

Indigenous Peoples Plan

July 2014

PRC: Yunnan Pu'er Regional Integrated Road Network Development Project

Yunnan Pu'er Regional Integrated Road Network Development Project

Ethnic Minority Development Plan

Pu'er Municipal Government

July 2014

Letter of Commitment

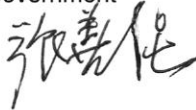
The Pu'er Municipal Government (PMG) has applied for a loan from the Asian Development Bank (ADB) for this project through the Ministry of Finance of the People's Republic of China (the "PRC"). To ensure that the project is implemented in accordance with ADB's social safeguard policies this Ethnic Minority Development Plan (EMDP) has been prepared. This EMDP complies with the applicable laws of the PRC, the applicable local regulations, and ADB's Safeguard Policy Statement (2009), Safeguards Requirements III, Indigenous Peoples. In order to complete the ethnic minorities development work more effectively, this EMDP includes some additional measures, and implementation and monitoring arrangements.

PMG hereby acknowledges and endorses the contents of this EMDP, and warrants that the budgetary funds under this EMDP will be included in the general budget of this project and made available on time. PMG will also ensure to conduct EMDP activities in accordance herewith during project implementation. PMG has discussed the draft of this EMDP with the administrative departments concerned and obtained their consensus. PMG hereby authorizes the Pu'er Municipal Transport Bureau (PMTB)—the implementing agency (IA) for the project to implement this project and the related ethnic minority development work, and other governments in the Project area to implement this project and the related ethnic minority development work within their jurisdictions.

Pu'er Prefecture Municipal Government

Municipal Head:

Date: 18/08, 2014



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List of Acronyms

AB	–	Agricultural Bureau
ACWF	–	All-China Women's Federation
AH	–	affected household
AHB	–	Animal Husbandry Bureau
AP	–	affected people
CAB	–	Cultural Affairs Bureau
CB	–	Communication Bureau
CDC	–	Center for Diseases Control and Prevention
EA	–	Executive Agency
EB	–	Education Bureau
EM	–	ethnic minority
EMDP	–	Ethnic Minorities Development Plan
ERAB	–	Ethnic & Religious Affairs Bureau
FB	–	Forestry Bureau
FGD	–	focus group discussion
GAD	–	gender and development
GDP	–	gross domestic product
HB	–	Health Bureau
HH	–	household
LRMR	–	local road maintenance and rehabilitation
HIV/AIDS	–	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IA	–	Implementing Agency
km	–	kilometer
M&E	–	monitoring and evaluation
PA	–	project area
PADO	–	Poverty Alleviation and Development Office
PMG	–	Pu'er Municipal Government
PPTA	–	Project Preparatory Technical Assistance
PRC	–	People's Republic of China
PSB	–	Public Security Bureau
PTB	–	Pu'er Transportation Bureau
RCC	–	Rural Credit Cooperative
SPS	–	Safeguard Policy Statement of ADB (2009)
STI	–	Sexually Transmitted Infection
TB	–	Tourism Bureau
YEAC	–	Yunnan Ethnic Affairs Commission
YPDOT	–	Yunnan Provincial Department of Transportation

I. EXECUTIVE SUMMARY

A. The Project

1. The project comprises: (i) regional roads development that includes reconstruction of Ning'er-Jiangcheng-Longfu Highway (234.07 km), and of Menglian-Meng'A Highway (48.75 km) that also includes construction of Meng'a Port Material Transit Centre (MTC); (ii) rural access improvement, including 33 rural earth roads (600 km) upgrade to paved class IV, village road sport improvement, rural road maintenance and rural transport services; and (iii) institutional strengthening, including road safety. The proposed project will contribute to inclusive growth and regional integration by improving rural area connectivity in poor areas and providing regional links with the border with Vietnam, Lao Peoples Democratic Republic, and Myanmar. The EMDP is prepared based on the project feasibility study report (FSR) and preliminary design which is very detailed. The Project is following, to a large extent, the existing road alignments and no major changes are envisaged following the project final design. This EMDP will, therefore, be treated as final unless there are some major design changes during the detail design. Following the completion of detail design ADB will be informed whether an update of the Plan is required or the current draft should be treated as final.

B. Legal and Policy Framework

2. The EMDP specifies mitigation and enhancement measures to comply with Asian Development Bank's (ADB's) Safeguard Policy Statement (2009), Safeguard Requirement No. 3 on indigenous peoples, PRC ethnic policy requirement of national unity, ethnic solidarity, ethnic equality and mutual respect, and Yunnan 12th five year Planning for Promoting Economic and Social Development of Ethnic Peoples and their Regions (Yun Zheng Fa [2011] No. 163) An Ethnic Minority Development Plan (EMDP) has been prepared by the Municipal Government (PMG), the Project Executing Agency in coordination with Pu'er Municipal Transport Bureau (PMTB)—the implementing agency (IA) for the project.

3. The EMDP is designed to ensure that project benefits are distributed equitably among affected minority communities and individuals, and that culturally appropriate measures are taken to (i) avoid or mitigate adverse impacts, and (ii) enhance benefits for ethnic minorities. The Project will ensure that ethnic minorities are consulted in matters related to each project output, and provided with opportunities to participate in decision making and/or implementation activities. During the consultations at project preparatory stage, the EMs population in the PA welcomes the proposed road development project that includes a total of 33 rural roads upgrading, Ning'er-Jiangcheng-Longfu highway rehabilitation and Menglian-Meng'a highway reconstruction, and express the wish of starting the project as early as possible. For the Ning'er-Jiangcheng-Longfu road, the re-alignment sections are particularly welcomed by the EMs along the re-alignment sections for the road's large potential to benefits the cash crop development and marketing and improving access to Jiangcheng, Ning'er and Simao town centres. Details of consultation and participation during the project preparation and implementation stages are provided under the Consultation and Participation Plan in the EMDP.

C. Impact Assessment and Action Plan

4. The social and poverty analysis undertaken to prepare this EMDP has assessed and described the circumstances of the EMs and the anticipated poverty and social, cultural and religious impacts from the project. The project relates to upgrading of the already existing roads and the potential socio-cultural and religious impacts resulting from the project are assessed as minimal and adequate measures are developed to deal with these under the plan. Adequate provisions to enhance the economic benefits for vulnerable groups, including ethnic minorities,

the poor and women have been integrated in the project design. Provisions for special mitigation measures relating to land acquisition and resettlement have been included in the resettlement plans (RP),¹ which will help ensure that vulnerable groups, including ethnic minorities adversely affected by loss of land or housing will be compensated for their loss of assets. Current governmental policies and programs for ethnic minorities, **including protection of ethnic minority cultural and religious practices**, further help protect and enhance project benefits to ethnic minority peoples. In addition to the Meng'a Highway , Ning'er-Jiangcheng-Longfu Highway construction and border trade facilities, most transport related community needs such as rural road improvements, sub-village spot improvement, rural road maintenance, rural transport services have been included in the project rural access improvement component. This EMDP presents (i) distinctive cultural and social features of different ethnic minorities present within the project impact zone, (ii) the project impacts on EMs, and (iii) agreed mitigation and enhancement measures to be implemented as part of this project.

5. Multiple ethnic minority groups in rural area characterize the population of Pu'er. Out of its 10 district/counties, except for the capital city Simao District, all nine counties are ethnic minority autonomous counties. The total non-Han ethnic minority population makes up 63.4% of the total population. Hani is the biggest group with a population of 4.68 million (or 18.3% of the total population), followed by Yi (17.5%), Lahu (12.3%), Wa (6.3%) Dai (5.9%), Yao (0.4%), Bai (0.5%), Hui (0.5%) and Miao (0.5%).

6. Pu'er Prefecture is also a poverty concentration area. Of its 10 district/counties, except for the capital city Simao District, all nine counties are national designated poverty counties.

7. The project potentially benefits a total population of about 405,000, including 287,000 or 71% ethnic minorities and 149,000, or 36.7% poor population. The rural road improvement component will benefit around 73,000 people in 16,280 households of 287 village groups of 110 administrative villages in 9 counties and one district of Pu'er prefecture. About 80% of them are ethnic minorities including Hani, Yi, Lahu, Wa, Dai, Yao, Bai, Hui, and Miao. The Ning'er-Jiangcheng-Longfu Road component and Menglian-Meng'a component will benefit population of 332,000, of which 260,720 or 69% are ethnic minorities. The main ethnic minority groups are Yi, Hani, Dai, Lahu, Wa, Yao and Bai.

8. The major project direct benefits include: (i) shorten travel distance in the case of Ning'er-Jiangcheng-Longfu road; (ii) shorten travel time by all components; (iii) smoothen travel with improved road surface of rural roads and Ning'er-Jiangcheng-Longfu road; (iv) increase all season accessibility by pavement of 33 rural roads and rural road maintenance; (v) reduced traffic jams of Menglian-Meng'a road; (vi) improve rural transport service; (vii) provide all weather access to administrative villages or to link with higher level road; and (viii) provide direct job opportunity during project implementation and operation phases, although which is not the main long term benefit envisioned by the surveyed villagers, they expressed willingness to work for the project during project implementation and operation

9. Based on the current livelihood patterns of the villages in the PA, the Project's positive indirect impacts will most likely be: (i) promote and smoothen the transitions of the villages from traditional agriculture to cash crop growing by attracting investors and eliminate the transport barriers; (ii) better access to market for villagers who grow or are going to grow cash crops along the Project roads; (iii) benefit villages who need to diversify their income sources through non-farming activities, including cross border trade; (iv) promote villages near the urban areas

¹ Two draft RPs, have been prepared: (i) Ning'er'Jiangcheng-Longfu Highway rehabilitation; (ii) Menglian-Meng'a Highway Reconstruction.; and a Resettlement Framework for 33 rural roads with two short RP for selected rural roads.

or towns for sustaining their current trends in non-farming income; and (v) realize easier access to social services such as school, clinic, shopping and entertainment, and maintain social network.

10. Based on the social and poverty analysis, the project will benefit male and female, poor and non-poor, EMs and Han.

11. Permanent land acquisition by the project will affect total population of 17,245 in the affected villages that includes an ethnic minority population of 11,753, or 68.2% mainly be Jiangcheng-Ning'er-Longfu road and Menglian-Meng'a road. The main affected EMs includes Hani, Yi, Dai, Lahu, Wa, Hui and Yao. In addition the project will also affect 225 people in 45 families of Meng'a state farm and Mengma Tea Company (including 75 people in 15 households by house demolition). A total 2,368 people in 600 households will be affected by house demolition, among them, 68% (1,616 people in 410 households) are ethnic minorities. The project is linear and development and upgrading of two regional roads will mostly follow the existing roads, lowering the impacts of land acquisition, which are mostly partial.

12. The main potential negative impact on ethnic minorities include land acquisition, house demolition, disturbance during construction, road safety issues caused by higher speed and increased traffic, potential risk of human and drug trafficking, and HIV/AIDS. On ethnic minority culture **and religious practices**, a possible negative impact is on sacred trees for worship that might fall within the proposed alignments. Precaution measures has been taken to avoid this in preliminary design.

13. The specific measures in this EMDP include project benefit enhancement measures and mitigation measures to address social risks. The benefit enhancement measures are (i) regional roads development; (ii) improved village roads and transport services; (iii) improved road safety; (iv) project generated employment and income generation opportunities; (v) capacity development measures including training for cash crop development, and non-farming job skill training. The mitigation measures include (i) EM cultural protection and awareness building; (ii) **avoidance of project impact on sacred trees and relics; (iii) mitigating negative impacts of potential tourism development as an indirect impact of the project; (iv) minimizing risk of communicable diseases including I HIV/AIDS; (v) minimizing risk of human and drug trafficking; (vi) minimization of disturbances during constructions; and (vii) coordinate with the local government on complementary poverty reduction measures to enhance the project benefits.**

14. **The budget for the EMDP is derived under various sources within the project budget and includes budget for village road spot improvement (US\$ 4 million), rural transport services piloting (US\$ 500,000), road safety improvement (US\$ 400,000), EM cultural protection, minimizing risk of communicable diseases and minimizing risk of human and drug trafficking (US\$ 100,000). In addition, amount of US\$85,000 as M&E costs is included in the project budget to ensure the progress and results of the EMDP actions and results are monitored and reported separately. Apart from the direct budget support from the Project, a number of program under the PMG, especially on protection of cultural and religious practices of ethnic minorities will ensure long term measures to deal with any potential negative impacts.**

D. Implementation Arrangement

15. The EMDP will be implemented in parallel with the project construction works during 2015–2016.

16. The Pu'er Prefecture Municipal Government (PMG) as executing agency (EA) is responsible to endorse the EMDP. The Pu'er Municipal Transport Bureau (PMTB), the project IA is primarily responsible for implementing the EMDP and will coordinate with other key local

governmental agencies. For implementation of the EMDP, Pu'er Ethnic and Religion Affairs Bureau (PERAB) will provide support in terms of cultural awareness and monitoring of the EMDP effectiveness. Other key agencies for the implementation include poverty reduction and development office (PRADOs), Labour and Social Security Bureaus (LSSB) and Women's Federations (WFs.)

17. The Project Leading Group will have a member responsible for the EMDP implementation. The PMO will ensure that (i) at least one focal point staff and resources will be available to implement the EMDP.

18. The EA, IA and other line agencies have sufficient capacity to implement the EMDP. Majority of project counties are ethnic minority autonomous counties and as indicated in this EMDP, a number of programs for the ethnic minority communities are being implemented by these agencies. To enhance the EA and IA's understanding of ADB requirements, a social safeguards expert will be procured under the consultancy services to ensure that the EMDP is implemented in accordance to the plan and in compliance with the ADB policy.

19. **Monitoring.** Implementation of the EMDP will be implemented both internally and externally. The PMO focal staff will be responsible for internal monitoring of the plan implementation that will be reported on a quarterly basis as part of the project progress report. Additionally, the PMO will engage an independent agency as external monitor to undertake monitoring and evaluation of the plan implementation. The external monitor will undertake monitoring on a semi-annual basis and will submit semi-annual monitoring reports to the PMO and ADB. Additionally, the external monitor will establish a base line to evaluate the plan implementation impacts will undertake two evaluation reviews and submit two annual reports following the completion of the EMDP implementation. The monitoring reports should include data disaggregated by ethnic group and by gender, by poor and non-poor wherever relevant.

20. **Consultation and participation.** The project will follow a proactive approach to ensure the affected ethnic minority communities: (i) participate in decision-making; (ii) are fully informed and involved in implementation; and (iii) receive equitable and culturally appropriate benefits from the project. Ethnic minority people have been consulted during the project preparation through informal discussions, household surveys, and public consultation meetings/workshops. The IA will conduct further consultation in collaboration with local government agencies and local community groups during detailed design, implementation and monitoring.

21. **EMDP disclosure.** The draft EMDP will be endorsed by PMG and submitted to the ADB for review and approval. Once approved by the ADB the EMDP will be distributed to targeted villages for public disclosure and consultation by the August 2014.

22. **Grievance redress mechanism.** Prior to commencement of project implementation, a transparent and effective channel for complaints and appeals will be established for affected peoples. A Grievance Redress Mechanism will be established so that any problems arising from the project implementation are identified, recorded, discussed and resolved in a timely and effective manner to ensure that the Project is implemented in compliance with ADB Safeguard requirements, as set out in this EMDP. The EMDP focal person in PMO will responsible to coordinate, document and report the cases and results. Existing legal court services are available in all levels from county courts upwards.

II. INTRODUCTION

A. The Project

1. The project comprises: (i) regional roads development, including Ning'er-Jiangcheng-Longfu Highway (223.07 km) rehabilitation, Menglian-Meng'a Highway (48.75 km) reconstruction and Meng'a Port Material Transit Centre (MTC) construction, (ii) rural access improvement, including 33 rural earth roads (600 km) upgrade to paved class IV, village road sport improvement, rural road maintenance and rural transport services, and (iii) institutional strengthening, including road safety.

2. The proposed project aims to contribute to inclusive growth and regional integration by connecting isolated rural communities and border areas to the regional road network and providing infrastructure to support trade and regional cooperation between the People's Republic of China (PRC), Viet Nam, Lao People's Democratic Republic (Lao PDR), and Myanmar.²

3. The project is located in Pu'er Municipality in southern Yunnan, an ethnic minority and mountainous poverty stricken area where EM people represent 63.4% of the total population. The main ethnic minority groups within the project area (PA) include Yi, Hani, Dai, Lahu, Wa, Yao, and Bai. A Social and Poverty Analysis (SPA) conducted for the Project has assessed the socio-economic circumstances including causes for poverty and poverty incidences of the EM peoples. The project has also assessed the positive and negative impacts of the project on ethnic minority communities in the project area.

B. Justification for EMDP

4. This EMDP is prepared as this project invokes ADB's safeguard policy SPS, 2009, Safeguards Requirement 3: Indigenous Peoples because there are:

- (i) distinct ethnic minority groups with self-identification and recognition by PRC government;
- (ii) cultural, religious and social institutions, which are unique for mainstream Han society; and
- (iii) distinct languages used by ethnic minority groups.

5. There are no ancestral domains, lands or natural resources that are claimed based on customary rights. Rather, lands are mainly collectively owned by the rural people, who possess collective legal rights to land ownership and individual legal rights for land use.³

6. The project does not involve:

- (i) commercial development of the cultural resources and knowledge of Indigenous Peoples;
- (ii) physical displacement from traditional or customary land; and
- (iii) commercial development of natural resources within customary land under use that would impact the livelihood or the cultural, ceremonial or spiritual uses that define the identity and community of Indigenous Peoples.

² The ethnicity in the project area cross border with Myanmar are mainly Dai (Shan), Lahu, Hani (Aka), and Wa, with Laos are Dai and Hani, with Vietnam are mainly Yao, and Miao.

³ In the PRC, rural land is owned by the village collectives and land use rights are allocated to individual households within the villages. This is a common practice whether these village collectives are ethnic minorities or otherwise. The 'collective ownership' therefore does not refer to as 'collectively owned by ethnic minorities', neither does it correlates to the notion of 'collective attachment' as in ADB's SPS (2009).

7. Though the project will result in displacement of ethnic minority community peoples, including demolition of their houses, these lands including housing lands are collectively owned with individual households having users rights. Furthermore, the project impacts are linear in nature and will not adversely impact the community character of the villages. No village communities will be completely relocated and those ethnic minority households require relocation will be resettled within their respective villages. The project impacts therefore do not trigger ADB's special requirement to seek broad community support. Nonetheless, all local people have been informed of the project, are quite supportive, and have participated actively in project design. Their involvement will continue during implementation.

C. Methodology

8. The methodology used to formulate the EMDP consists of a combination of data collection and analysis as defined below:

a.) Secondary Data Collection

9. Literature review included: (i) Twelfth Five-year Development Plan of Pu'er; (ii) official statistics books of Yunnan, Pu'er and the Project counties; (iii) Poverty Reduction Strategies in Pu'er; (iv) women development plan and evaluation reports in Pu'er; (v) ethnic minority development program in Pu'er; (vi) land acquisition and house demolition policies in provincial and prefecture levels; and (vii) lessons learned from NGOs' working on protection of HIV/AIDS and human trafficking.

b.) Primary Data Collection

10. Household survey and participatory appraisal approaches were used to gather primary data, which includes key informant interviews, focus group discussions, in-depth individual interviews and field observations.

11. **Household survey.** The household survey was designed to: (i) gather socio-economic and transport information at household level and (ii) assess positive and negative impacts of the project on local people, particularly on women, the poor, ethnic minorities and other vulnerable groups. A total of 520 households in 23 administrative villages and one state farm in the project area were sampled for household survey (Table 1). A total of 27 focus group discussions were held in 26 villages and 1 state farm unit located in: (i) direct and indirect affected villages; (ii) with and without ethnic minority group concentration; (iii) close to and relatively far from the road alignment; (iv) mountain and plain valley; (v) with different project components; and (vi) "non-poor" and "poor" as designated by the Poverty Alleviation & Development Office.

Table 1: Distribution of Surveyed Villages

Component	Rural Road No.	County	Town /Township	Village committee	Sub-village or Village group	Key interview and FGD	No. of HH surveyed	
I. Rural Roads Upgrading	Gali Road RR1	Simao	Liushun	Gaojiancao	Xiaoxinzhai	Yes	11	
					Xinghuozhai	Yes	9	
	Dongnai RR25	Menglian	Mengma	Dongnai	Nankang	Yes	20	
	He'an RR??			He'an	Babo	Yes	20	
	Yongbang RR30	Ximeng	Mengka	Yongbang	Yongbang No. 3 group	Yes	20	
	Yongye RR??			Mowo	Mowo liuzu	Yes	20	
	Liangkeshu RR20	Jiang cheng	Kangping	Yaojiashan	Zhongxiangjiao shan	Yes	20	
Gongguan RR8	Mojiang	Tongguan	Gongguan	Gongguan	Yes	20		
II. Ning'er-Jiangcheng-Longfu Highway Rehabilitation		Jiang cheng	Baozang	Shuicheng	Pasha'erzu	Yes	20	
				Banghe	Shitouzhai	Yes	20	
			Menglie	Jiangbian	Dashaba	Yes	20	
				Niuluohe	Xinzhai	Yes	20	
		Qushui	Nuna	Lonfu	Yes	20		
		Ninger	Mengxian	Heping	Sanjiacun	Yes	23	
				Huangzhai	Dafenshan	Yes	17	
III. Simao-Ning'er Highway construction*	Simao	Yixiang		Yongqing	Nalitian	Yes	30	
					Ganlanba	Yes	29	
				Banpo	Shijiazhai	Yes	29	
	Ninger	Tongxin		Namengmeng	Yangcaotang	Yes	28	
				Dawazi	Yangtianjing	Yes	24	
IV. Menglian-Menga Road		Menglian	Mengma	Nayun	Jingkang	Mangzhong	Yes	20
					Manghai	Mangsha	Yes	22
					Mengma	Manglang	Yes	15
					Paliang	Huilongkuo	Yes	10
						Yintai	Yes	11
						Menga	Longhai	Yes
		State-owned Menglian Farm					Yes	14

*It was replaced by Menglian-Meng'a Road during the PPTA, however, the data collected is still relevant for the socio-economic information within the project impact zone.

Source: Field survey. Total 520 households.

12. Out of a total 520 households surveyed, 87.7% are ethnic minority households, 48.7% households with a family size of 3-4 persons, 88.7% headed by male and 83.5% headed by ethnic minority (Table 2).

Table 2: Demographic Characteristics of Surveyed HHs

Characteristics of Surveyed HHs		No. of Surveyed HHs	% of Surveyed HHs
Ethnic minority family	EM family	456	87.7
	Non-EM family	64	12.3
	Total	520	100
Family head by gender	Male	461	88.7
	Female	59	11.3
	Total	520	100
Family head by nationality	Han	86	16.5
	Yi	71	13.7
	Hani	104	20.0
	Dai	69	13.3
	Lahu	85	16.3
	Wa	43	8.3
	Miao	7	1.3
	Hui	17	3.3
	Bulang	36	6.9
	Bai	2	0.4
	Total	520	100

Source: Household survey data.

13. **Key informant interview.** Key informants interviewed were from government agencies at prefecture levels and county/district level, such as Tea Bureau, Tourism Bureau, Labor and Social Insurance Bureau, Civil Affairs Bureau, Resettlement Bureau, Women's Federation, Poverty Alleviation Office, Ethnic Minority Affairs Bureau and Communication Bureau. The interviews aimed to understand existing programs and policies with respect to the project impacts on different social groups and explore opportunities to address issues. Key informants from private sectors such as bus companies, tea product companies, and various stores along the road were also interviewed to understand how existing programs and policies operated and what are the challenges faced. Representatives of NGOs were interviewed to gain an understanding of their experiences and lessons learned in addressing social issues. Community leaders were interviewed to collect information on poverty, gender and minority, poverty causes and poverty reduction programs implemented at the village level.

14. **Focus group discussion.** Various social groups in the Project areas with differences by gender, age, household economic situation, school, occupation and ethnicity were respectively organized to discuss their needs, opportunities and constraints brought by the Project. The focus group discussions also led to identification of positive and negative impacts of the Project on the local population. Social concerns and problems raised by different groups were cross-checked with results from Household Survey.

