of Grains	ton		Specialized Agriculture Cooperatives		
Lack of Skills (multiple choice)	Person		Total Output of Economic Crops	ton		Modern Agriculture Development Park		
Lack of Labor (multiple choice)	Person		Total Output of Other Crops	ton		Agriculture companies		
Lack of Fund (multiple choice)	Person		Large Livestock Population by the Year-end			Leading enterprises in agriculture industrialization		
Other reasons (multiple choice)	Person		Pig Population by the Year-end			Leading households in Animal Farming	Households	
Labor under the age of 35	Person		Sheep Population by the Year-end			Leading households in Crop Farming	Households	
Migrant Workers	Person		Poultry Population by the Year-end			Leading Households in Protected Agriculture	Households	
Female Migrant Workers	Person		Forage Yield	ton		Farm-based small-scale tourist services	Households	
Migrant Workers under 35	Person		Meat production	ton		Farmer's Market		
Age Structure			Production of Eggs	ton		Storage of agricultural and sideline products		

Appendix

0-14 (Adolescent)	Person		Dairy Production	ton		Processing of agricultural and sideline products		
Female	Person		Per capita share of grain	Km/person		Production of Local Handwork		
15-35 (The Youth)	Person		Leading Industry 1			VI. Construction Status of Community to be Built		
Female	Person		Cultivated Area/ Animal farming size	Mu/numbe r		Size		
36-64 (Adult)	Person		Total Output	Jin/number , jin		Number of Households planned (Design Capacity)		
Female	Person		Total Value	10,000 yuan		Design Population (Design capacity)/ including women		
Over 65 (the Aged)	Person		Leading Industry 2			Land acquisition area	hectare	
Female	Person		Cultivated Area/ Animal farming size	Mu/numbe r		Migrant Population/ including women		
Education Level			Total Output	Jin/head, Jin		Planed resettlement housing (design capacity)	set	
Junior College and above	Person		Total Value	10,000 yuan		Planned Total building area (design capacity)	m ²	
Female	Person		Leading Industry 3			Production radius	km	
High school and vocational high school	Person		Size of crop/animal farming	Mu/head		Residential area	10,000 m ²	
Female	Person		Total Output	Jin/head, Jin		VII. Project Management		
Middle School	Person		Total Value	10,000 yuan		Number of Management Personnel		
Female	Person		IV. Community Infrastructur e and Public Service Facilities			Number of people with similar project experiences		
Primary School	Person		Length of Roads	km		Number of people with similar project training		
Female	Person		Production Roads	meter				
Rural per capita	Yuan			meter				

Appendix

net income/female rural per capita net income			Hardened Roads					
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Note: Data collection deadline is the end of 2014. 1 jin = 500g

[illegible]

Appendix 5: _____ County World-Bank-financed Rural Area Community Development Project Public Participation Plan

_____ County World-Bank-financed Rural Area Community Development Project Public Participation Plan

Name of Community:

Project Stage	Participated Activities	Participation Method	Participating Subject	Main Content	Unit in Charge
Preparation					
Project Design					
Implementation					

Appendix 6: Statistics on the Land Use in the Project Areas

Statistics on the Land Use in the Project Areas

Land Using Projects	Project Area	Project Name	Construction Content	Current Land Use Information							Land Use Plan					Remarks
				Land area (mu)	Land use mode 1.transfer(share buying, leasing) 2.requisition 3.borrowing 4.transaction	Cost(10,000 yuan)	Nature of the land-collective, national	Contract signing (verbal, written)	Execution process (the transferring, requisition, borrowing and transaction)	Remarks	Planned Land area (mu)	Land use mode 1.transfer(share buying, leasing) 2.requisition 3.borrowing 4.transaction	Nature of the land-collective, national	If the land is acquired, please specify the time and executive principal of land acquisition	Remarks (please specify the reason if land acquisition is not needed)	
Cooperative Construction	Cooperative institution construction															Note: The table should be filled out by PMOs of each community. If the land acquisition has been completed, please specify the time, executive principal of land acquisition and provide land using approval documents, Farmers' compensation receipts, and social insurance plan. If there is ownership change, please provide related documents.
	Storage and processing of agricultural products															
	Market development															
Agriculture Infrastructure Establishment	Soil amelioration															
	production roads															Note: The table should be filled out by PMOs of each community. If the land acquisition has been completed, please specify the time, executive principal of land acquisition and provide land using approval documents, Farmers' compensation receipts, and social insurance plan. If there is ownership change, please provide related documents.
	Irrigation facilities															
	Seedling greenhouse															
Cooperative Development Fund	crop farming															
	animal farming															

Appendix

Infrastructure Construction	Water supply and drainage project																
	road project																
	environment project																
	Rural Energy Project																

Appendix 7: ____ County World-Bank-financed Rural Area Community Development Project Activities Demand Survey

____ County World-Bank-financed Rural Area Community Development Project Activities Demand Survey

Community Name: _____

Cooperative Name	Name of Administrative Villages involved	Project Activities Needed																										
		Cooperative Institution Building (offices and office supplies)	Agricultural product storage and processing facilities (workshop, equipment and cold storage, etc.)	Market Development (venue, E-business platform and brand certification, etc.)	Production Insurance	Soil amelioration	Production Roads	Irrigation Project	Seedling Greenhouse	Crop Farming Development Fund	Animal Farming Development Fund	Service Industry Development Fund	Cooperation with Leading Enterprises	Cooperation with technology providers	Water supply and drainage project (Domestic Water and drainage)	Road Construction	Power supply project	Environment Project (compost, waste collection, etc.)	Rural Energy Project (methane, solar energy)	Production Capability Building	Community Capability Building	Cooperative Capability Building	Farmer Capability Building	Project Management Training and Capacity Building of PMOs in the county- and township-level.	Community Infrastructure Construction Management Training and Institutional Capability Building	Community Infrastructure Construction Management Training and Institutional Capability Building	Project Management and Monitoring Platform System Development	Maintenance Management of Project Operation at the provincial, municipal, county and township level.