15. **Stakeholder consultation workshop.** Stakeholder consultation workshops were conducted at prefecture/county levels with key stakeholders in three stages. In the first stage the workshops focused more on the project scopes with participation of technical staff. In the second stage the consultations aimed to collect feedback on the initial RP, EMP, EMDP and GAP. The third stage consultations focused more on feedback regarding the Project detail design and implementation. The major stakeholders in the stakeholder workshops included the project EA and IAs, Poverty Alleviation Office, Women's Federations, Ethnic Minority Bureaus,

NGOS working on protection of HIV/AIDS, Pu'er Tea association, and representatives of the villages affected by land acquisition and relocation (LAR).

16. Overall stakeholders perceived benefits and potential issues summarized in Table 28.

III. LEGAL FRAMEWORK

A. Government Policy, Plans and Programs Concerning Ethnic Groups in China

17. 56 ethnic groups were officially identified from early 1950s to 1979 in the PRC. Among them, the Han who accounts for 91.6% of the total population is designated as the “majority” while all the other 55 are called “ethnic minorities”. The Common Program of the CPPCC adopted by the Chinese People’s Political Consultative Conference (CPPCC) in September 1949 clearly stipulated that “all the ethnic groups within Chinese territory were equal; the PRC, as a unified multi-ethnic state, instituted EM regional autonomy in areas where EM people lived in compact communities, establishing various levels of regional EM autonomous organs according to the population and scope of these areas.” Chinese constitution clearly prescribes that regional autonomy of EM is the basic policy in solving Chinese ethnic affairs and one key part of China’s fundamental political system. Given the poorer social and economic conditions of most minorities, the government has also adopted a policy of positive discrimination in favour of the minority groups to help them ‘catch up’. Policies and regulations incorporate a variety of measures to address the needs of ethnic people, including autonomous governments at various levels, special consideration in education, and funding of programs for the development of ethnic people.⁴

18. Ethnic minority autonomous prefectures and counties that have been established are concentrated in three provinces (Guizhou, Yunnan and Qinghai) and five (5) minority autonomous regions⁵ in China. The 1954 Constitution specified mechanisms for exercising autonomy in minority areas. Nationality autonomous areas have representation in government bodies at all levels, and government subsidies have been substantial in the following areas: special access to relief funds, loans, and subsidies to assist in economic development.⁶

19. Since the early 1980s, governments of autonomous areas have also been able to decide on economic policy, including what to produce. They have some latitude in allocating government subsidies, and within set guidelines, education and budgeting based on the Law on Ethnic Regional Autonomy (1984).

20. The key principles of PRC’s ethnic minority policies can be briefly summed up as: 1) ethnic equality and solidarity; 2) administrative autonomy of ethnic minority regions; 3) to develop economy and cultures of ethnic minority regions; 4) to cultivate ethnic minority cadres; 5) to improve science, education, civilization, health and other undertakings in ethnic minority regions; 6) to promote the application of ethnic minority languages; 7) to respect ethnic minorities customs and habits; and 8) to respect and protect ethnic minorities freedom of religious beliefs. On the top of its state-building agenda, PRC has been taking national unity, ethnic solidarity, ethnic equality and mutual respect as the basic guidelines of managing ethnic affairs.

21. Minority areas also have special access to relief funds, loans, subsidies and tax relief, to assist in economic development. For the eight provinces in the PRC where minorities are concentrated, including Yunnan, government subsidies in the past have been substantial. There are two existing funds to support poverty minority villages, the ethnic minority fund and the ethnic minority development opportunity, together receiving about CNY1-5 million per annum

⁴ On 28 Feb. 2001, Law of the People’s Republic of China on Region National Autonomy was revised and enacted.

⁵ Inner Mongolia, Xinjiang, Guangxi, Ningxia and Xizang.

⁶ For instance, in each county of Pu’er Prefecture, there is a special project every year to provide financial support to those ethnic minority students who passed the national exam for university entry but face difficulties to involve in university study due to poverty.

each county from the municipal and provincial levels. Both funds support minorities exclusively and can cover poverty alleviation, small village facility construction etc. A number of the other poverty alleviation programs⁷ are given priority to assisting ethnic minority people.

22. Despite these efforts, many ethnic minority groups and ethnic minority areas still lag behind in socioeconomic development, largely due to historical and geographical factors. Ever since Chinese government launched large-scale poverty alleviation in mid-1980s, ethnic minority areas have been the main focus. Among the 331 poverty counties identified in 1986, 141 were ethnic minority autonomous counties (42.6%). In the national “87 Plan for Poverty Alleviation” (1994), 592 counties were listed to be the main focus of poverty alleviation. Among them 257 (43.4%) were in ethnic minority autonomous regions. In 1990, the government established the “Fund for Food and Clothes in Ethnic Minority Areas in Poverty” focusing on helping ethnic minority counties in poverty. In 1992, “Development Fund for Ethnic Minorities” was established to help the development of ethnic minority autonomous regions or to overcome special difficulties in ethnic minorities’ production and life. In 2000, the Western Development Program was launched aiming at a faster development in the western part of the PRC, where most of the EM peoples are living.

23. In 2007, the State Ethnic Affairs Commission (SEAC) and other related departments formulated the Eleventh Five-Year Plan for Ethnic Groups Development, which shows the great attention the Central Government has paid to the development of ethnic groups. The plan prescribes 11 main tasks:

- to greatly improve the primary conditions for economic development in EM autonomous regions;
- to deal with poverty in EM groups;
- to improve education and technology;
- to promote medical care and public health;
- to develop cultural undertakings;
- to steadily improve public welfare ;
- to strengthen the cultivation of ethnic qualified persons;
- for EM groups and EM autonomous regions to continuously open wider to the world;
- to perfect ethnic-related law system;
- to improve the system of ethnic theories and policies;
- to continuously create the social environment where all the ethnic groups develop harmoniously.

24. In 2011, the Twelfth Five-Year Plan for Ethnic Groups Development was updated and issued with emphasis on infrastructure and capacity building. Followed the central government 12th Five Year Plan, Yunnan Province issued “The 12th Five Year Planning for Promoting Economic and Social Development of Ethnic Peoples and their Regions of Yunnan Province” (YunZhengFa [2011] No. 163). Its development objectives sited as: By 2015, the poor population of areas inhabited centrally by ethnic minorities with less population is at least halved, the per capita net income of farmers and herdsmen reaches or exceeds the local average, and the per capita net income of about half of farmers and herdsmen reaches or exceeds the national average; infrastructure security level, livelihood security level and self-development capacity are improved greatly. By 2020, areas inhabited centrally by ethnic minorities with less

⁷ See the Poverty and Social Assessment.

population will feature more balanced development, richer lives, a better environment, and a more harmonious and well-being society.

25. In addition, some special support is given to the ethnic groups whose population is less than 100,000 people (commonly called “smaller ethnic minority groups”). Since 2005, the 22 smaller ethnic minority groups have got annual special support from the central government to improve infrastructure and other living conditions. Since 2010, the number was updated to 28 with a new definition of “smaller EM” as those whose population is less than 300,000.

26. The PRC government has been accorded great importance to the protection of cultural rights of ethnic minorities, devoted to create favorable conditions for the inheritance and development of these cultures. The main activities include:

- Respecting and protecting the right to retain or alter their customs in daily life.
- Protecting the marriage customs. According to Article 50th of the Marriage Law, “the people’s congresses of the ethnic autonomous areas are authorized to make flexible alternation to the regulations in light of specific situations of local ethnic marriage and family.”
- Respecting and protecting the right to preserve traditional festivals.
- Respecting and protecting the right to retain or alter the ethnic funeral customs.
- The government has adopted a series of measures to cope with the cases in which a few news media and publications, violating the relevant state regulations, occasionally hurt the feeling of the ethnic minorities by defaming or distorting their customs.
- Respecting and protecting the right to use and develop their spoken and written languages.
- With great importance attached to the protection and development of the traditional cultures of ethnic minorities, the PRC has been collecting, editing, translating and publishing their cultural heritage ancient writings of ethnic minorities in a planned and organized way, and protecting their historical spots, priceless relics and historical heritages.
- Various measures are taken to guarantee the development of the medicine of ethnic minorities.
- Great importance is attached to the preservation of intangible or intangible cultural heritage of ethnic minorities.

B. ADB Policy on Indigenous People

27. Indigenous peoples (IP) in ADB’s Safeguard Policy Statement (SPS) (2009)/SR-3 is defined as groups with social or cultural identities distinct from that of the dominant or mainstream society. ADB defines ‘indigenous peoples’ as those whose social and cultural identities are distinct from that of the dominant or mainstream society. These distinct social and cultural groups often possess the following characteristics in varying degree:

- self-identification as members of a distinct indigenous cultural group and the recognition of this identity by others;
- collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
- customary, cultural, economical, social, or political institutions that are separated from those of the dominant society and culture; and

- a distinct language, often different from the official (or the dominant society's) language of the country or region.

28. The ADB's SPS (2009) recognizes the potential vulnerability of indigenous peoples in development processes. The policy works to ensure that indigenous peoples have opportunities to participate in and benefit equally from development. Accordingly, project activities must ensure that development initiatives affecting indigenous peoples are effective, sustainable and culturally appropriate. Initiatives should be compatible in substance and structure with the affected peoples' culture, social and economic institutions, and commensurate with the needs, aspirations, and demands of affected peoples. Initiatives should be conceived, planned, and implemented, to the maximum extent possible, including consultation with affected communities to ensure respect for indigenous peoples' dignity, human rights, and cultural uniqueness. Projects must avoid negatively affecting indigenous peoples, and provide culturally adequate and appropriate mitigation when a negative impact is unavoidable. Project strategies and approaches to development that affect indigenous peoples must include clear mechanisms for accurate, objective analysis of their circumstances. Development processes must incorporate transparency and accountability, and encourage the participation of IPs in project design and implementation.

29. ADB's Safeguard Policy Statement requires that any development project that has impact on IPs should ensure that:

- the project is in compliance with the IPs' requirements and desires;
- the project is, essentially and structurally, in compliance with the IPs' cultural, social and economic norms;
- the impacted people should be well informed about the concept, planning and implementation of the project and fully participate in it;
- equity must be guaranteed in the developmental endeavor and its impact; and
- the adverse impact of any developmental activity should not be imposed on the IPs. If such negative impact is unavoidable, proper and acceptable compensation or mitigation should be guaranteed.

30. To avoid, minimize and mitigate the adverse impact on IPs, ADB requires that all the ADB-financed development projects have to:

- undertake culturally appropriate and gender sensitive social impact assessment and planning process;
- prepare social impact assessment of the proposed project activities;
- undertake meaningful consultations with affected indigenous peoples communities in designing, implementation and monitoring measures to avoid adverse impacts and to ensure that IP communities benefit from the project in a culturally appropriate manner;
- prepare IP planning documents which specify (i) actions to mitigation adverse impacts and enhance project benefits in a culturally appropriate manner, and (ii) institutional arrangements and budget to implement the actions;
- disclose information and undertake meaningful consultation, which may include ascertaining consent of affected indigenous peoples' communities to selected project activities;
- establish a culturally and gender sensitive grievance mechanism; and
- monitor and report on implementation of the planning document.

Table 3: Summary Policy Framework for Ethnic Minorities of the PRC and ADB

Category	Name of Policy/ Regulation	Contents and Key Points
State laws and regulations	State laws and regulations: Constitution of the People's Republic of China, Law of the People's Republic of China on Regional Ethnic Autonomy, Law of Organization of Villager Committee of the People's Republic of China, Regulations on the Administrative Work of Ethnic Minority Townships the People's Republic of China, the 12 th Five-year Plan for Ethnic Minority Programs	<ol style="list-style-type: none"> 1. In addition to the same powers as local governments, the authorities of the localities of ethnic autonomy also have the following rights: autonomous legislative power; autonomy in the administration of local political, economic, financial, scientific, educational and cultural affairs, the right to organize local public security forces, and the right to use and develop ethnic minority languages, etc. 2. Citizens of the People's Republic of China shall have freedom in religious belief, and the state and the authorities of the localities of ethnic autonomy shall guarantee such freedom for citizens of all ethnic groups. 3. Administrative regulations for ethnic minorities shall be formulated to promote the development economic and cultural programs of ethnic minority townships, protect the lawful rights and interests of ethnic minorities, and enhance the unity among different ethnic groups. 4. Except those deprived of political rights, villagers attaining 18 years of age, regardless of ethnic group, race, sex, occupation, family background, religious belief, education, property condition or term of residence, shall have the right to vote and the right to be elected. 5. The state shall support all ethnic minorities financially, materially and technically to accelerate their economic development, cultural and other social programs. 6. Provincial, autonomous region and municipal governments shall take urban ethnic work as an important duty, strengthen leadership and make unified arrangements. 7. In spoken and written language work, we must adhere to the principle of ethnic equality, ensure that all ethnic groups have the freedom to use and develop their own languages, advocate all ethnic groups to learn from one another's language, enable languages to serve the reform and opening up, and all-round development of political, economic and cultural programs of the autonomous region, and promote the unity, progress and co-prosperity of all ethnic groups.

Category	Name of Policy/ Regulation	Contents and Key Points
State and Yunnan provincial supporting policy	<p>Development Plan for Ethnic Minorities with Less Population (2011-2015)</p> <p>Yunnan Province's Methods to Implement "Law of Regional Minority Autonomy of PRC" (ShengRenDa [2004] No. 14)</p> <p>The 12th Five Planning for Promoting Economic and Social Development of Ethnic Peoples and their Regions of Yunnan Province (YunZhengFa[2011] No. 163)</p>	<ol style="list-style-type: none"> 1. Among the 55 ethnic minorities, the 28 ones with a population of less than 300,000 shall be supported, including the Tajik, Uzbek, Russian and Tatar people. The period of planning shall be 2011-2015. 2. Development objectives: By 2015, the poor population of areas inhabited centrally by ethnic minorities with less population is at least halved, the per capita net income of farmers and herdsmen reaches or exceeds the local average, and the per capita net income of about half of farmers and herdsmen reaches or exceeds the national average; infrastructure security level, livelihood security level and self-development capacity are improved greatly. By 2020, areas inhabited centrally by ethnic minorities with less population will feature more balanced development, richer lives, a better environment, and a more harmonious and well-being society. 3. Priorities: Strengthen the construction of infrastructure and supporting facilities, improve development security level greatly, develop characteristic and advantaged industries to promote income increase, protect and improve livelihoods, promote the equality of basic public services, development of cultural programs and industries to prosper ethnic cultures, strengthen human resources development to enhance self-development capacity, promote ethnic unity and build a harmonious homeland. 4. Policy measures: Increase fund input, and strengthen financial services, counterpart-assistance, talent team building, and the implementation of prevailing policies and regulations. 5. Implementation: All departments concerned should give full play to their functions, strengthen guidance on classification, include the development of ethnic minorities with less population in their own plans, increase fund input, accelerate project arrangements, implement and enhance policy measures, and support and urge local authorities to carry out relevant work practically.

Category	Name of Policy/ Regulation	Contents and Key Points
ADB	Safeguard policy Statement (2009) safeguards requirement 3 of ADB for indigenous peoples (ethnic minorities)	<p>The ADB policy requirement 3 for indigenous peoples (ethnic minorities) aims to ensure that the dignity, powers, economies and cultures of ethnic minorities are fully respected during the project development process. The key policy points include:</p> <ol style="list-style-type: none"> 1. ADB acknowledges that indigenous peoples have the right to be consulted, participate and influence development decisions that affect them. Ethnic minorities may not benefit from development automatically, because development is often planned and implemented by the mainstream or dominant society in the country in which they live. Special efforts should be paid to enable ethnic minorities to participate in the planning of development projects that affect them, especially projects designed to meet their special needs and desires. 2. Projects should be designed and implemented in a way that fosters full respect for ethnic minorities identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by themselves so that they (i) receive culturally appropriate social and economic benefits, (ii) do not suffer adverse impacts as a result of projects, and (iii) can participate actively in projects that affect them. 3. To protect the rights and interests of ethnic minorities, project owners are required to: (i) conduct social impact assessment and planning; (ii) prepare social impact assessment and planning documents; (iii) disclose information and conduct consultation, including confirming that the affected ethnic minorities approve of the scope of construction; (iv) establish a grievance redress mechanism; and (v) conduct monitoring and reporting. This set of policy requirements will ensure that ethnic minorities maintain and carry forward their cultural features and practices, and their habitats, and that necessary measures are taken in projects affecting them to protect these rights.

Sources: PMO, Ethnic Minority Affairs Bureau.

IV. ETHNIC MINORITIES IN PROJECT AREA

A. Overall Social Economic Features of the Project Roads

1. Rural Access Improvement

31. A total of 33 rural earthen roads (599 km) are selected for upgrading to paved surface. These roads are distributed across all counties and district of Pu'er. These rural roads provide rural isolated communities away from main road with access to markets, to collection or processing stations for a sale of cash crops, and to towns and cities for employment opportunities. They also provide important social services such as access to school, health facilities and administrative services. However, many rural roads become impassable during the rainy season due to landslides and poor road surface.

32. In general, the proposed project roads are in poor condition caused by multiple factors including increasing traffic volume with the growth of cash crops and insufficient investments in road maintenance and rehabilitation. The poor condition of the roads is a major constraint for faster and easier mobility for local people to widen income-generating opportunities that are crucial to diversify household income sources for livelihood development. The bad road condition has been also obstructing the trade of agricultural products, hindering timely transportation of goods, which is becoming increasingly important for rural livelihoods under the changing situation of commercialized agriculture. Finally, the bad road condition is obstructive to accessibility of public transport services for local communities, particularly for the poor and women who are the major travelers using public transport.

33. There is little public transport service available on most rural roads due to: 1) poor road condition, 2) limited number of passengers and 3) heavily fluctuating traffic within a year. Among 7 surveyed villages along selected rural road only 2 of them have bus services. For those villages without bus services, villagers can only use private modes of transport such as motorcycle, tractor-trailer and tractor-truck. Several villagers provide passenger transport services with their own transport modes. Transport fares vary from village to village and from dry to rainy season. According to interviews, the fare of these transport modes could be as much as double during the rainy season.

34. The project is expected to improve the rural bus service through 1) improved rural road conditions which will most likely stimulate bus operation and, 2) piloting a low costs rural bus service. A participatory rural bus service planning approach will be adapted to formulate the demonstration and piloting.

35. The field survey selected 5 roads out of 33 proposed upgrading rural roads and two highways to study socio-economic features and to understand project benefits, impact and risks. Table 1 gives the basic information on roads and villages surveyed. The surveyed villages were classified as poverty villages and have implemented or are implementing poverty reduction programs. According to poverty alleviation offices, most of the villages along the proposed rural roads are poverty villages.

2. Regional Roads Development

a) Ning'er-Jiangcheng-Longfu Road

36. This component comprises a mixture of upgrading of existing road and new construction of some sections. The length of proposed road is 234.07 km with a mix of Class III and Class IV.

37. The road connects two counties, Ning'er and Jiangcheng and serves a population of about 10,000 in six townships. In these townships, 60% of the household income is derived from cash crops such as tobacco, bananas, sugarcane, rubber, coffee and tea. In 2012, the average farmland holding was 2.3 mu per capita and average income is CNY3,400 per capita. Minority groups account for 70% of the total population—majority being Yi and Hani.

38. Farmers of over 40 villages are fully dependent on the road for their livelihoods. They use the road to seek waged jobs, visit health facilities and markets, go to school, buy agricultural inputs and sell their products. Longfu Border Market is only 7 km away from one end of the road. The market is an important local commodity exchange center with Vietnam since 2010. The market days are 3rd, 13th and 23rd of each month. During dry season the market can attract from 3000 to 5000 visitors on the market days. Jiangcheng County Government prepared the Longfu Economic Development Plan (2011–2030) that proposes to upgrade the port to a National-level one⁸ (Current transport modes for farmers include motorcycle, tractor-trailer, small truck, bus and minivan. Availability of bus or minivan varies with routes connecting village to village, village to township, township to township, township to county and county to Pu'er city. Some branches of roads can be accessed by one return bus while others have no access to public transport services, due to poor road condition, or lower demand, or both.

39. The current road condition of Ning'er-Jiangcheng-Longfu cannot meet the increasing transportation demands. Some segments of road surface are badly damaged with dense potholes and many deformations. The Class IV road surface is too narrow to meet the increasing transportation demand because of fast expansion of cash crops areas. The considerable potential of cross border trading with Vietnam also requires a good and safe transportation connection. However, poor pavement, narrow road surface, increasing traffic volume, lack of effective measures of truck overloading control, and unclear safety signs at most intersections, are major factors contributing to unsafe travel on the road.

b) Menglian-Meng'a Road

40. The project comprises a mixture of upgrading of existing road and new construction of some realignment sections. The length of proposed road is 48.75 km with rehabilitation from existing Class III up to Class II.

41. The road connects the county town of Menglian and Meng'a border crossing and serves a population of about 50,000 living in the two biggest towns in Menglian County where 70% of household income is derived from cash crops such as bananas, rubber, coffee and tea. Minority population accounts for 80%. Dai, Lahu and Wa are the majority minorities. Among six surveyed villages, the average per capita farmland was 1.3 mu in 2012.

42. Livelihoods of villagers have improved significantly in recent five years as they take the advantage of road accessibility and convenient public transport availability to develop various cash crops to obtain more cash income. In 2012 per capita farmer net income reached CNY6,220 on average among the six surveyed villages.

43. All villages are fully dependent on the road access or access to branches of road to maintain and develop their livelihoods in terms of seeking waged jobs, visiting health facilities and markets, going to school, buying agricultural inputs and selling their products.

⁸ National level (class I) port operation all custom services including freight and visitors customs. Provincial level port does not provide custom entry service to visitors but local residents.

44. The border trade at Meng'a has been increasing rapidly. In 2012 there were 760,000 people (person/time), and 170,000 vehicles crossing Meng'a border port.⁹ The volume and the value of goods reached 530,000 ton and 170 million ton respectively in the same year. In 2012 Meng'a was approved as provincial level border economic zone by Yunnan provincial government. In 2013, a master plan of border economic zone development at Meng'a was prepared.

45. Currently the road condition (narrow road surface and many bends) is becoming an obvious barrier for cross-border movements. The Project will bring faster and bigger cross-border movements through upgrading existing Class III/IV road to Class II/I that will underpin the implementation of Meng'a border economic zone development as well as contribute to local residents' livelihood development, since the increasing border economy would create more business and job opportunities for the locals.

B. Ethnic Minority Population in Yunnan and Pu'er

46. Yunnan has the largest number of minority groups, as it is the origin for 26 nationalities, with 25 ethnic minorities accounting for 15 million people, 33.4% of the total population. Of these minority nationalities,¹⁰ the Yi is the largest group, with a population of 5.03 million (11%). However, other ethnic groups with a population exceeding one million include the Bai, Hani, Zhuang, Dai and Miao. There are 24 ethnic minority groups with population over 10,000. Among its 16 prefectures, 128 counties/districts and 1,376 towns/townships, there are eight ethnic minority autonomous prefectures, 29 ethnic minority autonomous counties and 197 ethnic minority townships.

47. Multiple ethnic minority groups in rural area characterize the population of Pu'er. Out of its 10 district/counties, except for the capital city Simao District, all nine counties are ethnic minority autonomous counties. The total non-Han ethnic minority population makes up 63.4% of the population. Hani is the biggest EM group with a population of 4.68 million (18.3%), followed by Yi (17.5%), Lahu (12.3%), Wa (6.3%) and Dai (5.9%), Yao (0.4%), Bai(0.5%), Hui (0.5%) and Miao (0.5%).

C. Ethnic Groups in Project Area

48. Table 4 shows the ethnic minority population in the project area by county. Ximeng County has the highest ethnic minority population (94.4%) with Wa as the majority group (71.1%), followed by Menglian County (86.1%) with Lahu (30.2%), Wa (24.6%) and Dai (20.5%) as the majorities groups, and Jiangcheng County (81.3%) with Hani as the majority group (50.3%). The other counties with EMs over 50% include Lancang (79.3%) with Lahu (43.2%) as the majority, and Zhengyuan (76.6%) with Hani as the majority (62.2%). Ning'er and Mojiang have ethnic minority population slightly less than 50% (Ning'er 49.8% and Mojiang 47.6%), and Simao districts has 35.2%.

⁹ Currently class II. The scale may enlarge but class level will most likely remain the same because the Myanmar side is not operated by its central government but autonomous district.

¹⁰ The term 'nationality' refers to which ethnic group people belong to and includes Hans. While term 'ethnic minority' refers 55 various ethnic groups but excludes the Hans (which are the majority) in the PRC.

Table 4: EM Distribution by District/County (2011) ('000 of population)

Area		Pu'er	Simao	Ning'er	Mojiang	Jingdong	Jinggu	Zhenyuan	Jiangcheng	Lancang	Menglian	Ximeng
Han	No.	935.4	171.8	183.4	161	95.3	87.9	87	23.2	102.9	17.7	5.2
	%	36.6	64.8	50.2	52.4	44.8	45.2	23.4	18.7	20.7	13.9	5.6
Total EMs	No.	1621.5	93.2	182.1	146.3	117.4	106.6	284.4	100.8	394	110.1	87.1
	%	63.4	35.2	49.8	47.6	55.2	54.8	76.6	81.3	79.3	86.1	94.4
Hani	No.	467.5	17.9	13.5	3.3	26.5	50.8	231.1	62.4	52	9.2	0.8
	%	18.3	6.7	3.7	1.1	12.5	26.1	62.2	50.3	10.5	7.2	0.9
Yi	No.	448.7	38	154.5	66	58.5	38.8	36.9	17.2	34.4	3.3	1
	%	17.5	14.3	42.3	21.5	27.5	20	9.9	13.8	6.9	2.6	1.1
Lahu	No.	313.7	4.1	1.6	12.3	18.3	1.9	4.7	1.8	214.8	38.7	15.5
	%	12.3	1.5	0.4	4	8.6	1	1.3	1.5	43.2	30.2	16.8
Wa	No.	161	3.2	0.1	0.1	0.1	0.3	0.1	0	60.1	31.4	65.5
	%	6.3	1.2	0	0	0	0.2	0	0	12.1	24.6	71.1
Dai	No.	150.5	9.4	3.2	57.6	9.1	7.1	5.4	9.1	19.9	26.2	3.5
	%	5.9	3.6	0.9	18.8	4.3	3.6	1.5	7.4	4	20.5	3.8
Bulang	No.	16.7	1	0.5	2.8	0.1	0.2	3.5	0.2	8.3	0.1	0
	%	0.7	0.4	0.1	0.9	0	0.1	0.9	0.2	1.7	0.1	0
Bai	No.	12.6	3	0.7	0.9	1.5	4.5	0.4	0.6	0.7	0.2	0.1
	%	0.5	1.1	0.2	0.3	0.7	2.3	0.1	0.5	0.1	0.2	0.1
Hui	No.	13.8	1.9	1.7	2.4	2.2	1.4	0.6	0.4	2.9	0.3	0.1
	%	0.5	0.7	0.5	0.8	1	0.7	0.2	0.3	0.6	0.2	0.1
Yao	No.	10.9	0.2	4.7	0.3	0	0.1	0.6	4.8	0.1	0	0
	%	0.4	0.1	1.3	0.1	0	0.1	0.2	3.9	0	0	0
Lisu	No.	7	6	0.1	0	0	0.2	0	0	0	0.3	0.1
	%	0.3	2.3	0	0	0	0.1	0	0	0	0.3	0.1
Miao	No.	12.7	8	0.6	0.1	0.2	0.1	0.1	3.5	0.1	0.1	0
	%	0.5	3	0.2	0	0.1	0	0	2.8	0	0	0
Mongolia	No.	1	0.2	0	0	0.4	0.2	0.2	0	0.1	0	0
	%	0.04	0.06	0	0	0.18	0.1	0.04	0.02	0.01	0.01	0
Others*	No.	5.4	0.5	0.8	0.3	0.5	0.7	0.8	0.8	0.7	0.3	0.4
	%	0.21	0.17	0.22	0.11	0.22	0.38	0.22	0.63	0.15	0.24	0.42

Sources: Yunnan Statistics Year Book 2011 and Pu'er PMO.

49. Table 5 shows the distribution of EMs by township along Ning'er-Jiangcheng-Longfu and Menglian-Meng'a roads. The total population in the area is 331,955, among which EMs amount to 228,792, (68.9%), including Yi 28.3%, Hani 9.3%, Dai 12.7%, Lahu 12%, Wa 6.4%, Yao 0.1% and Bai 0.1%.

Table 5: Ethnic Minorities in Project Townships along Ning'er-Jiangcheng and Menglian Meng'a Roads

Component	Municipal/ District/County/ Township	Total population	Sub-total Ethnic minority	%	Yi %	Hani %	Dai %	Lahu %	Wa %	Yao %	Bai %
Ning'er- Jiangcheng Longfu Road	Tongxin Township	16100	7406	46	20	20	3				3%
	Ning'er Township	48879	24440	50	30	20					
	Liming Township	11460	8022	70	60	10					
	Meizi Township	11349	6809	60	40	20					
	Mengxian	22853	12706	55.6		55.0					
	Ning'er Sub-total	110641	59383	53.7	26.5	26.3	0.4				0.4
	Kangping Township	22850	16681	73	72					1	
	Qushui Township	18556	15030	81	81						
	Guoqin Township	14051	0								
	Menglie Township	30609	25099	82	82						
	Baozang Township	9591	7961	83	83						
	Jiangcheng Sub- total	95657	64771	67.7	67.5					0.2	
	Longfu sub-total	206298	124154	60.2	45.5	14.1	0.2			0.1	0.2
Menglian Meng'a Road	Mengma Township	29786	23829	80			30	40	10		
	Jingxin Township	17765	14923	84		10	20	30	24		
	Gongxin Township	15568	14011	90			30%	40	20		
	Fuyan Township	13178	12387	94				50	44		
	Nayun	49360	39488	80			50%	20	10		
	Menglian Sub-total	125657	104638	83.3		1.4	33.3	31.8	16.8		
Total		331955	228792	68.9	28.3	9.3	12.7	12.0	6.4	0.1	0.1

Sources: Pu'er poverty reduction and development office (PRDO).

50. Collectively the 33 selected rural roads service 110 villages, 287 village groups, 16,280 households and 73,000 residents. It is estimated that 80% of the residents are ethnic minorities.

51. In the Project Area, ethnicity groups are often presented in mixed patterns in most villages. Table 6 presents the mix pattern of nine major non-Han ethnic minority groups in 18 villages surveyed, namely Han, Hani, Lahu, Yi, Wa, Yao, Bai, Dai. In addition there are 24 Bulang and two Zhuang people scattered in Bangpo, Dawaizi and Jiangbian villages. Most villages have more than two ethnicity groups and seven villages have predominantly one ethnicity. Villages with one dominant ethnic group are mainly located in Menglian, Jiangcheng and Ximeng Counties.

Table 6: Ethnic Minority Distribution by Surveyed Villages

Administrative Village	No. of HH	Population	Han	Yi	Hani	Lahu	Wa	Dai	Yao	Bai	Hui	Miao	Others*	Note
Yongqing	713	2802	2077	200	20	200		80		100	120	5		Han+ Multi-mixed
Banpo	482	2106	1652	400	40					8	4		2	Han+ Multi-mixed
Namengmeng	253	967	400	340	10		10	120		7	80			Han & Yi + multi-mixed
Dawazi	343	1342	90	971	24	120		12		120		1	4	Yi + Multi-mixed
Shuicheng	564	2873	35	1325	1320	20		60	108	5				Yi & Hani +multi-mixed
Banghe	286	1187	131	94	602	348		12						Hani & Lahu +multi-mixed
Jiangbian	466	1737	450	170	1093				4				20	Haini, Han & Yi mixed
Niuluohu	304	1152	58	33	1053					7		1		Hani+ multi-mixed
Nuna	570	2186	21	13	2102							50		Haini+ a few others
Heping	921	3982	1578	650	400					1354				Hai, Bai, Yi, and Haini
Huangzhai	255	1536	968	48	400			120						Han & Haini+
Gaojiancao	359	1549	1402	100	18	24	3	2						Han+ some other HH
Dongnai	949	3951	30			3920		1						Lahu+a few others
He'an	418	1415				1415								Lahu
Mowo	481	1447				2	1445							Wa
Yongbang	446	1433				3	1430							Wa
Yaojiasan	433	2033	9	106	92			2	1824					Yao+ a few other HHs
Gongguan	396	1645	1000	45	600									Han & Hani+
Total	8639	35343	9901	4495	7774	6052	2888	409	1936	1601	204	57	26	
%		100	28.0	12.7	22.0	17.1	8.2	1.2	5.5	4.5	0.6	0.2	0.1	

*Including 24 Bulang and two Zhuang scattered in Banpo, Dawazi and Jiangban villages.

Source: Field village survey.

52. **Language.** Most villages in remote area speak their own language. For the ethnically mixed villages, the spoken language depends on which ethnic minority group is in majority in that village or area. In Menglian, Ximeng and Jiangcheng Counties, most young people speak both Mandarin and their own ethnic language, but in Ning'er County, the youth mainly speak Mandarin only.

53. **Marriage.** Inter ethnicity marriage is practiced in most villages. For families with parents from different ethnic minority group, the children can succeed to either of the ethnic minority group of their parents. For families with Han and non-Han parents, children often claim to be ethnic rather than Han because of positive discriminate policies that favors ethnic minorities.

54. **Dressing.** As a result of fast commercialization and frequent interaction with major economic centers, ethnic minority dressing is only seen during holidays and specific events. In the daily life, people wear commercialized clothes. Convenience, diverse choices and being cheaper are the major reasons for the popularity of commercialized clothes.

55. **Religions.** Most ethnic groups in Pu'er are polytheists and animists. They do believe that there is no separation between the spiritual and physical world, and souls or spirits exist, not only in humans, but also in some other animals, plants, rocks, geographic features such as mountains, rivers, or other entities of the natural environment including thunder, wind and shadows. For example, Hani people profess a special adoration towards the spirit of their ancestors. They are used to practicing rituals to worship different gods and thus to obtain their protection. Yi people believe the dragon protect village against bad spirits and demons causing diseases. After someone dies they sacrifice a pig or sheep at the doorway to maintain the relationship with the deceased spirit. However, Dai people follow their traditional Buddhist religion and maintain similar customs and festivals to the other Buddhists.

56. **Perception of land.** The region inhabited by ethnic groups maintains a strong agricultural focus. Ethnic groups regard the land as a fundamental source of their livelihoods. Traditionally Dai and Hani minorities have been cultivating land for over 1,000 years. Hani people had created well known terraced rice paddies in the vast areas of mountains. Dai people have inhabited in the valley areas where there are abundant water resources and fertile land. Rice produced by Dai people is of high quality. Dai people maintain a ritual to thank the land after harvest. Historically shifting cultivation was practiced by most ethnic groups such as Lahu, Wa, Yi, Miao and Yao. But the shifting farming system has been transformed into terraced land cultivation since 1950 when PRC was established. With the increasing demand of cash income, lots of minority households expand areas for growing more cash crops. As a result the value and perception of land are changed from the earlier ones. The land is becoming the important source of cash income for most households.

57. **Holidays.** Each ethnic minority group has their own holidays, like the "Fire Torch Festival" of Yi, the "Water-Sprinkling Festival" of Dai, "Zalate" (October, new year) and "Kuzaza" (May festival) of Hani, "Kouza" or "Koumuza" of Lahu, "Sanyuejie" of Bai, etc.

58. **Interaction among EMs.** Each of ethnic groups always happily invites the other ethnic groups to join its festival. The culture and traditions of each ethnic group are respected. In the ethnic-mixed village, it is not easy to identify each other among the nationalities during normal social activities except Hui with special religious and food customs. In a village with Han, Yi, Hani, Bai the study team visited, for example, even the village leaders needed to track their records to identify what ethnic groups one is from. Similar things took place in another village with Dai, Lahu, Hani, Miao, Wa that the study team visited. The diverse ethnic minority groups are well integrated with each other.

59. **Interaction with outside world.** Interaction with outside world has been significantly enhanced by fast development of road network, electricity, and mobile Internet that is available in almost every village. Given these new developments, it is hard to say there is an absolute isolated ethnic minority. For example, as mobile Internet is available, online shopping does not need a PC any more. Online shopping has rapidly extended to rural villages, including rural ethnic minority villages. In Menglian, the survey team was told that goods of online shopping could be delivered in 3-5 days to township centers where villagers can pick these up. In each township, there are 2-4 representatives of different express companies responsible for collecting or delivering. Ethnic minorities are quickly integrating into modern life. All interviewed ethnic minority are happy with the integration.

60. **Livelihood Patterns:** According to the SPA conducted for the project, it indicates 4 basic livelihood patterns of the villagers in project area, namely,

- (i) Dominance of cash tree/crop income. This is the most common pattern in the affected villages. It exists in all EM groups and Han. In terms of which cash crops planted or will be planted more, it depends on location of the village and weather of the area. For example, for Dai community, those located in the mountain altitude over 1500 meter, tea and tobacco are their main cash crops. Located in mountain or valley lower than 800 meters, rubber and banana are the main cash crops, located in between 800-1500 meters, coffee, banana are the main cash crops. As banana, rubber and coffee are the most profitable cash crops in the project areas, the Dai in located in lower altitude area have comparably higher income than the Dai in higher altitude area. Similarly as EM of Lahu, Wa, Hani, Yi, Yao and Non-EM Han.
- (ii) Transition from traditional agriculture to cash tree/crop plantation. A small proportion of Dai, Lahu and Wa, but relatively larger proportion of Hani, Yi, Yao, Dai, Lauhu, Wa, Miao and Hui group are engaging more and more on transition from the traditional agriculture to cash crop/tree plantation. This transition is dependent on a number of factors such as being located at lower altitude mountain area, suitable weather, convenient transport and access to funds to invest on cash crops.
- (iii) Combination of income from both cash trees/and non-farming business. In addition to cash income, more and more households have started to diversify their income from non-farming business such as transportation, processing, wholesale, and trade, or migration to urban areas. Almost all EM group could find some households belongs to those livelihood pattern. Relatively, villages located close to town centers have higher proportion of households belongs to this type. Off-farming income dominated households. All EMs and Han have households with such livelihood pattern. Relatively, Hani, Yi, Dai, Bai, Hui and non-EM of Han have higher proportion of households with such livelihood pattern.

61. Additionally, a few of households are engaged in the land leasing for and labor working for outside investors. Proportion of young people migrant to urban city was higher in late 1990s and decreased now because of the cash crop boom in the project area. However, some young people in project area still look for seasonal work out of village, with aims to explore wider opportunities. All EMs and Non-EM of Han, have such cases. Table XXX provides a comparative statement of the income structure between the ethnic minority and non- ethnic minority population in the project area.

Table 7: Income Structures by EM and Non-EM (%)

Income source	EM (N=369)	Non-EM (N=51)	Total N=420
	Average % of total income	average% of total income	Difference between EM and non-EM
Cash crops (Coffee, rubber, tea, tobacco, vegetables, fruit and NTFP)	35.4%	43.7%	-8.2%
Waged employment income	25.7%	19.1%	6.6%
Livestock	10.6%	19.5%	-8.9%
Land rental, compensation or other policy allowance for agricultural development	9.8%	7.7%	2.1%
Supporting the poor	7.2%	1.9%	5.3%
Non-farming business (wholesaler, transport, repair, restaurant, processing, etc.)	5.7%	4.8%	0.9%
Traditional crops (Grain, oil plants)	5.2%	3.0%	2.2%
Other	0.4%	0.3%	0.1%
HH total income	100%	100%	0.0%

Source: Socio-economic HH survey, total 420 households.

62. **Land ownership and management:** In the PRC, all lands are either state owned or owned by the village collectives in China regardless of EM or non-EM areas. In the rural area, the land is owned by the village but the land use right is allocated to the households from village group. Therefore each villagers within a same village group at early 1980s when the household responsibility system was established, has same size of land. But among the village groups, the land size per capita varies. Villagers are allowed to use the land on their own wish but could not sale or change land use type, e.g from farm land to housing lot without approval. At the early stage of household responsibility system established, the land could not be leased officially, later 1990s, land lease are officially allowed.

63. **Institutional structure:** village leadership including 5-8 leaders are directly elected by villagers every 4 years. Those 5-8 leaders including 1 party secretary, 1 village head, 1 accountant and book keeper, 1 women representative, 1 birth control management staff, and some technical focal point, tea or tobacco technical focal point depends on the specialized plantation pattern. The system is same for the EMs and Non-Ems. Most administrative villages have one primary school unless it is too close to the town center or county center. All administrative villages established village clinics officially and at least on village doctor is trained to provide basic services. In addition, each village also have one or two local traditional Chinese herb medicine practitioners to provide local knowledge based services unofficially.

64. **Perception of land:** The region inhabited by ethnic groups maintains a strong agricultural focus. Ethnic groups regard the land as a fundamental source of their livelihoods. Traditionally Dai and Hani minorities have been cultivating land for over 1,000 years. Hani people had created well known terraced rice paddies in the vast areas of mountains. Dai people have inhabited in the valley areas where there are abundant water resources and fertile land. Rice produced by Dai people is of high quality. Dai people maintain a ritual to thank the land after harvest. Historically shifting cultivation was practiced by most ethnic groups such as Lahu, Wa, Yi, Miao and Yao. But the shifting farming system has been transformed into terraced land cultivation since 1950 when PRC was established. With the increasing demand of cash income, lots of minority households expand areas for growing more cash crops. As a result the value and perception of land are changed from the earlier ones. The land is becoming the important source of cash income for most households.

D. Project related effects on Ethnic Minorities

65. The land acquisition and house demolition resulting from Regional Roads Development output are the main project related affect for the EMs.

66. The rural road upgrading mainly involves surface pavement with very limited roadbed widening at some bends and is unlikely to cause land acquisition and relocation (LAR) impacts.

67. On the Ning'er-Jiangcheng-Longfu road, a total of 22 villages will be affected by the land acquisition and house demolition. Total affected people (AP) by land acquisition amount to 13,875 in 3,835 households. Of the APs, Han is 5,337, accounting for 38.5%, and EMs 8,538 or 61.5% including Hani 4,528, 32.63%, Yi 3,324, 23.96%, Lahu 301, Dai 169, Hui 38, Wa 17 and Yao 4.

Table 8: Distribution of APs and EMs along Ning'er-Jiangcheng-Longfu Road

Administrative village	No. HH	Population	Male	Female	Han	Hani	Yi	Dai	Yao	Lahu	Wa	Hui
Minzheng	220	845	435	410	655	12	160	10	0	3	2	3
Banhai	120	480	238	242	192	281	4	3	0	0	0	0
Manlian	344	1376	681	695	206	619	551	0	0	0	0	0
Xinping	300	1200	594	606	540	480	120	60	0	0	0	0
Taida	296	1043	516	527	600	0	443	0	0	0	0	0
Xishitou	533	1600	792	808	600	200	800	0	0	0	0	0
Wenquan	398	1287	637	650	717	437	133	0	0	0	0	0
Heping	312	1000	495	505	300	358	288	8	0	4	12	30
Qianle	51	204	101	103	180	24	0	0	0	0	0	0
Anning	60	190	94	96	152	30	5	0	0		3	0
Xuande	80	400	198	202	150	50	30	10	0	10	0	0
Yalu	191	883	437	446	400	483	0	0	0	0	0	0
Xianren	112	448	222	226	161	179	103	5	0	0	0	0
Wangjie	90	350	173	177	190	100	30	10	0	20	0	0
Tuanshan	80	320	158	162	140	54	108	4	4	5	0	5
Shuicheng	305	976	498	478	38	525	354	59	0	0	0	0
Banhe	160	512	261	251	16	230	0	0	0	266	0	0
Jiangbian	82	328	167	161	98	164	66	0	0	0	0	0
Niulehe	21	98	50	48	2	95	1	0	0	0	0	0
Dazhai	11	55	28	27	0	35	20	0	0	0	0	0
Bashan	30	120	61	59	0	12	108	0	0	0	0	0
Nuna	39	160	82	78	0	160	0	0	0	0	0	0
Total	3835	13875	6918	6957	5337	4528	3324	169	4	301	17	38
%		100	49.9	50.1	38.5	32.6	24.0	1.2	0.03	2.2	0.1	0.3

Source: RP Report.

68. A total of 1693 people in 439 households will be affected by house demolition. Around 60% are ethnic minorities. As road impacts are linear, there are no whole village resettlement will be required. The project will find approved relocation sites for the AH within the same village group. It will not have major disturbance on the affected HH as community and social relationship will remain intact. With previous experience of house relocation and compensation for road construction, as well as during public consultations with the EM communities for this project, the affected households do not regard house relocation as a serious impact. Households affected by house demolition will be adequately compensated and will be able to construct better quality houses within their original villages as outlined in the resettlement plans for the project.

69. Along the Menglian-Meng'a road, a total of six villages in two townships will be affected by the land acquisition and house demolition. Total APs by land acquisition amount to 3,370 in 713 households. Of the APs, Han is 145, (4.3%), and EMs 3,225 (95.7%) including Dai 2734 (81.1%), Wa 246 (7.3%), Lahu 245 (7.3%). Among the land-affected population, 600 people in 146 households will also be affected by house demolition.

Table 9: Distribution of APs and EMs along Menglian-Meng'a Road

Administrative Village	No. of HH	Population	Male	Female	Han	EMs in total	Dai	Lahu	Wa
Mangzhang	50	200	102	98	0	200	200	0	0
Paliang	101	450	230	221	0	450	0	204	246
Mengma	90	360	184	176	80	280	280	0	0
He'an	10	41	21	20	0	41	0	41	0
Manghai	218	1221	623	598	56	1165	1165	0	0
Meng'a	244	1098	560	538	9	1089	1089	0	0
Total	713	3370	1720	1651	145	3225	2734	245	246
%		100	51.0	49.0	4.3	95.7	81.1	7.3	7.3

Source: RP.

70. In addition the project will affect 225 people in 45 households of Meng'a state farm, and Mengma Tea Company. A total 75 people in 15 households will be affected by house demolition. All of them are Han not ethnic minority.

V. PROFILE OF ETHNIC MINORITY GROUPS IN THE PROJECT AREA

a) Hani

71. The Hani is an ancient ethnicity in China. Hani group mainly located in southern Yunnan, including in Honghe Hani and Yi Autonomous Prefecture, Xishuanban Dai Autonomous Prefecture, Pu'er and Yuxi Prefecture Municipality. Hani nationality has its own language but no traditional characters until 1950s when a set of alphabetic writing was created to put into trial use. Hani group is good at music and dancing. Palm fan dancing is one of their traditional dance performances. Hani believe in that everything has the spirit and the soul is eternal even when people die. Naturism and Ancestor Worship are popular. They are polytheists and profess a special adoration toward the spirits of their ancestors. They are used to practicing rituals to venerate to the different gods and obtain their protection. A shaman presides over the rites, at which sacrifices of cattle are offered. The Hanis prefer clothing made of home-spun dark blue cloth. Men wear front-buttoned jackets and trousers, and black or white cloth turbans. Women have collarless, front-buttoned blouses with the cuffs and trouser legs laced. Both men and women wear leggings. In Mojiang, Yuanjiang and Jiangcheng, some women wear long, pleated or narrow skirts, while others have knee-length trousers with embroidered girdles. Women in general like to wear earrings, silver rings and necklaces. Married and unmarried women wear different hairstyles. The Hanis build their two- and three-story houses of bamboo, mud, stone and wood on hill slopes. A village comprises from ten to as many as 400 households. The Hani people celebrate their New Year in October, as their lunar calendar begins in that month. During the weeklong festivities, pigs are slaughtered and special glutinous rice balls are prepared. Relatives and friends visit each other, go-betweens are busy making matches, and married women go to see their parents. They also celebrate the June Festival, which falls on the 24th of that month. This is a happy occasion especially for the young people. They sing, dance, play on swings and hold wrestling contests. At night, people in some places light pine torches while beating drums and gongs to expel evil spirits and disease. They have abundant oral literature and folk song and dance. Most people, women and men, old and young are fond of carrying musical instruments such as Pau and flute during their festivals of Zalate (October, new year) and "Kuzaza" (May festival). Legends, fairy tales, poetry, stories, fables, ballads, proverbs, mythology and riddles form their oral literature. Genesis is a legend describing the origin of all things on earth. An Account of Floods tells how men conquered floods. Labare and Ahjigu are songs sung on solemn occasions such as weddings, funerals, festivals and religious rituals. Hani live in upland with an elevation of 800-2000 meters above the sea level and are mainly engaged in agriculture. Hani terraced rice cultivation is well known now.