[illegible]

Appendix 8: Status of Major Construction Content in the Project Area

Status of Major Construction Content in the Project Area

SN	Project	Development Status	Unit
1	Factory Building		m ²
2	Equipment		set
3	Cold Storage		
4	Market Facilities Building		
5	Cooperative E-Business Platform		
6	Cooperative Product Brand Certification		
7	Slope-to-Terrace Project		hectare
8	River Embankment		m
9	Production Bridges		
10	Harvest Alternative Roads		km
11	Rain-collecting Facilities		set
12	Motor-pumped Wells		
13	Pipelines		km
14	Orchard Drip Irrigation		hectare
15	Seedling Greenhouse		
16	Fruits and Vegetable Crop Farming		mu
17	Edible Fungi		
18	Protected Agriculture		
19	Bees		hive
20	Animal Housing Building		m ²
21	Livestock Farm Building		m ²
22	Service Industry Project		
23	Projects participated by leading enterprises		
24	Domestic Water Source Building		spot

Appendix

25	Water Supply Project		spot
26	Village Drainage Pipes		m
27	Drainage Project		m
28	Drainage Ditch and Cellar Construction		
29	Connection roads		km
30	Intra-community roads		km
31	Bio-compost Pits		
32	Waste Collection Facilities		
33	Methane Project		m ³

Appendix 9: Farmer Population and Income in Project Counties

Farmer Population and Income in Project Counties

Municipality	County	Number of Households	Total Population (10,000)	Population of Ethnic Minorities (10,000)	Poverty Population (10,000)	Total Population of Labor (10,000)	Population of Female Labor (10,000)	Population of Migrant Worker (10,000)	Average Net Income of Farmers (yuan)	Income from Wage (yuan)	Income from Family Business Operating (yuan)	Transfer Income (yuan)	Income from Properties (Yuan)
Baoji	Linyou												
	Longxian												
Xianyang	Changwu												
Weinan	Fuping												
	Baishui												
	Heyang												
Yulin	Dingbian												
	Mizhi												
Yan'an	Yichuan												
	Yanchang												
	Yanchuan												

Appendix 10: Project Content with Women Participation

Project Content with Women Participation						
Project Activities	Whether women are willing to participate (YES or NO)	If YES, please write down the cooperative name	If YES, please write down the name of administrative village involved	If YES, please describe the specifics of the work	If YES, please specify whether there are differences between the work content of male and female and what are the differences.	Percentage of Women (%)
Cooperative Institution Building (offices and office supplies)						
Agricultural product storage and processing facilities (workshop, equipment and cold storage, etc.)						
Market Development (venue, E-business platform and brand certification, etc.)						
Production Insurance						
Soil amelioration						
Production Roads						

Appendix

Project Content with Women Participation						
Project Activities	Whether women are willing to participate (YES or NO)	If YES, please write down the cooperative name	If YES, please write down the name of administrative village involved	If YES, please describe the specifics of the work	If YES, please specify whether there are differences between the work content of male and female and what are the differences.	Percentage of Women (%)
Irrigation Project						
Seedling Greenhouse						
Crop Farming Development Fund						
Animal Farming Development Fund						
Service Industry Development Fund						
Cooperation with Leading Enterprises						
Cooperation with technology providers						
Water supply and drainage project (Domestic Water and drainage)						
Road Construction						
Power supply project						

Appendix

Project Content with Women Participation						
Project Activities	Whether women are willing to participate (YES or NO)	If YES, please write down the cooperative name	If YES, please write down the name of administrative village involved	If YES, please describe the specifics of the work	If YES, please specify whether there are differences between the work content of male and female and what are the differences.	Percentage of Women (%)
Environment Project (compost, waste collection, etc.)						
Rural Energy Project (methane, solar energy)						
Farmer Capability Building						

Appendix 11: Statistics on _____ Project Area Sub-project Activities

SN	Sub-project Activities	Project Type	Construction Location	Project Size	Project Description	List of Equipment Procurement	Current Land Use Information						Land Use Plan					
							Land area (mu)	Land use mode 1.transfer(share buying, leasing) 2.requisition 3.borrowing 4.transaction	Cost(10,000 yuan)	Nature of the land-collective, national	Contract signing (verbal, written)	Execution process (the transferring, requisition, borrowing and transaction)	Remarks	Planned Land area (mu)	Land use mode 1.transfer(share buying, leasing) 2.requisition 3.borrowing 4.transaction	Nature of the land-collective, national	If the land is acquired, please specify the time and executive principal of land acquisition	Remarks (please specify the reason if land acquisition is not needed)
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
...
...
...

Appendix 12: Project Participation Manual (Presented independently)

Appendix 13: Pictures



13-1 SA team interviewing related government agencies in Changwu County



13-2 SA team holding seminar in Qinwan Village Committee of Yangjing Township, Dingbian County



13-3 SA team doing questionnaire in Leichi Township of Yanchang County