72. Hani is the biggest ethnic minority group in Pu'er distributing in all counties and district but comparably concentrating in Mojiang Hani autonomous county, Ning'er and Jiangcheng Hani & Yi autonomous county, and Zhengyuan Yi, Hani and Lahu autonomous county.

b) Yi

73. The Yi is an ancient ethnicity in China originating from Qiang. Yi people are the largest ethnic minority group in Yunnan Province. The Yi nationality believes in many gods and worships ancestors. Some Yi who lived with the Han also believed in Buddhism. The Yi people have their own language. Yi characters, one of the earliest syllabic scripts in China, were formed in the 13th century and are still used today. Works of history, literature and medicine, as well as genealogies of the ruling families, all written in the old Yi script, can still be found in most Yi areas. However, due to cultural and economic exchanges with the Han, more and more Yi people are now using the Han language and characters in daily life. Yi mainly live in mountainous area. "Fire Torch festival" (June) is the most important festival. The Yis are

monogamous, living in nuclear families. Before 1949, marriages were generally arranged by parents, and the bride's family often asked for heavy betrothal gifts. In many places, married women stayed at their own parents' home till their first children were born. Patriarchal and monogamous families were the basic units. The Yis traditionally associated the father's name with the son's. When a boy was named, the last one or two syllables of his father's name would be added to his own. Such a practice made it possible to trace the family tree back for many generations. In the Yi families, women were in a subordinate position with no right to inherit property, but the remnants of matriarchal society could still be seen clearly sometimes. The Yis much respected the power of uncles on the mother's side, and relations between such uncles and nephews were close.

74. Yi is the second largest group in Pu'er and relatively concentrated in Jingdong Yi Autonomous County and Zhengyuan, Jinggu, Ning'er and Jiangcheng Autonomous County. The earliest Yi calendar divided the year into 10 months, each with 36 days. The tenth month was the period of the annual festival. Influenced by the Han Lunar Calendar, the Yis later divided the year into 12 months, using the 12 animals representing the 12 Earthly Branches to calculate the year, month and date. The New Year festival was not fixed but generally fell between the 11th and 12th lunar months. In celebrating the New Year, the Yis would slaughter cattle, sheep and pigs to offer sacrifices to ancestors. "The Torch Festival," held around 24th of the sixth lunar month, is a common tradition for the Yis in all areas. During the festival, the Yis in all villages would carry torches and walk around their houses and fields, and plant pine torches on field ridges in the hope of driving away insect pests. After making their rounds, the Yis of the whole village would gather around bonfires, playing moon guitars (a four-stringed plucked instrument with a moon-shaped sound box) and mouth organs, dancing and drinking wine through the night to pray for a good harvest.

c) Lahu

75. The Lahu is an ancient ethnicity in China originating from Qiang in Gansu and Qinghai provinces and moved to the south and eventually settled in the delta area of Lancang River from Lincang and Gengma in west to Lancang and Menglian in the south. Historically, Lahu people are good at hunting. "Lahu" means "tiger hunting". Lahu have its own language, believes in gods of mountains and ancestors. "Kouza" or "Koumuza" meaning New Year is the most important festival to Lahu. The Lahus ethnic minority has a population of 453,705, mainly distributed in the Lancang Lahu Autonomous County in Simao Prefecture, Southern Lincang Prefecture and Menghai County in western Xishuangbanna in Yunnan Province. Others live in counties along the Lancang River. The Lahu language belongs to the Chinese-Tibetan language family. Most of the Lahus also speak Chinese and the language of the Dais. In the past the custom of passing messages by wood-carving was prevalent. In some parts the alphabetic script invented by Western priests was in use. After 1949, the script was reformed and became their formal written language. Lahu men wear a collarless jacket buttoned on the right side, baggy long trousers, and a black turban. The women wear a long robe with slits along the legs. Around the collar and slits are sewn broad strips of color cloth with beautiful patterns and studded with silver ornaments. Women's headdress extends a dozen feet long, hanging down the back and reaching the waist. Their houses are built on stilts, with the space below reserved for domestic animals. The style of building is similar to the Dais'.

76. Lahu are monogamous. Women played the dominant part in marital relations. After the wedding, the husband stayed permanently in the wife's home, and kinship was traced through the mother's side. In other areas, men played the dominant part in marriage. Betrothal gifts were sent through a matchmaker before the wedding. After 1949, with the implementation of the marriage law, the old custom of sending betrothal gifts had been less strictly observed. Traditionally, the dead were cremated. During the burial, mourners were led to the common

cremation ground by women, who carried on their backs articles used by the deceased people during their life time. In some places, the dead person was buried, and the tomb piled with stones. The Lahu people used to worship many gods. Their super god was "Exia," who was believed to have created the Universe and mankind, and had the power to decide the good or bad fortune of people. Exia was placed in a forbidden place in the depth of mountainous forests, unapproachable by non-Lahu peoples. They also worshipped the deities of earth and revenge. The music and dances of the Lahu people have their unique styles and are permeated with life. There are many melodies and songs. Traditional musical instruments include the lusheng (a reed pipe wind instrument) and three-stringed guitar. Their dances, numbering about 40, are characterized by foot tapping and swinging to the left. The Lahus have a rich stock of oral literature, most of which is related to physical labor. The most popular form of poetry is called "Tuopuke" or puzzle. The social economy in the Lahu areas had remained stagnant for a long time. The Lahus used the same farm tools as the Hans, but due to their relatively backward farming technique, yields were low. Handicrafts included ironwork, weaving and bamboo handiwork, but few of the products were sold on the market.

77. Lahu is the third biggest ethnic minority group in Pu'er and is concentrated in Lancang Lahu Autonomous County and Menglian and Zhengyuan Autonomous County although they can be found throughout Pu'er.

d) Wa

78. Wa live in a compact region of Pu'er and Lincang Prefectures. The population of Wa ethnicity is distributed in Ximeng, Lancang and Menglian of Pu'er as well as in Cangyuan and Gengma of Lincang. Wa language belongs to the Palaungic branch of the Austroasiatic language family. Wa minorities live in the upland mountain areas. Agriculture is their main livelihood. They primarily produce food crops of rice, corn and potato from their limited paddy land. The vast areas of upland are creating more cash income for them by growing sugarcane, banana, coffee and rubber. Wa worship the spirits of ancestors, fire, hills, trees, rocks, water, earth and forests. The Wa language belongs to the Austroasiatic family. Before the founding of the People's Republic of China in 1949, except for some parts of the area where an alphabetic script was used, the Wa people had no written language, and they kept records and accounting or passed messages with material objects or by engraving bamboo strips. The monogamous family was the basic unit of the Wa society. Family property generally was inherited by the youngest son, while daughters were denied the right to inherit. Marriages were arranged by parents, and the bridegrooms had to pay several cattle as betrothal gifts. Elopement used to take place as a result of forced marriages. Most of the Wa villages were built on hilltops or slopes. When a family built a new house, others came to help and presented timber and straw as gifts. The Wa people dress differently according to different areas. Men's garments consist of a collarless jacket and very wide trousers. Their turbans are usually black or red and their ears are pierced, through which red and black tassels are threaded. Young men like decorating their shins with circular ornaments woven with bamboo strips or rattan. A Wa woman wears a black short dress and a straight long skirt with folds. She has a silver (or rattan) hoop round her head and silver necklets and chains of colored beads round her neck. Round her hips are many circular hoops of rattan.

79. Wa are worshippers of nature, believing that all the mountains and rivers and natural phenomena had their deities. They were believed to bring good or bad fortune to people. Frequent religious activities were held to obtain protection from deities and ghosts. Every year the activities started with making sacrifices to the deity of water, praying for good weather and good harvests. Cattle were carved up and their tails cut off as offerings. Post 1949, two important economic measures were taken in the Wa areas to improve production and people's life. One was to provide the poor Wa peasants with food and seeds, draught cattle and farm

tools, while helping them build irrigation projects to extend rice paddy fields. The other was to set up more state trading organizations to expand state trade. These measures brought changes to local production and daily life, enabling the people to do away with usury and exploitation by landlords. Industrial and agricultural development brought marked changes to the commerce, transport and communications, culture and education and health of the Wa people.

80. The Wa in Pu'er is concentrated mainly in Ximeng, Lancang, and Menglian counties and Simao District.

e) Dai

81. In PRC, Dai can only be found in Yunnan. They are mainly concentrated in Xishuangbanna Dai Autonomous Prefecture, Dehong Dai and Jingpo Autonomous Prefecture, Gengma Dai and Wa Autonomous County in Lincang Prefecture and Menglian Dai, Lahu and Wa Autonomous County in Simao Prefecture Municipality. Dai nationality is divided into three sub-groups according to their cultural practices (mainly Tai Lue in the project area). They use different languages and written characters, which makes each sub-group quite distinctive although they share common traits (e.g. festivals). Most Dai people are located in river valley and flat areas, and thus occupy the best farmlands. The Dai have their own written characters and oral language. The Dai believes in Theravada Buddhism. In each Dai community, there is a Buddhist temple. People, especially older than 40 years, go to the temple twice a week during August and October for confessing what they done in the past year. People entering into the temples must take off their shoes. Women cannot enter the temples through the center gate, only through the side door.

82. The Dai language belongs to the Chinese-Tibetan language family and has three major dialects. It is written in an alphabetic script. The increasing economic and cultural interflow between the Han and Dai peoples, as well as the migration of many Han people to the frontiers, taking with them advanced production skills and culture and science, promoted the economic development of Dai society. For a long time the Dais had grown rice as their main crop, and they had developed a rather complete, intensive farming system and gained rich experience in irrigation. The religious beliefs of the Dai people were closely related to their economic development. Residents on the borders generally were followers of Hinayana, a sect of Buddhism, while retaining remnants of shamanism. There were many Buddhist temples in the countryside, and it was a common practice, especially in Xishuangbanna, to send young boys to the temples to learn to read and write and chant scriptures, as a form of schooling. Some of them became monks, while most of them returned to secular life. The marriage of the Dais was characterized by intermarriage on strictly equal social and economic status. Polygamy was common among chieftains. The patriarchal monogamous nuclear family was the common form among peasants. It was common for the groom to move into the bride's home after the wedding. The graveyards of aristocrats and poor people were strictly separated. Men wore collarless tight-sleeved short jackets, with the opening at the front or along the right side, and long baggy trousers. In winter they drape a blanket over their shoulders. They wore black or white turbans. Tattooing was common. When a boy reached the age of 11 or 12, a tattoo artist was invited to tattoo his body and limbs with designs of animals, flowers, geometric patterns or the Dai written script. Traditionally, women wore tight-sleeved short dresses and sarongs. The buildings generally are built on stilts. Some of the houses are square, with two stories. The upper story serves as the living place, while the lower space, without walls, is used as a storehouse and for keeping livestock. Dai festivals, closely related to religious activities, included the "Door-Closing" festival in mid-June by the lunar calendar, the "Door-Opening" festival in mid-September, and the "Water-Splashing" festival in spring. "Door-Closing" started three months of intensive religious activities. "Door-Opening" marked the beginning of normal life. "Water-

Splashing," still held every year, is the most important festival, during which the Dais splash water on one another, and hold dragon boat races in the hope of chasing away all the illnesses and bad fortune of the past year and bringing about good weather and bumper harvests. The Dais have a rich, colorful culture. They have their own calendar, which started in 638 A.D. There are books in Dai script for calculating solar and lunar eclipses. Dai historical documents carry a rich variety of literary works covering poetry, legends, stories, fables and children's tales. They love to sing and dance, accompanied by their native musical instruments.

83. Dai (Shan in Myanmar) ethnic group is the fifth largest ethnic minority group in Pu'er with wide distribution to all counties and district. In the surveyed villages, the Dai live in mixed society with Yi, Hani, Han, Bai, etc.

f) Yao

84. Yao people are distributed primarily in the provinces of Hunan, Guangxi, Guizhou and Yunnan. Historically, the Yaos have had at least 30 names based on their ways of production, lifestyles, dresses and adornments. The name "Yao" was officially adopted after the founding of the People's Republic in 1949. Yao minorities reside in the mountainous terrain of Pu'er Prefecture. The men and the women cover their heads with a black or red scarf. The traditional suit of the women is of bright colors. They also adorn their shirts with decorations made out of silver. Before 1949, the Yaos did not have a written language. Ancient Yaos kept records of important affairs by carving notches on wood or bamboo slips. Later they used Chinese characters. Prior to 1949, there were three types of economic organizations followed by the Yao people. The first and most common type, with agriculture as the base and forestry and other sideline occupations affiliated. The second type was centered on forestry, with agriculture as a sideline. The third type, engaged in by a tiny percentage of the Yao population, was the "slash-and-burn" cultivation. Today hunting remains an important part of Yao life. On the one hand, it provides them with a greater variety of food; on the other, it prevents their crops and forests from being damaged by too many wild animals. After hunting, the bag is divided equally among the hunters. Sometimes portions are given to the children carried on the elders' backs, but the hunter who caught the animal is awarded a double portion. Sometimes, part of the bag is put aside for the aged people back in the villages. The Yaos practiced an interesting form of cooperation called "singing-while-digging." At times of spring ploughing, 20 to 30 households work together for one household after another until all their fields are ploughed and sown. While the group is working, a young man stands out in the fields, beating a drum and leading the singing. Everyone sings after him.

85. The Yaos have such unique life styles that the various communities are quite different from each other. In modern times, the Yao costumes maintain their diversity. Men wear jackets buttoned in the middle or to the left, and usually belted. Some men like trousers long enough to touch their insteps; some prefer shorts akin to knee breechs. Men's dress is mainly in blue or black. Women's dress varies more. Some Yao women fancy short collarless jackets, cloth belts and skirts either long or short; some choose knee-length jackets buttoned in the middle, belts with both ends drooping and either long or short slacks; some have their collars, sleeves and trouser legs embroidered with beautiful patterns. In addition to the silver medals decorating their jackets, many Yao women wear silver bracelets, earrings, necklets and hairpins. A typical Yao house is a rectangular wood-and-bamboo structure with usually three rooms -- the sitting room in the middle, the bedrooms on both sides. A cooking stove is set in a corner of each bedroom. Some hillside houses are two-storied, the upper story being the sitting room and bedrooms, the lower story stables. In old Yao families, the mother's brothers had a decisive say in crucial family matters and enjoyed lots of other privileges. Festivals take place one after another in the Yao communities, at a rate of about once a month. Although festive customs alter from place to place, there are common celebrations such as the Spring Festival, the Land God

Festival, the Pure Brightness Festival, "Danu" Festival and "Shuawang" Festival. The Yaos worshipped a plethora of gods, and their ancestors. Their belief in "Panhu," the dog spirit, revealed a vestige of totemism. The Yaos cherish a magnificent oral literary tradition. Singing forms an indispensable part of their life. Besides drums, gongs and the suona horn (a woodwind instrument), the long waist drum, another traditional musical instrument, is unique to the Yaos. The Yaos are expert weavers, dyers and embroiderers. In the early 1950s, few Yao people had any education, but today, schools can be found in all villages. Almost every child of school age gets elementary and secondary education.

86. In Pu'er, Yao has the total population of 10,863 distributed mainly in Ning'er and Jiangcheng counties. Most Yao live in the remote mountainous areas with abundant farming land and forestland. Except their own land, the villages are also surrounded by large area of state-owned forestland. Their livelihood took advantages of the forestland for cattle production in the past. Now there is a shift toward cash crop plantations.

87. The project will promote cash crop plantation in their area. Many households expressed technical training and credit needs to take advantages of the road improvement.

g) Bai

88. The language of the Bai belongs to the Zang-Mian Austronesian of Han-Zang Phylum. They have also invented their own written characters based on the Han characters. Thus many words are in fact taken from the Han language. The Bais speak a language related to the Yi branch of the Tibetan-Myanmese rroup of the Chinese-Tibetan language family. The language contains a large number of Chinese words due to the Bais' long contact with the majority Chinese ethnic group--Han. The Bai people mainly believe in "Benzhu" (village god). In each village and region, the Benzhu has a different meaning attached to it. Some are referred to as the God of Nature, others as national heroes, famous officers, and as loyal women. A small group of them also believe in ghosts and Buddhism. The Bai people prefer the white color. Men like to wear white shirts while women's clothing differs from place to place. Over the centuries, the Bais have created a science and culture of their own. The superb architectural skill of the Bai people is represented by the three pagodas at the Chongsheng Temple in Dali. They have created a wealth of literary works reflecting their life, work, and struggles against nature and oppression. The epic, Genesis, sings the praises of the communal life of Bai primitive society. Some poems by Bai poets have been included in the Complete Poems of Tang Dynasty. The History of the Bais, Anecdotes of Nanzhao and Kingdoms of Southwest China are among the best historical works written by Bai historians. The Bai people are good singers and dancers. The "Lion Dance," created during the Nanzhao regime, was appreciated in the central plains during the Tang Dynasty. Bai opera, known as chuichui, is an art form combining folk music and dancing. It has also absorbed some of the characteristics of Han operas.

89. The Bais are Buddhists and worshippers of "communal god." Dotted with monasteries and temples, Dali has been known as a "Scented Wonderland." Abbots who held huge amount of land and other property in the past were big landlords and usurers. The ordinary people were heavily burdened by this caste and by religious activities which required sacrifices of cattle and other valuables. Monogamous families have been the basic social cells of the Bais. Before the founding of the People's Republic of China in 1949, matches between young men and young women of the same surname or clan were not permitted, while marriages between cousins were encouraged, and were arranged by the parents. High bride prices caused many poor families to fall into debt. Women were discriminated against, and only men had the right to inherit family property. But all such feudal practices and customs have been fading away since 1949. The "March Fair," which falls between March 15 and 20 of the lunar calendar, is a grand festival of the Bais. It is celebrated every year at the foot of the Diancang Hill to the west of Dali city. It is a

fair and an occasion for sporting contests and theatrical performances. People gather there to enjoy dances, horse racing and other games. June 25 is the "Torch Festival." On that day, torches are lit everywhere to usher in a bumper harvest and to bless the people with good health and fortune. Streamers bearing auspicious words are hung in doorways and at village entrances alongside the flaming torches. Villagers, holding aloft torches, walk around in the fields to drive insects away. Before 1949, the feudal landlord economy was dominant in most Bai areas. Incipient capitalism had developed in a few cities and towns, while vestiges of the primitive communalism and remnants of the slave system were still in existence. About 90 per cent of the people were farmers who possessed only 20 per cent of the arable land. In areas where the lord system prevailed, peasants were all serfs, who owned neither land nor personal freedom.

90. The Bai ethnic group mainly relies on agriculture. The main crops are rice, winter wheat, beans, millet, cotton, rape, sugarcane and tobacco. Bai people living in the plains rely on rice and wheat as their staple food and those in mountain areas mostly depend on corn, yam and buckwheat. Pickles and bean sauce are famous snacks of the Bai people.

91. Bai group has a wide distribution in Yunnan but mainly distributes in Dali Bai Autonomous Prefecture. In Pu'er, Bai group mainly live in Jinggu, Jingdong, Mojiang Simao and Ning'er county/district. The total population was 12,589 in 2012. In the surveyed village, Bai group in Heping, Dawazi and Yongqing lived together with Han, Hani, Yi, etc.

h) Hui

92. The Hui Nationality is descended from the Arab and Iranian traders who travelled to China during the Tang Dynasty. Immigrants from Central Asia increased their numbers during the Yuan Dynasty. The Hui have a wide variety of occupations, many of which relate to Islamic restrictions on diet and hygiene: restaurateur, innkeeper, shepherd, farmer, butcher, tanner, tea trader, jeweler, interpreter and clergyman. The Hui are well known for their business skills. A higher proportion of Hui than of other ethnic groups live in urban areas and they are usually considered to be a financially better-off ethnic minority. The Hui people also have their own religion (muslim) and costume. The Islamic religion had a deep influence on the life style of the Hui people. For instance, soon after birth, an infant was to be given a Huihui name by an ahung (imam); wedding ceremonies must be witnessed by ahungs. Men were accustomed to wearing white or black brimless hats, specially during religious services, while women were seen with black, white or green scarves on their head. Islamism also had great impact on the political and economic systems of Hui society. "Jiaofang" or "religious community," as once practiced among the Huis, was a religious system as well as an economic system. An imam was to be invited to preside over the religious affairs of the community as well as to take responsibility over all aspects of the livelihood of its members and to collect religious levies and other taxes from them. A mosque functioned not only as a place for religious activities but also as a rendezvous where the public met to discuss matters of common interest. Hui artisans were famous for their craftsmanship in making incense, medicine, leather and cannons, as well as in mining and smelting of ore. Hui merchants played a positive role in the economic exchanges between the hinterland and border regions and in trade contacts between China and other Asian countries.

93. Hui scholars and scientists made outstanding contributions to China in introducing and spreading the achievements of Western Asia in astronomy, calendars, medicine and a number of other academic and cultural developments. After 1949, the Chinese government has carried out a policy of regional ethnic autonomy in Hui-populated areas. Officials from the Hui ethnic minority occupy an appropriate percentage in the organs of autonomy at all levels. The social and economic situation among the Hui people has undergone fundamental changes during the last three decades. The production and livelihood of the Huis in the countryside have improved

continuously. Considerable progress has been made by the Huis in farmland capital construction, construction of water conservancy works and mechanized farming. Mass literary, artistic and sports activities have been spreading among the Huis, resulting in the emergence of outstanding artists and sportsmen. The skills of veteran Hui artisans in producing such traditional special handicrafts as carved ivory, cloisonne, Suzhou embroidery, carved bricks and carpets have been carried on and developed.

94. Hui are mostly found in Lancang, Mojiang, Jingdong and Ning'er.

i) Miao

95. The Miao people originated from Hunan and migrated to Guizhou and Sichuan during the Qin dynasty. Some 500 years ago, during the Ming and Qing dynasties, some Miao people started to migrate from Guizhou to Longlin and Xilin, although large populations remain there today. Miao people have their own language and special costume. They are mainly engaged in agriculture. In the areas of Yunnan Province where Miao people are most concentrated, they speak only their own language. However, in other areas, including the project counties, they speak Han, Miao and sometimes Yi if they live in a mixed village or township. The Miao language belongs to the Miao-Yao branch of the Chinese-Tibetan language family. It has three main dialects in China -- one based in west Hunan, one in east Guizhou and the other in Sichuan, Yunnan and part of Guizhou. In some places, people who call themselves Miao use the languages of other ethnic groups. Their clothing has distinctive features which vary from place to place. In northwest Guizhou and northeast Yunnan, Miao men usually wear linen jackets with colorful designs, and drape woollen blankets with geometric patterns over their shoulders. In other areas, men wear short jackets buttoned down the front or to the left, long trousers with wide belts and long black scarves. In winter, men usually wear extra cloth leggings known as puttees. Women's clothing varies even from village.

96. In northwest Guizhou, Sichuan and northeast Yunnan, they mainly eat maize, potatoes, buckwheat and oats. Before 1949, for lack of salt, many Miao people had to flavor their food with pepper or a sour taste. Many even had to live on wild vegetables. Because timber resources are plentiful in most Miao areas, houses are usually built of wood, and roofed with fir bark or tiles or are thatched. Houses vary greatly in style. In mountainous areas, they are usually built on slopes and raised on stilts. Animals are kept under the stilted floors. The typical Miao family is small and monogamous. Aged parents are usually supported by their youngest son. Marriages are usually arranged by parents, but unmarried young men and women have the freedom to court. Mass courting occasions sometimes take place during holidays. Different Miao communities celebrate different festivals. Even the same festivals may fall on different dates. In many areas, the Miaos have Dragon Boat festivals and Flower Mountain festivals (May 5), Tasting New Rice festivals (between June and July), Pure Brightness festivals and the Beginning of Autumn festivals. In Yunnan, "Stepping over Flower Mountains" is a popular festivity for the Miaos. Childless couples use the occasion to repeat vows to the god of fertility. They provide wine for young people, who sing and dance under a pine tree, on which hangs a bottle of wine. Young men and women may fall in love on this occasion, and this, it is hoped, will help bring children to the childless couples.

97. The Miaos used to believe in many gods. The Miao have a highly diversified culture developed from a common root. They are fond of singing and dancing, and have a highly-developed folk literature. The lusheng is their favorite musical instrument. In addition, flutes, copper drum, mouth organs, the xiao (a vertical bamboo flute) and the suona horn are also very popular. Popular dances include the lusheng dance, drum dance and bench dance. The Miaos create a variety of colorful arts and crafts, including cross-stitch work, embroidery, weaving, batik, and paper-cuts. After 1951, a number of Miao autonomous divisions were established in

Guizhou, Yunnan, Guangxi, Guangdong, and Hunan. Most of these autonomous divisions have taken the form of multiethnic autonomy, as the Miaos have for a long time lived harmoniously with the Tujia, Bouyei, Dong, Zhuang, Li and Han peoples.

98. Miao has a wide distribution in east area of Yunnan bordered with Guizhou province and Guangxi Autonomous Region. In Pu'er Miao concentrate in Jiangcheng County.

j) Lisu

99. The Lisu Group originated from ancient Qiang nationality and share the same origin with Yi. In China, Lisu people only live in Yunnan. According to historical records, the ancestors of the Lisu once lived along the banks of Jinsha River (Upper Yangtse) and Yalong River. Between the 15th and 19th century, they gradually migrated into the delta areas of the Nu and Lancang Rivers. Lisu people have their own written characters and oral language. There is very little difference between Lisu dialects in different areas in Yunnan or Myanmar. Phrases of Lisu character in different areas are very similar. Many Lisu can read Han and speak Mandarin. The Lisu people believe that everything in the world has its god, and they are naturists. Necromancers host the sacrifice offering ceremonies. Lisu women often wear an embroidered jacket, flax skirt and various ornaments such as shells, coral, beads, silver coins, and agate, with white cloth around the head, big copper loops and silver loops on ears. Men normally wear a jacket with a flax gown outside. Some wear a black turban with a knife hanging on his left waist, and an arrow on his right. The Lisu language belongs to the Chinese-Tibetan language family. In 1957, a new alphabetic script was created for the Lisu people. Before 1949, in Lijiang, Dali, Baoshan, Weixi, Lanping and Xichang, areas closer to China's interior, a feudal landlord economy was prevalent. Traditionally, they had to make up for their scanty agricultural output by collecting fruits and wild vegetables and hunting. Their simple production tools consisted of iron and bamboo implements. Slash-and-burn was practiced. The division of social labor was not distinct, and handicrafts and commerce had not yet been separated from agriculture. Bartering was in practice. The clan and village commune played an important part in practical life. The "ka," or village, meant a place where a group of close relatives lived together. Apart from common ownership of land and working on it together, clan members helped one another in daily life. When there was wine or pork, they shared it. When a girl got married, they shared the betrothal gifts given to her parents; and when a young man took in a wife, the betrothal gifts for the bride's family were borne by all. Debts too, were to be paid by all. These collective rights and obligations in production and daily life made it possible for clan relations to continue for a long time.

100. In the past the Lisu people worshipped many gods, nature and a multitude of other things. This appeared to be a remnant of totemism. Religious professionals made a living by offering sacrifices to ghosts and fortune-telling. During the religious activities, animals were slaughtered and a large sum of money spent. In the middle of the 19th century, Christianity and Catholicism were spread into the area by Western missionaries. The monogamous family was the basic unit of Lisu society. Sons left their parents and supported their own families after getting married. The youngest or only son remained with the parents to take care of them and inherit property. The daughter had no right of inheritance but could take her husband into her parents' home instead of being married off. Marriages were arranged by parents, with enormous betrothal gifts. The dead were buried. Generally the village or the clan had its own common graveyard. In most areas the Lisu people wear home-spun hemp clothes. Women put on short dresses and long skirts. Their heads are decorated with red and white glass beads and their chests with necklaces formed by strings of colored beads. Men wear short dresses and pants reaching the knee. Some of them wear black turban. A cutting knife dangles at a man's left waist, and a quiver hangs at his right waist. The festivals of the Lisus living closer to the hinterland are nearly the same as those of the Han, Bai, Naxi and other peoples around. During

the Lunar New Year, the first thing they do is to feed their cattle with salt to show respect for their labor. They have the Torch Festival in the sixth month of the year, and the Mid-Autumn Festival in the eighth month. The Lisu in the Nu River and Weixi areas enjoy their "Harvest Festival" in the 10th month, during which people exchange gifts of wine and pork. They sing and dance till dawn.

101. The Lisu people mainly engage in agriculture and grow maize, rice and buckwheat. Hunting also plays an important role in their life and the man who wins in an archery match will be greatly respected by the people.

102. Lisu has a wide distribution along Nujiang River with concentration in Nujiang Lisu Autonomous Prefecture. In Pu'er Lisu group is mainly present in Simao District.

A. Poverty Analysis of EMs

103. There are two groups of poverty population. The first group is the poorest group under the Minimum Living Standard Scheme (MLSS), which is the official poorest sector of the population. A total of 583,996 persons in 255,438 households, or 22.8% of the total population, belong to this group. The second group is the low-income group whose annual net income is less than CNY2,300 in rural areas. Statistically, it is included the rural MLSS group. In Pu'er, the total rural poverty population was 890,000 or 34.8% in 2011. The MLSS standard is CNY184 per month.

104. The proposed project road is in a poverty concentration area. Table 10 shows the 2012 poverty population distribution in project counties/district and townships. The average poverty incidence ratio along the selected roads is 36.9%, higher than the average of 34.8 in Pu'er. Out of the 32 potential beneficiary and affected townships, 18 townships have a poverty incident ratio over 30%. It is expected the project will play an important role in poverty reduction. Table 10 presents the comparative analysis of the existing poverty among the EM and non-EM groups.

Table 10: Poverty Population Distribution in project Townships (2012)

Municipal/District/County/Township	Rural Population ('0000)	Rural Poverty Population ('0000)	Poverty Ratio (%)	Poverty Ratio of EMs (%)	Poverty Ratio of non-EMs
Pu'er Prefecture	81.98	30.21	36.9	36.5	37.1
Simao District sub-total	13.19	1.85	14.0	13.9	14.1
Nanping Township	2.05	0.17	8	7.9	8
Yixiang Township	4	0.49	12	12.2	11.9
Longtan Township	1.04	0.22	21	20.8	21.1
Liushun Township	1.22	0.22	18	17.8	18.3
Yunxian Township	1.7	0.38	22	21.7	22.4
Simao Township	1.52	0.11	7	6.7	7.4
Simao Port Township	1.66	0.26	16	15.9	16.2
Ning'er County sub-total	13.73	2.67	19.4	19.2	19.6
Tongxi Township	1.53	0.22	14.4	14.2	14.6
Ning'er Township	4.6	0.54	11.8	11.9	11.7
Liming Township	1.12	0.19	17	16.8	17.1
Meizi Township	1.09	0.49	45	44.8	45.1
Jingdong County sub-total	2.2	0.48	21.8	21.6	21.9
Longjie Township	2.2	0.48	21.8	21.7	21.9
Jingu County sub-total	5.39	1.23	22.8	22.7	22.9
Weiyuan Township	5.39	1.23	22.8	22.7	22.9
Mojiang County Sub-total	17.27	8.29	50.9	50.7	51
Lianzhu Township	6.02	2.54	42	41.8	42.1
Tongguan Township	2.5	1.03	41.2	41	41.5
Mengnong Township	0.98	0.58	59	58	59.4
Jiangcheng County sub-total	7.77	4.65	59.7	59.6	59.8
Kangping Township	2.13	1.34	63	62.8	63.1
Qushui Township	1.7	0.86	51	50.7	51.2
Guoqin Township	1.3	0.84	64.6	64.4	64.9
Menglie Township	1.8	0.97	53.9	53.7	54.0
Baozang Township	0.84	0.63	75	74.8	75.2
Zhenyuan County sub-total	6.5	2.31	35.5	35.4	35.8
Zhedong Township	2.9	1.13	39	38.4	39.7
Anban Township	2.2	0.51	23.2	23.5	23.1
Gucheng Township	1.4	0.67	47.9	47.6	48
Lancang County sub-total	4.61	3.15	68.3	68.2	68.4
Fubang Township	2.09	1.45	69.4	68.8	70.0
Nanling Township	2.52	1.7	67.5	66.9	68
Menglian County sub-total	7.03	2.98	42.4	41.9	42.6
Mengma Township	2.92	1.09	37.3	37.1	37.5
Jingxin Township	1.27	0.56	44.1	44.0	44.3
Gongxin Township	1.53	0.69	45.1	45	45.3
Fuyan Township	1.31	0.64	48.9	48.6	49
Ximeng County sub-total	2.09	1.63	78.0	77.6	78.3
Zhongke Township	1.01	0.69	68.3	68.1	68.5
Mengka Township	1.08	0.94	87	86.8	87.1

Sources: Pu'er poverty reduction and development office (PRDO).

105. Most of the surveyed villages in Jiangcheng, Ning'er, Menglian, Ximeng and Mojiang area along the proposed rural roads, and the villages along the Ning'er-Jiangcheng-Longfu

highway are poor villages. All the surveyed villages have received poverty reduction assistance to help them improve housing, electricity, tap water, clinic, solar heating system or other community infrastructures according to the community needs. The investment amount differs from a hundred thousand to millions of yuan. However, group discussions revealed that the most important changes in the past few years of the surveyed 18 villages are road improvement, increase of cash crops, and reduction of tuition burden after the 9-year free education policy, and income increase.

B. Characteristics of Poor Households

106. According to the updated national rural poverty line (annual net income CNY2,300 per capita), 46.4% surveyed HHs were defined as poor (annual net income below CNY2,300 per capita in 2012), 24.3% of surveyed HHs (CNY2,300-5,000) middle, 19.0% upper middle (CNY5000-10000) and 10.2% were classified as better-off (> CNY10,000) households.

107. However, in terms of self-evaluation of economic status, 56% of the surveyed households viewed themselves as poor with 3.1% as extremely poor. Some households have young cash crop from which the income is not steady yet. That is part of the reason a lot of households still evaluate themselves comparable poor.

Table 11: Economic Status and Self-Evaluation by Surveyed HHs

HH Economic Status		No. of Surveyed HHs	% of Surveyed HHs
Annual net income per capita	< CNY2300	213	42.1
	2300-5000	123	24.3
	5001-10000	108	21.3
	10001-20000	48	9.5
	>20000	14	2.8
	Total*	506	100
Self-evaluation of economic status	Better-off	4	0.8
	Middle	233	47.5
	Poor	256	49.2
	Extremely poor	13	2.5
	Not sure	0	0.0
	Total	506	100

* Exclude 14 households who are workers (Han) of state farm excluded in this categorization but included 50 Han or Mixed Households in other villages.

Source: Field HH survey.

108. Field group discussions found that villagers' self-evaluation considered not only income, but also the assets, housing, and capacity of income generation. Most of them believe they will benefit from the cash crop/tree plantation or non-farming job/business stimulated by the road. For the extremely poor, the main reason is illness or being handicapped. They will mainly benefit from easier access to social services not income increase.

109. **Land holding.** Landholding varies with villages and groups. During the land reform (so called rural households responsibility system) in early 1980s, land use rights were equally distributed among household members within the same village group. Therefore the land holdings were more or less same within a same village group. As of today, landholding difference depends on changes of household members regardless of ethnicity. Table 12 has the average farming land and cash crop land by surveyed villages with different ethnicities.

Table 12: Cultivated Land by Surveyed Village Groups

Road Name	District/ County	Town /Township	Administrative village committee	Farmer net income (CNY/capita)	Farming land (Mu/capita)	Cash crop (Mu/capita)	Ethnicity
Rural Road	Simao	Liushun	Gaojiancao	3,300	2	4.1	Han+a few other HH
			Menglian	Mengma	Dongnai	3,634	2.2
	He'an	2,700			3.8	4.1	Lahu
	Ximeng	Mengka	Mowo	3,571	2.6	1.1	Wa
			Yongbang	2,670	2.1	4.9	Wa
	Jiangcheng	Kangping	Yaojiashan	3,206	3.2	8.7	Yao+ a few other HH
Mojiang	Tongguan	Gongguan	4,500	1.5	1.5	Han & Hani+	
Ning'er- Jiangcheng- Longfu Road	Jiangcheng	Baozang	Shuicheng	5,012	3.5	2.3	Yi & Hani +multi-mixed
			Banghe	5,120	3.8	5.2	Hani & Lahu +multi-mixed
		Menglie	Jiangbian	6,300	10	8.5	Hani, Han & Yi mixed
			Niuluohe	3,800	5.3	5.3	Hani+ multi-mixed
	Ninger	Mengxian	Heping	6,000	3.4	1.7	Han, Bai, Yi, and Haini
			Huangzhai	1,570	5.7	1.7	Han & Haini+
Simao- Ning'er Road	Simao	Yixiang	Yongqing	4,226	0.75	2.8	Han+ Multi-mixed, suburban
			Banpo	3,800	1.4	2.9	Han+ Multi-mixed
	Ninger	Tongxin	Namengmeng	2,224	8.6	1.5	Han & Yi + multi-mixed
			Dawazi	4,656	2.1	2.6	Yi + Multi-mixed
Menglian- Meng'a road	Menglian	Nayun	Mangzhong	10,080	2.3	8.6	Dai
		Mengma	Mangsha	8,467	1.19	7.34	Dai+Wa+Lahu
			Manglang	4,970	1.2	1.18	Dai+Wa+Lahu
			Huilongkuo	2,000	0.62	5.15	Lahu+ a few other HH, mountain, farming land more forest land
			Yintai	3,800	1.2	12	Yi+Hani+Wa+Lahu, Mountain more forest land
			Longhai	8,000	9.9		Wa

Source: Field village survey.

110. The major differences of land holding between poor and non-poor are dry land and forestland instead of traditional paddy land and orchard land. More dry land and forestland indicate either different potential to cash crop growing such as tea, coffee and rubber, banana or existing matured rubber, coffee and tea which categorized as forestland. It is implied that the proposed project will be helpful to the current poor to free themselves from the constraints of being remote, will provide them with opportunity to engage in enhanced cash crop with access to the market and will help them out of the poverty.

111. Table 13 shows the different land holdings of major cash crops between the poor and non-poor households. 53.5% of the surveyed households grow tea while only 3.7% grow mulberry. The non-poor households have more areas of cash crops than the poor households have except for mulberry. The differences from the highest to lowest areas of cash crops are vegetable (7.07 mu), coffee (6.04mu), rubber (4.6mu), tobacco (2.52mu), tea (2.25mu), banana (0.93 mu) and mulberry (0.21).

Table 13: Cash Crops Plantation Holding Between Poor and Non-poor HHs (2013)

Cash Crops	HH with Cash Crops (N=520)			Poor HH with Crops (N=216)			Non-poor with Cash Crops (N=304)			Difference of Non-poor and Poor
	No. of HH	%	Area per HH (mu)	No. of HH	%	Area per HH (mu)	No. of HH	%	Area per HH (mu)	Area per HH (mu)
Banana	40	7.6	4.69	17	7.9	4.22	23	7.6	5.15	0.93
Coffee	175	33.7	8.44	66	30.6	5.42	109	35.9	11.46	6.04
Mulberry	19	3.7	1.89	9	4.2	2	10	3.3	1.79	-0.21
Vegetable	88	16.9	6.13	25	11.6	2.59	63	20.7	9.66	7.07
Rubber	122	23.5	20.77	51	23.6	18.47	71	23.4	23.07	4.60
Tea	278	53.5	5.64	105	48.6	4.43	173	56.9	6.84	2.25
Tobacco	123	23.7	7.82	27	12.5	6.56	96	31.6	9.08	2.52

*Walnuts, orange and other fruits/nuts trees.

Source: Field HH survey, total 520HH with 87.7% EMS.

112. **Assets possession.** Transport vehicles represent the biggest share of the total household assets for both poor, (40.6%) and non-poor (48.7%), which play important role in income generation and household livelihood for both. Table 14 details the assets holding of the surveyed households by poor and non-poor.

Table 14: Assets Possession between Poor and Non-poor

	% in Assets Value per HH	Poor (N=195)	Non-Poor (N=225)	Total(N=420)
Domestic asset	TV & DVD & hi-fi	7.7	6.0	6.6
	fridge	3.3	3.6	3.5
	washing machine	1.4	1.9	1.7
	phones	3.9	3.2	3.4
	air conditioner	0.1	0.1	0.1
	car/jeep/minivan/truck	11.1	25.7	20.6
	motorcycle/bicycle/tractor	29.5	23.0	25.3
	furniture	8.0	6.7	7.2
	other	0.2	0.2	0.2
	Sub-total	65.2	70.3	68.5
Productive asset	livestock	24.3	20.3	21.7
	fish	0.8	1.5	1.2

	% in Assets Value per HH	Poor (N=195)	Non-Poor (N=225)	Total(N=420)
	poultry	3.5	2.6	2.9
	farming machine	4.1	2.6	3.1
	processing machine	2.0	1.6	1.8
	stored goods	0.1	1.0	0.7
	Sub-total	34.8	29.7	31.5
	Total	100	100	100

Source: Field HH survey.

113. Out of 520 surveyed households, 89% (85.6% for Poor and 91.4% for non-poor) have transport vehicles (Car, Jeep, pick-up, minivan, truck, tractor, motor-tricycle, motorcycle and electric bikes (which is in the villages close to county town or big townships).

Table 15: Households with Transport Vehicle by Economic Status and EMs

Do your family have transport Vehicle?	Poor (N=216)		Non-Poor (N=304)		Total(N=520)	
	No.	%	No.	%	No.	%
Yes	185	85.6	278	91.4	463	89.0
No	31	14.4	26	8.6	57	11.0
Total	216	100	304	100	520	100
Types of Vehicle's owned*	Han (N=51)		EMs (N=369)		Total(N=420)	
	% of HHs	No. of HHs	% of HHs	% of HHs	No. of HHs	% of HHs
1. Car/jeep/truck (Qiche)	5	9.8	49	13.3	54	12.9
2. Motorcycle/Moto tricycle/tractor	37	72.6	325	88.1	362	86.2

Note: Around 10% of the Household with both categories.

Source: Household survey data.

114. Out of 455 surveyed EM households, over 90% households have motorized transport vehicles; including 13.3% households have cars/Jeep/truck/pickup while 88.1% have motorcycle/motor tricycle/ tractor (around 10% households have both). Field group discussions revealed that there is no big difference between having or not having transport tools for the poor and non-poor households, but the difference is on the basis of value and types. Household surveys proved that poor and non-poor, EM and Non-EM households have quite high percentages of transport vehicle ownership. It suggests that most households regardless of poor or non-poor, EM or Non-EM will directly benefit from the Project road improvement.

115. **Income structures and expenditure patterns.** Table 16 details the income structure of the poor and non-poor. The sources of income and shares are similar between poor and non-poor in terms of items. The poor households have less income from non-farming business, land rental, compensation and policy allowance for agricultural development and cash crops, and more income from supporting poor, waged employment and traditional crops.

Table 16: Income Structures between Poor and Non-poor (CNY) (%)

As % of Average Total HH Income	Difference between Poor and Non-poor	Poor (N=216*)	Non-Poor (N=290*)	Total (N=506)
Cash crops (Coffee, rubber, tea, tobacco, vegetables, fruit and NTFP)	5.2	47.2	50.4	49.5
Waged employment income	-2.5	21.2	15.3	15.3
Livestock	-1.4	10.5	11.9	10.4
Land rental, compensation or other policy allowance for agricultural development	-2.4	5.4	7.8	5.4
Supporting the poor	4.2	6.3	2.1	4.5

As % of Average Total HH Income	Difference between Poor and Non-poor	Poor (N=216*)	Non-Poor (N=290*)	Total (N=506)
Non-farming business (wholesaler, transport, repair, restaurant, processing, etc.)	-4	4.2	8.2	9.6
Traditional crops (Grain, oil plants)	1.3	5.0	3.7	4.9
Other	-0.4	0.2	0.6	0.4
HH total income		100	100	100

* Excluded 14 Han households in State farm but included 50 Han or mixed household in other villages.

Source: Household survey data.

116. Group discussions revealed that the poorer households continued with traditional crop plantation and shifted to cultivation of cash crops only at later stages. This was attributed to three major factors: i) lack of capital investment for developing high value added crops, ii) lack of techniques in developing cash crops, and iii) the poor are often located in remote villages with poor road condition or climate condition for cash crop growing. In general, those villages with more cash crop plantation and earlier development appear to have better economic condition. In terms of non-farming incomes, the poor have less percentage from business operation but higher percentage from waged employment. Lack of available capital and experience for investment are the major two obstacles for the poor to be involved in business operation. Local cash cropping has boomed in the past 10 years and created a lot of waged farming jobs for the remote villagers. It is expected the proposed project will improve the access of the poor villages by rural road component. The EMDP includes measures of technical training and coordination of existing credit programs to enhance the project benefits.

117. A comparison of living expenditure between poor and non-poor is shown in Table 17. Fuel, travel and goods transport costs consume a large portion of the household expenditures at 13.2% (poor) and 13% (non-poor). The poor spent a higher percentage on agriculture and other investment. From group discussions it was learnt this is because cash crop plantation required a large investment in the first few years without any income. The poor started cash crop plantation comparably later than the non-poor. A lot of non-poor households had invested before and started harvesting. The poor spent less on health care and education. It was also found that the poor face more health problems and travel more than non-poor to village clinics because of their cheaper costs.

Table 17: Household Expenditure Patterns between Poor and Non-poor

As % of HH expenditure	Difference between poor and non-poor	Poor (N=216)	Non-Poor (N=304)	Total (N=520)
Food & Clothing	0	19.2	18.2	19.2
Fuel, travel and goods transport	1.2	13.2	13.0	12.5
Health care and education	-4.2	23.4	28.2	25.2
Other living expenditures*	3.5	20.7	17.2	18.9
Agricultural production and other investment	3.7	19.4	14.7	17.4
Building/reconstructing house	4.3	4.1	8.7	6.8
Total expenditure		100	100	100

Source: Household survey data, total case 520 households with 2305 members.

C. Causes of Poverty

118. The various surveys and discussions have allowed an analysis of poverty characteristics and the forming of conclusions regarding the main causes of poverty at the village and

household levels in the project areas. Remote location with under-developed transport infrastructure and harsh geographical and climate conditions are the main causes of poverty at the village level while lack of credit, professional skills and illness are often the main causes responsible for poverty at the household level.

a) Remote location with under-developed transport infrastructures

119. In a mountainous area, transport infrastructure is very crucial to help people come out of poverty through cash cropping, collection and trade of high value-added NTFP, and incomes from non-farming sources. Under-developed transport infrastructures restrict such development opportunities of rural inhabitants. First, the poor road condition limits benefits of the high value cash crop plantation or NTFP collection and trade, particularly the high value-added perishable produces. Second, poor road condition also results in higher costs for transporting goods to the local market. Thirdly, it limits the movement of villagers to seek employment opportunities that are an important source of increasing income in some villages. Fourthly, it is a constraint to villagers' access to services such as difficult accessing extension service workers and traders who are more willing to visit villages when a road is in good condition. Lastly, lack of regular and cheap public transport services is a key factor in heightening vulnerability for the poorest without transport tools.

b) Harsh geographic and climatic conditions

120. The harsh geographic and climate conditions hamper rural inhabitants in rising out of poverty. The poor tend to be located in remote mountainous areas and in vulnerable climatic condition such as cold weather, drought and flood. Locational factors have an important bearing on the potential for development. Remoteness is a greater obstacle to obtaining economic benefits for rural inhabitants as they have limited access to better road networks and wider marketing networks and employment opportunities. Natural disasters often cause large number of poor inhabitants to fall back into poverty again. It is officially estimated that every year there is about 10 percent of the rural population returning to poverty on average in Pu'er Prefecture City due to various natural disasters.

c) Lack of capital to diversify livelihoods

121. Livelihood diversity is a major strategy for rural households in order to survive or to improve their standards of living. Lack of capital obstructs the capacity of the poor to diversify their livelihood sources. In the project area, investment in the cash crop growing is crucial to increase household income. Insufficient availability of finance to carry out timely purchase of agricultural production, or to invest in cash crops which require significant amount of capital until harvesting time in 3-7 years, or finance of some new small businesses as well as to buy equipment is one of critical constraints of rising productivity. Household survey results indicate that the poor were involved less in business operation than the non-poor.

d) Lack of professional skills

122. Lack of professional skills places the poor in disadvantage position in labor markets where work opportunities vary according to skills. The poor population tends to occupy insecure jobs with unstable wages. In terms of new cash crops, the poor face more challenges than the non-poor in terms of new technology adoption.

e) **Illness**

123. Illness is another cause of poverty, which results in two consequences of high level of health care costs and loses of working capacity. Household survey results indicate that the poor households have higher frequency of travel to clinics.

D. **Existing Poverty Reduction Programs**

124. Pu'er prefecture municipal government has formulated long-term poverty reduction strategies to address development needs of poverty population. The comprehensive strategies manifest in four programs: village-based integrated poverty reduction program, non-interest loan program, relocation and housing improving program and professional skill training program. Each program with different target and employed different measures.

a) **Village-based integrated poverty reduction program¹¹**

125. This program targets the poor villages and aims to increase efficiency of poverty reduction. Six components can be funded, which include: (i) improvement of basic infrastructures ensuring the poor access to drinking water, road, electricity, telephone and TV; (ii) improvement of basic social facilities such as village primary schools and clinics; (iii) improvement of villages' sanitation through building toilets and small drainage system; (iv) saving energy by establishing biogas pools; and (v) assistance to economic development by provision of seedling of commercial trees like walnuts or introduction of high value-added agriculture. Each selected poor village can receive fixed yearly funds amounting to CNY0.2 million. Only a few of very poor villages can obtain continuous two-year funds (CNY0.4 million) due to the limitation of the funds. Villagers in the poor villages make decisions jointly with poverty alleviation office on how to use the funds. However, the fund is in principle deployed for the basic needs of infrastructure improvement according to villagers' needs. Improvement of village roads has been the highest priority among funded villages because road improvement is a public good that is broadly recognized as a fundamental factor for rural development and poverty reduction. A total of CNY154.49 million was provided for 786 villages to implement village-based integrated poverty reduction programs in Pu'er during 2012. The villages awarded such program significantly improved small village specific infrastructure, such as tapped water supply, sub-village road improvement and maintenance, small irrigation etc.

b) **Relocation and Housing Improvement Program**

126. Relocating poor villagers, living scattered in mountain regions, where natural conditions are very inferior and poverty reduction is costly. Households will be moved to locations closer to major towns or centers where there are various advantages including easier access to schools, clinics and other social facilities. Because the relocation program is carried out fully on voluntary basis and many poor villagers are not willing to interrupt their social relationships, the program to date only provides assistance to a small portion of the population. A total of 2,750 households with poor housing condition have received a housing subsidy of CNY10,000 each household to improve housing conditions. Meanwhile 4,000 households received solar heating system

¹¹ This is a voluntary based poverty alleviation program, including several types: 1) relocate within same village, e.g from mountain to the foot or to where the site with better water supply condition. No land use right was changed in this type. 2) Re-locate from original village to another area where abundant land became cultivatable due to big irrigation project built. Whether land use right to be changed depends on who owns the land before irrigation project. If it is state owned land, relocated villagers was allocated land from state owned land. If the land was owned by other village, land adjustment agreement reached before the irrigation project. 3) Re-location from other county. It was practiced in late 1990s and early 2000s, mainly in the area of state owned land.

subsidies. It directly benefited the target households in housing condition and livelihood restoration. It is a voluntary based selection process which is welcomed by both the relocated and the remaining households.

c) Interest-Subsidized Loan Program

127. The program directly targets poor HHs through providing loans to the poor HHs. Poor HHs receive loans through Rural Credit Cooperatives (RCC) with interest subsidized by the government (5% of interest subsidized by government funds only for the first year). Large numbers of poor HHs have been covered by the program. For instance, a total loan of CNY296 million was released with a government subsidy of CNY2 million in 2012.

d) Professional Skill Training Program

128. The program aims to enhance the capacity of poor migration labor. It provides professional skill training for poor migration laborers to better access labor markets and seeks non-farm job opportunities. In 2012 a total of 16,800 poor people received professional training in Puer at a cost of CNY5.9 million.

e) Ethnic Minority Development Support Program

129. There are five programs specifically targeting ethnic minority poor. In 2012, a budget of CNY54.26 million was allocated to support programs of ethnic minority development in Puer Municipal City. 90% from provincial level and 10% from PMG. This includes:

- “Fu Min Xin Bian” (Border Development and Population Benefit Program) targets poor EM groups in border areas. In 2012, an amount of CNY40.7 million funded in support of EM community development of 51 villages and two ethnic unique industry projects in two counties.
- “Small EM Group Support Program” specifically target small EM groups. CNY9.26 million was disbursed to 22 natural villages to meet their specific development needs with 37 projects and to one batch of village heads training for their leadership.
- “Agricultural technical training” focuses on new technical adaptations for EMs. Amount of CNY510,000 was allocated to it, which accounted for 430 sessions and benefited 41,982 ethnic villagers.
- “Interest Subsidized EM Enterprise” project target EM enterprise to produce goods for unique ethnic needs. A loan of CNY100,000 with interest subsidy was provided to a designated company to improve its production technology.
- “Ethnic Minority Fund” and “Ethnic Minority Contingent Fund” are developed to meet special needs of EM culture protection. CNY7 million was allocated to support 64 projects.

E. Poverty Reduction Role

130. Based on the study, the project will have positive impact on poverty reduction. First, it will reduce the difficulties of the poorest to access the health care because the poorest are often haunted with illness. Secondly, the project will help promote the transition of the poor from traditional agriculture production to cash crop plantation. Thirdly, the project will create local waged farming jobs for the poor particularly in the villages where villagers rely on multiple income sources. Fourthly, the project will indirectly benefit the poor by creating non-farming jobs or business opportunities through stimulating overall economic development, particularly urbanization and industrialization. Fifthly, the project will lead to attract investment on and

operation of the rural transport services, which will greatly benefit the poor along the rural road. The project manifests itself a pro-poor intervention by connecting township/county center or main road to remote villages where most of the poor live. Six, the project will facilitate the rural public transport services in the isolated area where most of the poor live. Last the compensation received from land acquisition could be an important investment capital on cash crop development for the poor.

F. Travel Needs

131. Table 18 presents data for transport destination of family member trips of the surveyed HH by poor and non-poor group. Travel within village is more or less the same between poor and non-poor. The poor have slightly more travel intra villages within township while the non-poor have more intra township travel within county. Both poor and non-poor groups reported no trips travelled to the province town during the surveyed month.

Table 18: Travel Destinations by Poor and Non-poor

Destinations	Poor HH (N=195)		Non-poor HH (N=225)		Total	
	No. of HH member trips	%	No. of HH member trips	%	No. of HH member trips	%
village	88	27.1	118	24.4	206	25.5
township	142	43.7	183	37.9	325	40.2
county	95	29.2	182	37.7	277	34.3
province town	0		0		0	0
Total	325	100	483	100	808	100

Note: Total 520 Households included 456 EM and 64 Han Households.

Source: Household survey data.

132. Overall, the poor have less travel frequency to all three major destinations but with longer time of travel combined with lower costs (Table 19). Group discussions revealed that the poor often chose a trip associated with longer time and less costs. Three factors that caused more time for poor travel than for non-poor travel are: 1) the poor are located more often in remote villages while the non-poor are more in the villages along main roads, 2) the poor use more motorcycles while non-poor use more bus/minibus and cars/pickups, and 3) the road condition is poorer for most of poor and remote villages.

Table 19: Travel Frequency, Time Used and Cost by Poor and Non-poor

		Poor (N=216)	Non-poor (N=304)	Total (N=520)
Travel frequency (No. of travels per month)	village	4.7	5.3	5.0
	township	4.6	5.3	5.2
	county	3.4	4.5	4.2
	province town	0.0	0.0	0.0
	Total	12.7	15.1	14.4
Travel time(Minutes/one return)	village	16.2	14.7	20.5
	township	27.3	37.0	42.2
	county	53.8	48.5	70.6
	province town	0.0	0.0	0.0
	Total	110	115.3	133.2
Cost of travel (Yuan/one return and back)	village	3.1	3.7	3.3

		Poor (N=216)	Non-poor (N=304)	Total (N=520)
	township	9.8	13.1	10.8
	county	21.0	25.9	23.4
	province town	0.0	0.0	0
	Total	33.9	42.7	37.5

Source: Household Survey Data, total 520 households with 2305 members.

133. Table 20 presents the detailed travel purpose and transport means in village, township and county by poor and non-poor. Compared to non-poor, the poor have higher percentages of travel to all three destinations for health care and less for jobs. Field discussion confirmed that the poor are ill more often. Road improvement therefore will benefit the poor in easing access to health care facilities.

Table 20: Travel Purpose and Tools by Poor and Non-poor

Destination	Poor (N=195)	Non-poor (N=225)
Village	Purposes: <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (33.3%) <input type="checkbox"/> Sending and picking up children to and from school (1.2%) <input type="checkbox"/> Buy or sell products (0%) <input type="checkbox"/> Buy HH commodities (7.4%) <input type="checkbox"/> Maintain social network (14.8%) <input type="checkbox"/> Visiting health center (29.6%) Patterns: <ul style="list-style-type: none"> <input type="checkbox"/> On feet (54.3%) <input type="checkbox"/> Motorcycle/motor-tricycle (39.5%) <input type="checkbox"/> Track-trailer (3.7%) <input type="checkbox"/> Car (1.2%) <input type="checkbox"/> Bus or minivan (0%) 	Purposes: <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (68.8%) <input type="checkbox"/> Sending and picking up children to and from school (0.6%) <input type="checkbox"/> Buy or sell products (1.1%) <input type="checkbox"/> Buy HH commodities (10.8%) <input type="checkbox"/> Maintain social network (5.4%) <input type="checkbox"/> Visiting health center (8.6%) Patterns: <ul style="list-style-type: none"> <input type="checkbox"/> On feet (36.6%) <input type="checkbox"/> Motorcycle/motor-tricycle (50.5%) <input type="checkbox"/> Track-trailer (4.3%) <input type="checkbox"/> Car (2.2) <input type="checkbox"/> Bus or minivan (4.3%)
Township	Purposes: <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (13.3%) <input type="checkbox"/> Sending and picking up children to and from school (0%) <input type="checkbox"/> Buy or sell products (18.8%) <input type="checkbox"/> Buy HH commodities (44.5%) <input type="checkbox"/> Maintain social network (5.5%) <input type="checkbox"/> Visiting health center (10.9%) Patterns: <ul style="list-style-type: none"> <input type="checkbox"/> On feet (9.4%) <input type="checkbox"/> Motorcycle/motor-tricycle (61%) <input type="checkbox"/> Track-trailer/small truck (6.2%) <input type="checkbox"/> Car (1.6%) <input type="checkbox"/> Bus or minivan (18.8%) 	Purposes: <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (20.5%) <input type="checkbox"/> Sending and picking up children to and from school (2.4%) <input type="checkbox"/> Buy or sell products (11%) <input type="checkbox"/> Buy HH commodities (39.4%) <input type="checkbox"/> Maintain social network (7.9%) <input type="checkbox"/> Visiting health center (10.2%) Patterns: <ul style="list-style-type: none"> <input type="checkbox"/> On feet (7.1%) <input type="checkbox"/> Motorcycle/motor-tricycle (48.8%) <input type="checkbox"/> Track-trailer/small truck (1.6%) <input type="checkbox"/> Car (4.7%) <input type="checkbox"/> Bus or minivan (33.9%)

Destination	Poor (N=195)	Non-poor (N=225)
County town	Purposes: <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (8.2%) <input type="checkbox"/> Sending and picking up children to and from school (0%) <input type="checkbox"/> Buy or sell products (10.6%) <input type="checkbox"/> Buy HH commodities (38.8%) <input type="checkbox"/> Maintain social network (7.1%) <input type="checkbox"/> Visiting health center (23.5%) Patterns: <ul style="list-style-type: none"> <input type="checkbox"/> Motorcycle/motor-tricycle (22.4%) <input type="checkbox"/> Track-trailer/truck/small truck (5.90%) <input type="checkbox"/> Bus or minivan (64.7%) <input type="checkbox"/> Car (5.9%) 	Purposes: <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (15.4%) <input type="checkbox"/> Sending and picking up children to and from school (0%) <input type="checkbox"/> Buy or sell products (19.2%) <input type="checkbox"/> Buy HH commodities (31.5%) <input type="checkbox"/> Maintain social network (10.0%) <input type="checkbox"/> Visiting health center (13.8%) Patterns: <ul style="list-style-type: none"> <input type="checkbox"/> Motorcycle/motor-tricycle (21.6%) <input type="checkbox"/> Track-trailer/truck/small truck (9.3%) <input type="checkbox"/> Bus or minivan (60%) <input type="checkbox"/> Car (8.5%)

Source: Household survey data.

134. For selling products and maintaining their social network, the poor travel more within village within townships, while the non-poor travel more to townships and county towns. The poor appear to have a narrower traveling scope.

135. More poor travel to township and county town for buying household commodities than the non-poor did. This suggests the improvement of road from village to township will bring more benefits to poor in terms of purchase of cheaper household commodities at centers of township and county town. Field discussions proved that the price of commodities is cheaper at county towns than at township centers and similarly cheaper at township center than at village small shops. Online shopping is an emerging shopping model in China with over 70 million parcels delivered every day. The survey team found that it would take 3-4 days to receive a parcel after an order of online shopping. It was reported that most townships have 3-4 representatives from different express companies. Villagers can also pick up at township center. The youth are the pioneer users of this shopping model. Improving village to township road will bring convenience of modern online purchase to local people, both poor and non-poor.

136. To transport agricultural products, both poor and non-poor mainly use their own or rented vehicles. However, compared to non-poor, the poor use more often their own tractors, motorcycles, or walking/carrying or wait for buyers' to come to the villages to collect the farm products. The non-poor use more rented vehicles and minibuses. Group discussion revealed that the poor use more rented vehicles in addition to their own vehicles to speed up the harvesting process. As the bus/minibus available areas have higher percentage of non-poor, they appear to use more bus services.

Table 21: Transport Modes of the Agricultural Products of Surveyed Households

Transport mode (as % of HH agriculture produces)	Poor(N=216)	Non-Poor (N=304)	Total (N=520)
Walking/carrying	10.5	6.8	8.5
Own vehicles	49.5	45.6	47.4
Rented vehicles	19.6	28.6	24.4
Buyer coming	15.6	12.5	13.9
bus/minibus	4.8	6.5	5.7
Total	100	100	100

Source: Field HH survey.

G. Priority Needs of Local Community

a) Major changes in last 10 years

137. During village leader interviews and village focus group discussions the participants discussed the most significant changes in the past 10 years and then their development needs for the future. Table 22 presents the most significant changes of the surveyed villages in the past 10 years. The only negative changes are more inconvenience of going to school which was mentioned by 3 villages and more inconvenient access to health care facility mentioned by 1 village.

Table 22: Major Changes in the Last 10 Years

Major Changes Identified	No of villages mentioned
Road improved a lot	14
Plantation of cash crops increased a lot	13
Reduce of tuition burden since the 9- year free education policy	13
More households purchase auto vehicles	13
Income increased a lot	12
Lease collective land to external investors	10
More travel for business, shopping, entertainment and visiting friends and relatives	10
Housing improved a lot due to economic growth and poverty alleviation program	10
Electricity supply improved	10
Irrigation improved	9
Water supply improved	9
More convenience of health care access	9
Non-agricultural income share increased a lot	8

Sources: Field village leader interview and focus group discussions in 18 villages.

b) Future Development Needs

138. Community future development needs vary village by village. Road improvement needs are evolving from main road to village road. Improvement of village road connecting to main roads was prioritized as the first rank by 6 villages and second rank by 5 villages. Improvement to village roads connecting the township center was prioritized as either first or second rank by 8 villages. The other top 6 priorities included cash crop training and extension service, promotion of external investment to create more non-farming job opportunities, improved irrigation and access to credit. Providing or improving bus services were also prioritized as the fourth, fifth and sixth rank by three villages with a condition of government subsidy. Table 23 shows the top 6 priority development needs in the future of the 18 surveyed villages.

Table 23: Prioritized Community Development Needs

Number of villages ranked as Needs of improvement	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
1. Improving drinking water and electricity supply	0	2	0	1	0	1
2. Improving irrigation	1	2	1	1	0	0
3. improving village clinic/Better health care in the village	0	0	0	0	2	0

Number of villages ranked as Needs of improvement	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
4. Improving drainage system within village		1			1	
5. Improving village roads connecting the township	6	2		1		
6. Improving village roads connecting the main road (national, provincial, county)	6	5				
7. Better access to credit		2	1			1
8. Providing training to facilitate better access to waged employment	1	1	1		1	
9. Attracting investment to create more non-agriculture job opportunities			5	3		
10. Providing Better Market Information Service					1	
11. Assistance to eco-tourism development in the ethnic village					2	
12. Establishment of farmers' professional associations		2	2	3		1
13. Providing cash crop technical training and extension services	2		7	2	2	
14. Providing rural bus service/ Improving rural bus service				1	1	1
15. Improving housing condition	1					

Sources: Field village group discussion and village leader interview. Total 18 administrative villages surveyed.

139. Based on the socio-economic situation of the surveyed villages along the project roads, the following four aspects of transport needs are the most important.

140. **Agricultural goods transport.** Since 1990, the transport for agricultural products has increased greatly. As indicated in Table 24 rubber, tea and tobacco increased thousands of times during 1990–2012, while meat, oil plants products, and sugarcane increased hundreds of times. Although there is no data available for coffee and aquatic products in 1990, these two productions increased 987 and 702 times respectively during 2000–2012. From 2010 to 2012, the annual fruit production increased 96.5% and vegetable production increased 13.5%. The scaling up of the commercial agricultural products was in part a result of road accessibility improvement, and also fuels further road improvement need. The field surveys and observations found that in Jiangcheng, Ximeng, Menglian, Ning'er, Simao and Mojiang, the most profitable cash crops (bananas, watermelon and vegetables) were planted in the wide valley with main road or better rural road access. Most newly planted cash crops are located in the area with a new road constructed or a newly improved road. The expansion of cash crops correlated with the road development. Group discussion confirmed that road accessibility is one of the major factors affecting cash crop production. The other factors include large area of land availability, financing availability, irrigation condition, and technology and marketing capacity. Out of the 18 surveyed administrative villages, 13 viewed cash crop plantation increase as one of the major changes and all 18 villages are looking forward planting more or improve the productivity of the cash crops.

Table 24: Major Agricultural Production in Pu'er ('000 tons)

Year	1990	2000	2010	2011	2012	% of Increase from 1990 to 2012	% of average annual increase during 2000-2012
Grain	62.8	82.1	90.48	95.48	108.8	73	2.7

Year	1990	2000	2010	2011	2012	% of Increase from 1990 to 2012	% of average annual increase during 2000-2012
Oil plants	5601	1.09	1.47	1.61	1.88	236	6.1
Sugar Cane	61.07	173	172.09	180.66	201.6	230	1.4
Tobacco	n.a	0.56	4.09	5.71	6.53	1066*	88.8
Meat (Pork, lamb and chicken)	3.19	7.14	12.19	13.32	17.48	448	12.1
Aquatic products (e.g fish)	n.a	0.92	4.9	6.32	10	987*	82.2
Tea leaves	0.59	1.67	5.35	6.51	7.95	1243	31.3
Rubber	0.101	0.92	3.01	3.58	4.55	4405	32.8
Vegetable		n.a	30.07	32.8	38.17	27**	13.5**
Coffee	n.a	0.46	2.12	2.77	3.69	702*	58.5
Fruit	n.a	n.a	9.93	14.99	29.1	193**	96.5**

*During 2000-2012, **During 2010-2012.

Sources: Pu'er statistics year book 2011, Pu'er socio-economic statistics report 2012.

141. **Travel for jobs.** 8 out of 18 surveyed villages have income from waged labor representing over 20% of the total income, and 4 villages had this as the biggest income generator. Around 30% of the surveyed households have members involved in waged jobs that require transport. 9.3% and 11.2% of female and male labor force respectively.¹² Discussion and interviews found that income from waged jobs is increasing for most local households. Waged jobs include local jobs and migrant jobs outside the township and beyond. The closer to county seats like Simao city, the more villagers were involved in non-farming jobs in the city or along the road. In Jiangcheng, Ximeng and Menglian the more outside investors are engaged in agriculture investment, the more villagers became involved in waged farming activities locally. Gender disaggregated travels for jobs are analyzed in section v.

142. Waged farming jobs included planting and harvesting of coffee, tea, sugarcane, rubber, banana, watermelon, etc. Non-farming jobs are mainly migrant jobs in the urban city. Young girls and boys started those ventures in the end of 1980s. Earlier jobs were mainly waitress in the restaurant and hotels for the girl and as construction or house construction workers for boys. Migrant labor has become more popular since 1990s and the destination and the scope of work became wider. In the middle 2000s, as cash crops increased significantly, local waged jobs for cultivating of cash crops increased significantly. However, transport is one of the major factors for waged job travel. The proposed rural roads upgrading are expected to shorten the travel time, providing smoother journeys with less dust and bumps.

143. **Travel to school.** Within the 18 administrative villages surveyed, there are total 3013 primary students and 807 middle school or high school students. In the surveyed households, there are total 193 students, with 129 in primary, 36 in middle school, 19 in high school and 9 in vocational school. Primary students travel mainly within village (60%), or to town (34%) and only few to county towns (6%). Middle school students travel mainly to town (67%) or county town (31%), all high school students travel to county town, and vocational school students travel to county town (78%) and province towns (22%).

¹² There is a missing of 6-12 month migrant labor in household survey. Group discussion estimated that it is around 10% of total labor force, no significant differences between women and men.

Table 25: Student Distribution of Surveyed Households

		village	township	county	province town	Total
Students in primary schools	No.	77	44	8	0	129
	%	59.7	34.1	6.2	0	100
Students in middle schools	No.	1	24	11	0	36
	%	2.8	66.7	30.6	0	100
Students in high schools	No.	0	0	19	0	19
	%	0	0	100	0	100
Students in vocational schools	No.	0	0	7	2	9
	%	0	0	77.8	22.2	100
Total	No.		68	45	2	193
	%	40.4	35.2	23.3	1.0	100

Sources: Field HH survey data. Total 420 Households with 1840 members.

144. Motorcycle and walking are the two major transport modes for primary school. Motorcycle and bus/minibus are the major transport modes for middle school students. Bus/minibus is the main transport mode for high school and vocational school.

Table 26: Transport Mode of Students of the Surveyed Households

Transport mode	Student of primary School		Student of middle school		Students of high schools		Students of vocational School		Total student	
	No.	%	No.	%	No.	%	No.	%	No.	%
walking	42	32.6	4	11.1	0	0	0	0	46	23.8
motorcycle	63	48.8	11	30.6	1	5.3	1	11.1	76	39.4
tractor-trailer	1	0.8	0	0.0	0	0	0	0	1	0.5
car	6	4.7	0	0.0	0	0	0	0	6	3.1
small truck	3	2.3	1	2.8	1	5.3	0	0	5	2.6
bus/minibuses	13	10.1	20	55.6	16	84.2	8	88.9	57	29.5
other	1	0.8	0	0.0	1	5.3	0	0	2	1.0
Total	129	100	36	100	19	100	9	100	193	100

Sources: Field HH survey data. Total 420 Households with 1840 members

145. Travel for health care and socialization/entertainment is another kind of travel need within village, to town and to county town.

H. Livelihood Patterns of EMs

146. The field village survey found that household income among village groups varied with climate condition and land soil quality suitable for different crops, road condition and distance to economic centers and non-farming income opportunities.

Table 27: Cash Income Sources by Surveyed Village

Administrative village	Village/Group	Income	From Cash crop%	From livestock	Waged labor and business	Conventional grain plantation	Others (e.g. NTFP, land lease, government subsidy)	Ethnicity
Gaojiancao	Xiaoxingzai	3300	58	30	2		10 (NTFP)	Han+some others
Dongnai	Nankang	3634	95	5				Lahu+a few others
He'an	Babo	2700	70	10				Lahu
Mowo	Liuzu	3571	20	10	70			Wa
Yongbang	Sanzu	2670	65	5	30			Wa
Yaojiaoshan	Zhongxiangjiaoshan	3206	30	10	40		20 (Land lease)	Yao+a few others
Gongguan	Gongguan	4500	40	40	20			Han & Hani+
Shuicheng	Bashaerzu	5012	50		10	10	30(land lease)	Yi & Hani +multi-mixed
Banhe	Shitouzhai	5120	40		30		30(land lease)	Hani & Lahu +multi-mixed
Jiangban	Dashaba	6300	50		30		20 Land lease	Haini, Han & Yi mixed
Niuluohe	Xinzhai	3800	40	20	40			Hani+ multi-mixed
Nuna	Longfu	6344	20		40		30 (land lease) 10 (gov't subsidy)	Hani+some others
Heping	Shanjia	6000	40	20	30		10 (NTFP)	Hai, Bai, Yi, and Haini
Huangzhai	Dafengshan	1570	50	30	10	10		Han & Haini+
Yongqing	Ganlanba	2800	25	20	15	40		Han+ Multi-mixed
	Nalitian	4226	60	10	30			Han+ Multi-mixed
Banpo	Shijizhai	3800	60	20	10		10 (NTFP)	Han+ Multi-mixed
Namengmeng	Yangcaitang	2224	60	15	15		10	Han & Yi + multi-mixed
Dawaizi	Yangtianqin	4656	70	20	10			Yi + Multi-mixed
	Mangzhong	10080	90	—			10(transport)	Dai
	Mangsha	8467	100					Dai+Lahu+Wa
	Manglang	4970	50			50 (rice)		Dai+Lahu+Wa
	Huilongkuo	2000	80	10		10 (corn)		Lahu+
	Yingtai	3800	80			20 (corn)		Wa+Lahu+Yi+Hani
	Longhai	8000	80		20 (border business)			Dai

Source: Field village leader interview and group discussion.

Table 28: Cash Crop Area in mu per Capita of Surveyed Villages

Administrative village	Banana	Rubber	Coffee	Tea	Tobacco	Vegetable	Sugarcane	Mulberry tree	Other cash crops	Total
Gaojiancao	0.5		1.8	1.7	0.1					4.1
Dongnai		5.5	0.6	0.8						6.9
He'an			1.4	2.0		0.2	0.5			4.1
Mowo		0.6				0.1		0.4		1.1
Yongbang									4.9*	4.9
Yaojiashan			0.1	1.6	3.9				3.0**	8.7
Gongguan		0.4	0.2	0.4	0.4					1.5
Shuicheng	1.04	0.42	0.51	0.26		0.05				2.3
Banghe	1.72	2.27	0.64	0.22			0.36			5.2
Jiangbian	4.03	2.88	0.63	0.81		0.17				8.5
Niuluohe			0.35	1.61					3.34**	5.3
Nuna	0.44	8.33		0.31						9.1
Heping				1.00	0.58	0.08		0.03		1.7
Huangzhai			0.07	1.31	0.33			0.02		1.7
Yongqing			0.54	1.04	0.15	0.57			0.49***	2.8
Banpo			0.76	1.47	0.21	0.05			0.38***	2.9
Namengmeng			0.94	0.53						1.5
Dawazi			1.93	0.71						2.6
Village group of Jingkang, Manghai, Mengma, Paliang, Mengga administrative village of Mengma township:										
Mangzhong			6.02	2.58						8.6
Mangsha		6.15				1.19				7.34
Manglang				0.48		0.52			0.18****t	1.18
Huilongkuo			5.15							5.15
Yintai			2.95	9.05						12
Longhai										

* Xiaomiqiao, **rice and corn, *** Tianshun. ****Dragon fruit.
Source: Field village leader interview and group discussion.

147. The field village survey identified several livelihood patterns and project benefits and development needs within each livelihood pattern.

1. Dominance of cash crop income

148. Of the 25 surveyed village groups, there are six villages where cash crops represent over 70% of their income. Main cash crops are rubber, coffee, banana, dragon fruit, tea, and in some villages vegetables. The villages have large areas of cash crop plantation with maturity of cash trees. Some villages also have off-farming incomes from either transport service or trade because of being close either to county or township centres, or main road or border port. These villages include Dongnai, He'an, Dawazi, Mangzhong, Mangsha, Hulongkuo, Yingtai and Longhai mainly along Menglian-Meng'a road and its branches. Ethnic minority consist of Wa, Dai, Han, Hani, and Yi in these villages. Most of these villages were poor villages but now have already got rid out of poverty. The poor households in those villages normally are families with disability or sick members, or consist of senior members only. All of them are supported under MLSS.

149. These villagers will benefit greatly from the project in terms of reducing transport costs of agricultural produce and their cash crops. There is a further potential for cash crops development for some villages with more land available, better access to marketing information, and economic stimulation of urban cities and the border port. It is estimated that around 30% of the beneficiaries could be categorized in this group.

150. Technology training for increasing productivity of cash crops and provision of better marketing environment is needed. There are on-going programs dealing with it. The EMDP will also address it in coordination with the existing programs.

2. Transition from traditional agriculture to cash crop plantation

151. The type of transition villages are found in Jiangcheng. They have abundant land and started to grow cash crops a few years ago. These villages used to be very poor a few years ago. They started growing cash crop plantation by attracting outside agribusiness investors. Most households start accumulating capital from land leasing income and being waged laborers for outside investors. Meanwhile they gradually learn knowledge and skills to grow cash crops having worked as waged labor. Now some households have started planting their own cash trees like coffee, rubber and tea. However, banana plantation is still dominated by outside investors due to high investment and lack of access to larger marketplaces.

152. Surveyed villages belong to this type of transition include Yongbang, Yaojiashan, Shuicheng, Banhe, Jiangbian, and Nuna along the Ning'er-Jiangcheng-Longfu and Project rural roads. Yao, Yi, Hani, Lahu, Wa and Dai are main ethnic minorities in these villages.

153. These villages will benefit greatly from the Project because of shorter transport time, increased attractiveness to agribusiness investors, lowered costs of cash crop input and output transport, shorter travel time to other social services, etc. It is estimated that around 30% of the project beneficiaries belong to this group.

154. Technology training, irrigation and further road improvement are the major expectations from villagers surveyed in addition to the proposed project. The technology training and rural road spot improvement will be included in the project or EMDP. Irrigation improvement is covered in the government five-year plans.

3. Dependence on both cash crop and non-farming job

155. This third type of village has little available land to grow cash crops compared to the other types. They earn their livelihoods from cash crops and seasonal labor. Most are located in the middle and upper regions of mountainous areas. The climate is relatively cooler and suits production of tea, tobacco and coffee.

156. The main ethnic minority groups are Hani, Wa, Lahu, Yi, Bai and Han. The proposed project will significantly improve their access to main economic centers. It will also benefit their cash crop plantation and marketing and will provide access to non-farming job opportunities in economic centers.

157. This type of villages face the challenges of remoteness, poor road access, lack of knowledge and skills to grow cash crops, lack of capital to invest in cash crops and less attraction to outside investors. These villages include Niuluohe, Huangzhai, Yongbang, and Mowo. Around 30% of the project beneficiaries belong to this group.

158. In addition to the Project, irrigation, technical training, further road improvement and credit support are the major needs. The proposed road will contribute to improve all season access of those villages to attract outside investment. The EMDP will address technology training and the on-going programs will be coordinated to address the other needs.

4. Dominance of non-farming income

159. This type of village is near county towns, township centers or border port area. Most of their farming land (except cash trees) is acquired or will be occupied in the future urbanization. There is not much potential to expand agriculture but great potential for non-farming income activities like operation of restaurants, transport services, repair shops, groceries, trade business and employment opportunities in urban industry or urban service sector.

160. These villages include Longhai, Heping, Longfu, Yongqing, Banpo, and Mangzhong where Lahu, Dai, Wa, Bai, Yi and Hani are main EMs. These villages will most likely indirectly benefit from non-farming employment/business opportunities provided by urbanization and industrialization. The minority villagers face major challenges including capability to utilize opportunities of non-farming income generation, social network to engage in economic activities, credit availability to start new business or enlarge existing business. The EMDP will address non-farming skill training, information sharing and coordinate credit services of the existing programs.

161. Around 10% of the project beneficiaries belong to this group.

I. Project Impact and Coping Strategies

162. The total population along the rural road component is around 73,000 in 16,280 households of 287 village groups of 110 administrative villages in 9 counties and one district of Pu'er. About 80% are EMs including Hani, Yi, Lahu, Wa, Dai, Yao, Bai, Hui, and Miao. In the roads upgrading components, the total beneficiary population is 332,000, out of them, 260,720 (68.9%) are EMs. The main EM groups are Yi, Hani, Dai, Lahu, Wa, Yao and Bai. Overall the project will benefit total population of about 405,000, including 287,000 (71%) ethnic minorities 36.7% poor.

163. The project is widely perceived as beneficial by people surveyed. Table 29 summarizes the social benefits and potential issues perceived by villagers, local government, public transport service providers, businessmen, roadside store owners, technical service agencies, urban people in Simao town, and the general public.

Table 29: Overall Stakeholders and the Benefits and Potential Issues Perceived

Stakeholders	Interests and Likely Benefits	Concerns or Potential Issues
Villagers along rural roads, including Hani, Dai, Lahu, Wa, Yao, Miao, Hui, Bulang ¹³	<ul style="list-style-type: none"> • Increase accessibility in all season • Smoothing travel • Saving travel time up to 50% to school, market place, clinic/hospital and other social services • Less damage to vehicles such as motorcycles, tractors, cars, pickup, minivan, and trucks etc. • Benefit to perishable goods transport brought by better roads • Stimulating cash crop growth • Easier access to job place • Easier back from job place when there is a need in home • More comfortable travel, e.g. less bumping and dust 	<ul style="list-style-type: none"> • Been delayed implementation • Been dropped from prom the project or from government existing project • Safety issues if the transport vehicles speed up
Villagers along rural road and Ning'er-Jiangcheng-Longfu road, including Hani, Yi, Dai, Yao, Lahu, etc	<ul style="list-style-type: none"> • Shortening travel time up to 50% to school, market place, clinic/hospital and other social services • Less damage to vehicles such as motorcycles, tractors, cars, pickup, minivan, and trucks etc. • Benefit to perishable goods transport brought by better roads • Stimulating cash crop growth • Easier access to job place • Easier back from job place when there is a need in home • More comfortable travel, e.g. less bumping and dust • Ensure all day accessibility, particularly during raining season 	<ul style="list-style-type: none"> • When to start the project • Landslide • Damages of road again by heavy trucks • Disturbance during construction but it is tolerable if the road get improved and the construction period is not too long • Safety issues if the transport vehicles speed up • Land acquisition and house demolition for Aps
Villagers along Menglian-Meng'a road. Including Dai, Lahu, and Wa	<ul style="list-style-type: none"> • Reduce traffic jams affected travel and roadside business • Potential job opportunities through attracting investors • Potentials to increase value of the land and property along the road • More business opportunities along road. • Potentials for expanding vegetable growth for the city. • benefits from potential urban and industrial park expansion • Job opportunities of construction 	<ul style="list-style-type: none"> • Reasonable compensation for land • Road safety issues • Inconvenience caused by construction • Future land development by owners
Local government	<ul style="list-style-type: none"> • Improvement road network that can stimulate economic growth • Better road coverage • Poverty reduction through road improvement • Development of ethnic minority area through road improvement. 	<ul style="list-style-type: none"> • Approval of the project follow the procedures of PRC and ADB • Balance of investment among different counties/district • Balance of the needs of

¹³ Field survey found that it is difficult to differentiate the villagers' answers by EM but by roads and location.

Stakeholders	Interests and Likely Benefits	Concerns or Potential Issues
		different group in different county/district <ul style="list-style-type: none"> • Optimizing the options technically, economically and socially.
Public transport service providers	<ul style="list-style-type: none"> • Faster and easier transport • Saving the costs • Safety • More business opportunities • More potentials for bus services 	<ul style="list-style-type: none"> • Construction disturbance • Increasing charges (what?) • Permissions for bus services • Safety issues
Business people	<ul style="list-style-type: none"> • Faster and easier transport • All season accessibility in rural road • Extending business to more areas • Saving transport cost • Reduction of goods damages, particularly perishable goods. • Stimulating economic development 	<ul style="list-style-type: none"> • Construction disturbance • When the project will be started • Any additional fee charges
Roadside business stores	<ul style="list-style-type: none"> • Increase of business opportunities during construction • More business with traffic increase after the construction 	<ul style="list-style-type: none"> • Safety issues • Compensation for potential resettlement • Construction disturbance
Technical service	<ul style="list-style-type: none"> • Faster and easier transport • More reachable areas • More needs of technical service as result of the cash crop growth stimulated 	<ul style="list-style-type: none"> • Earlier start of the project • Safety • Construction disturbance
General Public	<ul style="list-style-type: none"> • Saving transport costs • More comfortable travel • Extending service areas • Quick information • Potentials to stimulate tourism development 	<ul style="list-style-type: none"> • Cost effectiveness of the project • Balance of the benefit among groups • Role of the poverty reduction • Balance of area development • HIV/AIDs and human trafficking

Sources: Summary from Government agency interview, Field key informants interview and focus group discussion.

164. From the field HH surveys, 91.4% of the households in the rural road area, 97% in the Jiangcheng-Ning'er-Longfu area, and 100% along Menglian-Meng'a road expect the project would bring benefits. There is no significant difference in perceived benefits among ethnic groups or among villages. Villagers in Dongnai (Lahu), Yongbang (Wa), Yaojishan (Yao), and Longfu live along local roads with abundant land suitable for cash crop plantation and perceive mostly the project benefits in terms of shortened travel time, improved accessibility for all seasons, smoother ride, and reliable access to social services. The improved road conditions can increase cash crop plantation by attracting investors, and even allow startup of bus services, if none previously. Villagers residing along the re-alignment sections of the Ning'er-Jiangcheng-Longfu road are very supportive to the project because the re-alignment can significantly shorten their travel distance from village to economic centers of Jiangcheng County town, Ning'er and Simao town. Villages and the Meng'a state farm along the Menglian-Meng'a road regard the project's direct benefits as reduction of traffic jams and improved safety. The improved road condition may also promote urbanization of the border port area and the suburban area of Menglian County town and therefore create job opportunities in non-farming businesses, add value to the land and property.

165. The major project benefits perceived by both poor and non-poor are much the same. The most commonly perceived benefits of the project include shortened travel distance or time, improving all season access or reduced traffic jam, smoother ride particularly good for perishable fruit and vegetable transport, and promoting cash crops plantation.

Table 30: Project Benefits Perceived by Poor and Non-poor Surveyed Households

Components	Rural Road (Respondent Poor N=88, Non-poor N=51)		Ning'er-Jiangcheng- Longfu road (Respondent Poor N=63, Non-poor N=73)		Menglian-Meng'a road (Respondent Poor N=21, Non- poor N=79)	
	Poor %	Non- Poor %	Poor %	Non- Poor %	Poor %	Non- Poor %
Shorten travel distance/time	88.6	92.2	87.3	89	90.5	91.1
Improve all season/time accessibility*	77.3	76.5	88.9	87.7	71.4	89.9
Reduce noise and dust	18.6	19.2	38.1	35.6	28.6	15.2
Smoothing ride, particularly good for perishable fruit and vegetable transport	48.9	47.1	55.6	46.6	66.7	65.8
Provision of local waged labor opportunity directly and indirectly	21.6	17.6	20.6	24.7	14.3	15.2
Promotion of cash crops plantation	65.9	70.6	55.6	57.5	57.1	60
Promotion of livestock development	20.5	29.4	25.4	35.6	0	8.9
Provision of urban employment opportunity by stimulating overall economic development	33.6	34.2	14.3	24.7	52.4	41.8
Added value for land and property	6.2	7.4	20	12.3	61.9	36.7
Creating new businesses along road	5.8	6.7	15.9	11	42.9	49.4

* Reduce traffic jams in the case of Menglian-Meng'a road.

Source: Field household surveys. Total 380 households along three components.

166. Major negative impacts perceived by the surveyed households include land acquisition, house demolition in the case of Ning'er-Jiangcheng-Longfu road and Menglian-Meng'a road, construction disturbance for all roads and safety issues caused by higher speeds of vehicles. No significant difference exists between poor and non-poor households.

167. During the survey, the households were asked about their intension to take advantage of the road improvement; both poor and non-poor, EM and Han expressed their ideas about benefitting from the perceived project opportunities. The most common ideas to enhance the benefits include planting more cash crops, raising more livestock, buying vehicles, selecting better schools for children.

168. However, there are differences between poor and non-poor. For instance, the poor are likely to plant more cash crops and to make more money to have better education for children while non-poor are more likely to buy vehicles (Table 31).

Table 31: Households Intension to Harness Project Potential Benefits

Components	Rural Road (Respondent Poor N=88, Non-poor N=51)			Ning'er-Jiangcheng- Longfu road (Respondent Poor N=63, Non-poor N=73)			Menglian-Meng'a road (Respondent Poor N=21, Non- poor N=79)		
	Poor %	Non- Poor %	Total %	Poor %	Non- Poor %	Total %	Poor r %	Non- Noor %	Total %
Coping strategies									
Buy vehicles	26.1	45.1	33.1	30.2	46.6	39.0	23.8	29.1	28.0
Plant more fruits	8	11.8	9.4	20.6	13.7	16.9	9.5	7.6	8.0
Plant more cash crops	81.1	72.5	78.4	74.6	65.8	69.9	66.7	58.2	60.0
Raise more livestock	35.2	58.8	43.9	36.5	34.2	35.3	4.8	13.9	12.0
Reduce cattle raising in the wild	6.8	3.9	5.8	9.5	11.0	10.3	0	0	0.0
Doing business along the road	15.9	17.6	16.5	22.2	34.2	28.7	38.1	31.6	33.0
Seek more migrant job opportunities in other places	12.5	7.8	10.8	14.3	27.4	21.3	14.3	3.8	6.0
Take more chances to come back home from migrant workplaces	11.4	5.9	9.4	12.7	17.8	15.4	14.3	3.8	6.0
Select better school for children after road improved	34.1	31.4	33.1	36.5	41.1	39.0	57.1	36.7	41.0
Make more money to afford children's higher level education	33.0	23.5	29.5	30.2	24.7	27.2	57.1	39.2	43.0
Take more shopping and entertainment	18.2	19.6	18.7	15.9	23.3	19.9	81.0	69.6	72.0

Source: Field Household surveys. Total 520 households with 87.7% EMs.

169. The households were also asked the major challenges they may face. These include:

- a) Lack of technology in planting cash crops and difficulties in obtaining assistance is recognized as a major challenge in the rural roads and Ning'er-Jiangcheng-Longfu component. Most villagers are in transition from traditional agricultural production to commercial cash crops and need new skills that they did not use to have.
- b) Lack of accurate market information is regarded as the second challenge. The villagers need timely market information in order to avoid selling their crops at the lower price.
- c) Poor irrigation is perceived as the third challenge of villages along the rural road component. Most villages are located in middle or upper parts of mountainous areas. Cash crop such as tobacco, banana, and coffee plantation require better irrigation than traditional corn and upland rice.
- d) Difficulty in accessing loans is also a serious problem. Planting cash crops require more investment compared to traditional crops. For example, growing one mu corn needs around CNY300, rice CNY400, coffee around CNY2,000, rubber CNY2,200-2,500, Banana CNY4,000, tea CNY2,000. Funds availability is

also the main challenge for some households to engage in non-farming business such as purchasing vehicles to provide transport services.

- e) Lack of bus operation is considered a serious problem. There are no bus services on some rural roads because of poor road condition and insufficient demand. It is expected that some roads will have bus operation once road condition is improved by the Project. Although most households have their own motorcycle, tractors or pickups, bus services are still a convenient means to access to social services e.g. school, clinic and market.
- f) Villagers who are not at administrative village centers consider their connecting roads (which are not included in the Project) to the centers as their challenge.
- g) Other challenges raised include high risk of transition from traditional agriculture produce to commercial cash crops, lower frequency of bus services, etc.

Table 32: Challenges Perceived by Surveyed HHs in Harnessing Project Benefits

Components	Rural Road (Respondent N=139)		Ning'er-Jiangcheng- Longfu road (Respondent N=136)		Menglian-Meng'a road (Respondent N=100)	
	No.	%	No.	No.	No.	%
Challenges perceived						
Difficult to get loan	43	30.9	48	35.3	13	13.0
Poor irrigation for cash crops plant	51	36.7	23	16.9	6	6.0
No bus service	50	36.0	40	29.4	19	19.0
Less frequency of buses	21	15.1	24	17.6	0	0.0
Bad or no roads from village to the improved roads	23	16.5	45	33.1	14	14.0
Lack of accurate market information lead to difficult to sell cash crop or sell in lower price	70	50.4	53	39.0	56	56.0
Hard to get technology help or help on time	82	59.0	60	44.1	15	15.0
High risks shifting from traditional crop to cash crop plantation	13	9.4	17	12.5	4	4.0
Lack of technology to plant new cash crops	44	31.7	41	30.1	48	48.0
other	3	2.2	6	4.4	1	1.0

Source: Field household survey.

170. To maximize uptake of project benefits/opportunities villagers have prioritized technology training/extension of growing cash crops, provision of timely market information, and maintenance of roads connecting villages to the project roads. Highly desirable options also include provision of bus service, provision of loans, establishing Farmers' professional associations. The latter can be an effective way to deliver the training and market information for cash cropping.

Table 33: Most Desirable Interventions for Harnessing Project Benefits

Components	Rural Road (Respondent N=139)		Ning'er-Jiangcheng- Longfu road (Respondent N=136)		Menglian-Meng'a road (Respondent N=100)	
	No.	%	No.	%	No.	%
Provision of loan	48	34.5	33	24.3	20	20.0
Provision of bus service	46	33.1	58	42.6	0	0.0
Provision more frequent bus	4	2.9	3	2.2	0	0.0
Provision of technology service for cash crop plantation	86	61.9	54	39.7	42	42.0
Provision of technology training for cash crop plantation	97	69.8	72	52.9	7	7.0
Building markets place and storehouses along the road	15	10.8	34	25.0	1	1.0
Building bus stops	14	10.1	21	15.4	16	16.0
Provision of marketing information services	51	36.7	48	35.3	61	61.0
Assist to establish farmer's professional association	34	24.5	28	20.6	14	14.0
Maintain roads connecting villages and the project improved roads	51	36.7	53	39.0	28	28.0
Improving irrigation	29	20.9	25	18.4	4	4.0
Enabling environment for attracting investment and overall economic development to create more waged job opportunities in both farming and non-farming	10	7.2	20	14.7	57	57.0
other	0	0.0	10	7.4	0	0.0

Source: Filed FGD and Household Survey

171. Survey respondents were not seriously worried about potential negative Project impacts on their livelihoods. For rural roads improvement, 48.6% did not have any concerns about the project, 44.3% admitted some concern and only 7.1% were very concerned. The major concerns were "land loss" or "house demolition" because initially they lacked clear information that "the rural road is for pavement upgrading only". Another concern relates to safety issue that may be potentially caused by speeding vehicles after road improvement. Respondents were also concerned about "when will the project start", worrying that the Project might be postponed or even cancelled. They hoped the Project could start as soon as possible.

Table 34: Potential Negative Impacts of the Project Perceived

Components	Rural Road (Respondent N=139)		Ning'er-Jiangcheng- Longfu road (Respondent N=136)		Menglian-Meng'a road (Respondent N=100)	
	No.	%	No.	%	No.	%
Worry about the potential negative impact from the proposed road:						
Worried	10	7.1	3	2	1	1
A little worried	62	44.3	24	17	33	33
None	68	48.6	113	81	66	66

Components	Rural Road (Respondent N=139)		Ning'er-Jiangcheng- Longfu road (Respondent N=136)		Menglian-Meng'a road (Respondent N=100)	
	No.	%	No.	%	No.	%
Total	140	100	140	100	100	100
Negative impacts perceived:						
Land acquisition	20	14.4	19	14.0	39	39
House demolition	8	5.8	10	7.4	18	18
Disturbance during construction	1	0.7	6	4.4	7	7
Noise and dust	7	5.0	5	3.7	12	12
Safety issues caused by high speed of vehicle	13	9	10	7.4	23	23
Inconvenience caused by road traverse through village	2	1.4	12	8.8	14	14
Others*	13	9.4	1	0.7		

* For rural road, mainly the time of commencement and the duration of implementation. For Ning'er Jiangcheng-Longfu road, mainly the expectations of the re-alignment section could pass their villages.
Sources: Filed survey data.

172. The Ning'er-Jiangcheng-Longfu road will involve amounts of land acquisition and house demolition along the re-alignment sections. Over 81% of the villagers have no concerns of the project, 17% have small concerns and only 2% worried about negative impacts. The ranked negative concerns are i) compensation rate, and then ii) the inconvenience caused by road cutting through the village land (which may cause inconvenience of irrigation and Harvesting), and iii) house demolition. Deeper group discussions discovered that the villagers also worry whether the road re-alignment would come to their village and strongly expected that the road could pass through their village area.

173. For the Menglian-Meng'a road, the major negative impacts are land acquisition, house demolition and construction disturbance. In addition to villages' households, four enterprises including one state farm will be affected. Compensation standards for land and house were the major concern of villagers, state farm workers and employees of the enterprises. The RP has provided arrangements for the APs of the state farms and enterprises.

174. There are no prominent issues by ethnic minority in related to land acquisition, house demolition, disturbance during construction, road safety issues and inconvenience caused by road re-alignment except regarding issues of sacred trees for worship, HIV/AIDS, and road safety awareness.

J. Impact on Sacred Trees and Relics Land for Ethnic Worship

175. Most ethnic minority groups (Dai, Hani, Lahu, Yao, Yi and Wa) in this area have their own religions that include worship of sacred trees and relics. The rural roads and Menglian-Meng'a road will most likely not affect any sacred trees or relics. There are two major re-alignment sections of the Ning'er-Jiangcheng-Longfu road. The design institute is aware of this issue and local officials have experience on this issue. The preliminary design indicated that there is no such sacred trees/relics will be affected by the project. During the implementation phase, if required, identification of such sacred trees/relics will be done by Cultural Protection Management Bureau. The identification process among other criteria is based on extensive public consultation and if the Bureau identifies some culturally important tree/relic that will be avoided. **In case, if such avoidance is not possible, the trees or relics will be relocated. Sufficient**

consultations with the affected communities will be undertaken about the new site of relocation and the process of relocation. Cultural or religious ceremonies as required will be organized during the relocation process and the Project will bear the cost of the ceremony.

K. Risks about HIV/AIDS

176. The local officials from health care bureau and center for disease control (CDC) estimated that road improvement has less negative health impacts compared to new road construction in terms of HIV/AIDS. But still, the potential issues include i) construction workforce coming in and ii) increase through traffic, especially from/to bordering countries. Currently, local governments have put a system in place to deal with HIV/AIDS and anti-drug use after years' implementation of various health programs. All passenger vehicles are mandate to spread disinfectant when pass the port gate. Health inspections are required for those have fever.

177. Under the current national policy, the contractors are required to develop HIV/AIDS prevention programs for the contract workers. Implementation of these programs is mandatory under the 'safety requirements' at the construction sites. The Project IA will ensure that this clause is included in civil work contracts and will monitor its implementation.

178. Local governments have established a system responsible for education, monitoring and treatment of HIV/AIDS and anti-drug use. For instance, Menglian County in 2004 set up an Office for Drugs and HIV/AIDS Prevention. In 2008 the office for HIV/AIDS Prevention was separated and is now in charge of the HIV/AIDS prevention and treatment under Menglian Health Bureau. The public education of HIV/AIDS and anti-drug use program in Pu'er is targeting Menglian County, Simao District and Lancang County. Health workers at the township and village levels are conducting public education on HIV/AIDS in rural areas. Every year, one or two seminars are held for dissemination of HIV/AIDS preventive knowledge. Liaison persons at the village level are also assigned and are often women leaders. In addition to the regular seminars by health bureau, each of county official organizations is assigned to connect to one administrative village. The former often choose to disseminate health knowledge as part of their contribution to rural development.

179. CDC of each county is responsible for monitoring HIV/AIDS cases. Free testing and treatment system is available. For example, in Menglian County, two doctors are designated to take care of HIV/AIDS patient treatment. They are responsible for monitoring the patients within the county and distribute medicine to the patients without charge. The county government bears the medication costs ranging from RMB 4000 to RMB 5000 per patient a year. During 2005-2009, the Menglian County participated in the Global Fund Phase IV project that targeted sex workers and drug users. The project also educated and distributed preventive materials to them. During 2009 to 2012, the Menglian County was included in the "Border Developing and Local Residents Enrichment" program, of which one component targeted HIV/AIDS and anti-drug use and provided education to high-risk groups.

180. As a result of these activities, knowledge of HIV/AIDS is widely spread among the public. Local health care workers also observed more condom use. The PPTA households' survey shows that around 74.5% of EM respondents and 74.6% of Non-EM respondents respectively have heard HIV/AIDS and their preventive measures. However, there is still a comparative large proportion of local population including both EM and Non-EM that lack knowledge on HIV/AIDS prevention measures. The Project IA will ensure coordination amongst these various agencies to ensure that the project does not have any add-on effects on the HIV/AIDS within the project area.

Table 35: Knowledge of HIV/AIDS by EM and non-EM Groups

HIV/AIDS knowledge		EM		Non-EM	
		No. of HH members	%	No. of HH members	%
Have you ever heard of HIV	Yes	260	74.5	53	74.6
	No	89	25.5	18	25.4
	Total	349	100	71	100
Knowledge about preventive measures	using condoms	117	33.5	22	31.0
	needles and syringes	123	35.2	23	32.4
	prevent mother to child transmission	83	23.8	17	23.9
	other	4	1.1	0	0.0
	have no idea	118	33.8	28	39.4

Source: Field village survey.

L. Human and Drug Trafficking

181. ADB got a separate assessment conducted on project impacts on human and drug trafficking along the border regions in the project area. The main outcomes of the assessment are as following (the full report is included as Appendix XX)

182. The incident and detection rates of females/children trafficking are stable and present a downward trend. Policies and measures of governmental units and stakeholders in response human trafficking are all effective. Therefore, the program will not increase the risk on human trafficking. However, it will increase human migration and thus will put pressures on the workloads for surveillance detection, prevention and treatment of infectious disease, as well as intervention.

183. Given the grim situation of drug smuggling and the great negative impacts on teenagers in the region, local government and stakeholders adopted effective and comprehensive measures and interventions. The program will provide convenience to bulk and transit drugs smuggling to some extent and thus brings difficulties in investigation of drug smuggling and pose heavy working burden, but little effect on small drug smuggling.

184. Recommendation. Adopting multi-sector anti-trafficking cooperation mechanism as well as combating and prevention strategy, strengthening anti-trafficking education and improving the awareness of gender equality and legal rights to reduce the risk of minority female trafficking and rights impairment.

185. Recommending healthy units to carry out management on floating population and provide comprehensive prevention and treatment of diseases for them, as well as establishing temperate clinic, adding more sentinel surveillance points to deal with the risk of epidemic spreading.

186. In the program planning, it is suggested to set up system in comprehensive law enforcement area/service areas in traffic hotspots, and adding more drug inspection stations/points.

187. Increasing funding and technical supports in anti-drug and HIV/AIDS prevention education to local minorities, especially teenagers through special campaign or project.

M. Impacts of tourism development

188. The project will indirectly facilitate tourism in the project area by providing better road access and transportation facilities. Tourism is another booming sector in Pu'er. The tourism of Pu'er constantly developed with significant increase of domestic visitors during 2007 and 2013. According to Pu'er Statistic Year book 2011 and statistics report of 2013, the number of domestic visitors increased to 11.285 million person times in 2013 from 2.25 million in 2007, with an average annual growth rate of 66.9%. The number of overnight visitors took over that of one-day visitors since 2009, accounting for 64.7% of the total number of tourists in 2011. The number of international visitors ranged from 111,406 in 2008 to 149,600 in 2013. Income from the tourism increased to CNY7.109 billion in 2013 from CNY10.64 billion in 2007, with an average annual growth rate of 94.7%. In 2013, income from domestic visitors accounted for CNY6.99 billion or 98.34% of total income, international visitors for CNY118 million or 1.66%. In 2011, income from inward visitors of border ports for CNY26.6 million or 0.89% of total tourism income.

189. The tourism booming is attributed to three major factors, namely, overall economic development, road networking and transport service improvement and rich tourist resources in the project area. The proposed road improvement will continue to facilitate the tourism development of Pu'er. In one hand, tourism development will benefit the local EMs in economic development. In another hand, there could be potential negative impact of the tourism development on the ethnic minority culture and the way of life of the EMs. From local EM's perspective, the most serious impact on EM culture happened during "the Culture Revolution" decade rather than the recent years tourism booming. In fact, the tourism booming draws attention of the local people to the fact that their culture is valuable and encourage them to protect it. Meanwhile, the Pu'er government has developed "ethnic minority ecotourism and culture tourism development fund" to help the villages with the integration of tourism development and protection of culture and natural resources. Annually, there is at least 1 million budget allocated to each of 10 counties to protect ethnic cultures and resources. This fund is operated by ethnic minority bureaus at the Pu'er prefecture and county levels. Ethnic minority bureaus focus on supporting protection activities, such as documentation, disseminations and support ethnic cultural festivals, supporting EM traditional festivals, documenting and disseminating ethnic minority music, identifying and protecting ethnic minority ancient buildings, protecting model ethnic minority villages and cultural exchange events among ethnic minority groups. As a part of building ethnic minority cultural awareness TV programs and booklets are employed to introduce ethnic minority music, historical stories, festivals, daily life, community norms, custom, religious practices, taboo etc.

190. The proposed road project will contribute a budget CNY30,000 and will coordinate with the ethnic minority bureaus mainly to raise ethnic minority cultural awareness amongst the migrant workers of the project to ensure that the local customs, traditions and way of life are respected.

N. Gender Impact Analysis

a) Social Status of Rural Women in Project Areas

191. Women make up 48.2% of the total population in Pu'er Prefecture Municipal of which the majority were rural women accounting for over 65% of total female population. The social status of women in Pu'er has been improving through carrying out Pu'er Municipal Women Development Strategies. Women's political participations are significant. There were about 20% female leaders working in various government departments in 2012. In the same year, congresswomen at municipal level reached 23.6%. **Minority women in Pu'er enjoy equal rights**

in all aspects of political, economic and social with Han Women. They are entitled fundamental needs of education, health, housing, employment equally with Han women by Chinese Laws. In the community level, like Han women, minority women have less percentage of participation in the community decision body compared to men. Like Han women, rural minority women are engaged in agricultural activities such as growing crops and raising animals. They are playing crucial roles of household livelihood maintenance and development. Minority women are primary responsible persons to undertake household maintenances such as food preparation and water collection. Looking after household members particularly children and the elderly is mainly undertaken by minority women. Like Han women, with the expanding of cash crops areas in Pu'er, more and more minority women are involved in cash crops cultivation in terms of rubber, tea, banana, etc in order to meet the increasing demand of cash income in the household. Most minority women aged below 50 obtained at least primary school education, making they can communicate with outsiders in Mandarin that means young minority women have more opportunities for employment, for marking information. However, the percentage of minority women's education level aged above 50 are less than Han women with the same age on average as they were living usually in the remote mountainous areas with difficult access to school, difficult access to road in the past. Lower education level is a limitation for minority women aged above 50 to do income-generating activities because they have difficulties to receive market information as well as to learn technology.

- **Education**

192. Based on PPTA surveys, the average education level of rural women is lower than that of men. Specifically, 31.2% of female respondents are in the no-schooling category, higher than male respondents (25.1%). Similarly, female respondents with 7-9 years of education (23.8%), is lower than for males (30.8%). Very few respondents obtained more than 10 years of education. Regarding primary years of education, both genders were over 35%.

Table 36: Education Level by Gender

Education Level	Male		Female		Total	
	No. of respondents	% of respondents	No. of respondents	% of respondents	No. of respondents	% of respondents
No school	230	25.1%	288	31.2%	518	28.2%
Primary education (1-6 years)	325	35.5%	335	36.3%	660	35.9%
Junior middle school (7-9 years)	282	30.8%	220	23.8%	502	27.3%
Senior middle school (10-12 years)	56	6.1%	48	5.2%	104	5.7%
Higher education (>12 years)	23	2.5%	33	3.6%	56	3.0%
Total	916	100.0%	924	100.0%	1840	100.0%

Source: Household survey data.

- **Occupation**

193. The majority of respondents were farmers with 63.5% (61.7% female and 65.3% male) being fully engaged in agriculture on their farmland. Although the occupation of local farming labor was not popular in the Project area, the survey indicated that men (2%) were slightly more likely than women (1.4%) to work outside their family land as laborers seeking cash earnings, on local cash crops fields (such as sugarcane, tobacco, coffee). Women were often left at home both for cultivating family land and taking care of household.

194. Young couples tend to be long-term migrant laborers (more than 1 year) with 2.4% for men and 2.3% for women. Because of cash crop plantation, overall in the project area with more cash crop plantation, labour migrates in the area rather than out-migrating. More migrant labors are within the project area as short term in order to take care of their own plantations. The survey (Table 37) indicates that there are slightly more males being seasonal migrant laborers than women. However women running businesses or involved in private enterprises is much less. Of the respondents, only 0.2% of females were running business compared to males (0.5%), and 0.4% of females working in private enterprises compared to males (0.8%). 0.8% of females are village cadres as compared to 1% for males. These statistics indicate that women's participation in community decision-making and other socioeconomic activities was lower than for men.

Table 37: Occupation by Gender Aged at 16-60 Years

Occupation	Male		Female		Total	
	No. of respondents	% of respondents	No. of respondents	% of respondents	No. of respondents	% of respondents
Farmer	598	65.3%	570	61.7%	1168	63.5%
Local farming labor*	18	2.0%	13	1.4%	31	1.7%
Businessmen	5	0.5%	2	0.2%	7	0.4%
Government worker	1	0.1%	3	0.3%	4	0.2%
Retired, pensioner	9	1.0%	11	1.2%	20	1.1%
Private enterprise	7	0.8%	4	0.4%	12	0.7%
long-term migrant labor (over one year)	22	2.4%	21	2.3%	43	2.3%
seasonal migrant labor (within half year)	36	3.9%	27	2.9%	63	3.4%
village cadre	9	1.0%	7	0.8%	16	0.9%
housewife	0	0.0%	26	2.8%	26	1.4%
student	99	10.8%	140	15.2%	239	13.0%
Other(baby, disabled people)	112	12.2%	100	10.8%	212	11.5%
Total	916	100.0%	924	100.0%	1840	100.0%

* Work over 6 month a year.

Source: Household Survey Data.

- **Gender Division of Labor**

195. Women and men are involved differently in agricultural production practices. Males usually dominate ploughing and clearing activities, while females are more engaged in transplanting and weeding. Both women and men take part in activities such as fertilizing, harvesting and raising pigs. Tending poultry feeding is solely a woman's activity.

196. It is very common for both females and males to be involved in income-generating activities. Among middle-aged groups, men tend to be seasonal migrant labor and women deal with selling agricultural produce.

197. Women exclusively perform household work in addition to their agricultural work. Their roles are cooking, washing and care of small children and elders in their households.

- **Decision Making at Household and Community Levels**

198. Females headed only 9.8% of surveyed households. Men dominated decision-making at household level. Couples jointly discuss agriculture production activities such as planting, crop

selections, seed purchases, fertilizer and equipment/tools. In many cases, women's voices are heard during the discussion process but men make final decisions.

199. Men dominate decision making on household investments such as buying vehicles, running small shops or building new houses. The respondents indicated that men have more opportunities to go outside than women and therefore have more experience and knowledge with which to make decisions.

200. Men also dominated with respect to decision making on renting out land and on borrowing and lending money. These are very important household decisions and are definitely the responsibility of household heads.

201. Men and women equally share decision-making on household saving and buying durable consumables such as TVs, furniture, washing machines and electronic cookers. Women dominate decisions on purchase of daily consumables.

Table 38: Decision Making Inter Household by Gender (%)

Activities	Male	Female	Total
Crop Variety and size of areas for cultivation	60	40	100
Purchase of seed, fertilizer, equipment for production	60	40	100
Education cost for children	55	45	100
Purchase of HH daily consumables	20	80	100
Purchase of HH durable consumables	50	50	100
Household investment	80	20	100
Household saving	50	50	100
Rental land out and in	60	40	100
Borrowing money out and in	70	30	100

Source: Estimates from male and female FGDs.

202. The participation of women in community decision-making is still much less than for men because there are the fewer women members in decision-making bodies of communities. Women's participation in community management include organizing traditional festivals, special occasions like marriage ceremonies and funeral activities, attending community meetings in the absence of men, and contributing labor for public works such as village road routine maintenance and irrigation repair.

b) Rural Women Development Strategies in Pu'er

203. Pu'er Prefecture Municipal Women Federation launched the Pu'er Women Development Outline 2010–2020 based on the Chinese Women Development Outline 2010–2020. The Pu'er Outline defined five priority fields with respect to women development, which are implemented through various projects. These projects include: (i) women and poverty reduction—through microcredit programs for rural women have been carrying out across Yunnan rural areas and for urban poor women by promoting women employment; (ii) women and education - under which priority has been given to assist access to school for rural girls; (iii) women and health - in which projects aim to improve women health particularly women reproductive health through provision of professional training, employment information and health education; (iv) women's participation in decision making and management in society—in which gender percentage of leadership at all government levels has been regulated with support of wide range of training on women leadership capacity building; and (v) women and law protection—where provision of law aids for women against domestic violence and has been paid much attention through building

various law-aided women centers. Specific measures for promoting rural women development have been made by Pu'er Women Federation, as follows.

- **Women Participation in Community Decision Bodies**

204. PMG and Municipal Women Federation have addressed women's participation in decision-making and management at the community level. Gender percentage of leadership at township and village committee levels has been regulated with support of wide range of training on women leadership capacity building. The Pu'er Women Federation reported that women leaders at township and village committee levels had increased by 2.08% in 2012 compared to 2010. The total number of female cadres at township and village committee levels has increased steadily over the years particularly at village committee level where the percentage of female members had increased 2.6% in 2012 over the 2011 figure.

- **Women Health Improvement**

205. Women's health, in particular reproductive health, has been addressed through a variety of programs. The quality of births has improved a lot by implementing the program "Safe Mother and New-Born Baby". The rate of maternal hospital delivery in rural areas of Pu'er Municipality has substantially increased, with consequent reductions in maternal and infant mortality. In 2012, the rate of hospital delivery reached 68% and the rate of regularly premarital examination for rural pregnant women increased up to 84%. Women who deliver babies in hospital can receive a government subsidy of CNY400.

- **Enabling Nine-year Compulsory Education for Rural Girls**

206. Assistance to rural girls to enter the schooling system has been prioritized through provision of a governmental boarding subsidy. In 2012, the enrollment rate of primary school for rural girls was 99.8% (an increase of 1.2% over the 2010 figure) while the percentage of rural girls enrolling in middle school in 2012 was 87% (an increase of 2.4%).

- **Promotion of Women Income-Generating Activities**

207. Programs of promoting women income-generating have been initiated and run by the Women's Federation in support of women's development as follows:

- (i) Large-scale technical training program: It started in 2005 with provision of technology training of crops cultivation and animal raising for rural women in collaborating with other resource institutions of agricultural extension, education, health, finance, poverty alleviation office, and etc. Training has usually been conducted in township and village levels. These training sessions take half a day and have more than 100 trainees. In 2012 50,000 women were trained throughout Pu'er rural areas.
- (ii) Poverty relief loan of subsidized interest program: The Women's Federation uses a part of loans to provide credit to women farmers. The number of loans released to women reached 100,000 during 2008 to 2012 and over 10,000 rural women developed their individual projects under credit assistance across Pu'er Municipality.

- c) **Gender-Differentiated Transport Needs**

208. The women's role in the household shapes their transport patterns, frequency of women's mobility and travel costs. Women's transport activities are different from men's since women often have the primary responsibility for transporting goods to and from market, and for

accompanying children and elders to hospital, and for seeking job opportunities to meet increasing cash demand of households.

- **Travel Patterns and Destinations**

209. The surveys show a variety of travel destinations: within village, township, county town and province town. Rural village, township and county towns are the major travel destinations for both women and men. There is some travelling by both men and women to provincial towns. Table 39 shows the percentage of female and male travel to villages is similar with the purpose to buy or sell products, visit health center and seek local job opportunities. The percentage of female travel to townships is lower than that of men because men generally handle buying or selling products within bigger township markets. Women travel more to county towns for the purpose of accompanying their family members to hospital. In both Meng'a and Longfu border, small traders appear more in couple. But large scale trade involved mostly men.

Table 39: Travel Destinations by Gender

		Male (N=219)		Female (N=201)		Total (N=420)	
		No. of respondents	% of respondents	No. of respondents	% of respondents	No. of respondents	% of respondents
Destination	village	98	27.3%	76	26.7%	174	27.0%
	township	154	42.9%	101	35.4%	255	39.6%
	county town	107	29.8%	108	37.9%	215	33.4%
	province town	0	0.0%	0	0.0%	0	0.0%
	Total	359	100.0%	285	100.0%	644	100.0%

Source: Household survey data.

210. Women's transport purposes and modes differ to men's. The primary mode of women travel is walking within village, though they also use motorcycles and truck-trailer when they can gain access to them. The main purpose of women's travel includes; seek paid jobs, buy and sell products at nearby market and fetch small children from school. The main purpose of village travel for men is to look for job opportunities and is usually by motorcycle, though 35% report that they sometimes travel on foot.

211. Women also travel to township markets where they can sell more and buy with more options. Public transport and private motorcycles are the main transport means for local communities to township. Women prefer using public transport such as buses or vans over motorcycles. Travel to townships for men is mostly on motorcycles, for the purpose of visiting markets or seeking paid jobs. 23% of male and 28% of female respondents still use public transport (bus or minivan) to travel to township.

212. County travel is quite important for both women and men to visit bigger market centers have a better access to social facilities and to maintain family relationships and social networks. Women are more likely to accompany family members to hospital as role of primary family care. Public transport and private motorcycles are commonly used by both genders.

213. Long distance travel beyond county is not common for local people. Very few respondents travel to the provincial town.

Table 40: Transport Purposes and Patterns by Gender

Destination	Male (N=219)	Female (N=201)
Village	<p>Purposes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (58%) <input type="checkbox"/> sending and picking up children to and from school (0%) <input type="checkbox"/> Buy or sell products (0%) <input type="checkbox"/> Buy HH commodities (6%) <input type="checkbox"/> Maintain social network (4%) <input type="checkbox"/> Visiting health center (18%) <p>Patterns:</p> <ul style="list-style-type: none"> <input type="checkbox"/> On feet (35%) <input type="checkbox"/> Motorcycle (54%) <input type="checkbox"/> Track-trailer (5%) <input type="checkbox"/> Bus or minivan (1%) 	<p>Purposes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (44%) <input type="checkbox"/> Sending and picking up children to and from school (1.3%) <input type="checkbox"/> Buy or sell products (2.3%) <input type="checkbox"/> Buy HH commodities (14%) <input type="checkbox"/> Maintain social network (17%) <input type="checkbox"/> Visiting health center (18%) <p>Patterns:</p> <ul style="list-style-type: none"> <input type="checkbox"/> On feet (57%) <input type="checkbox"/> Motorcycle (34%) <input type="checkbox"/> Track-trailer (3%) <input type="checkbox"/> Bus or minivan (3%)
Township	<p>Purposes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (19%) <input type="checkbox"/> sending and picking up children to and from school (3%) <input type="checkbox"/> Buy or sell products (16%) <input type="checkbox"/> Buy HH commodities (36%) <input type="checkbox"/> Maintain social network (10%) <input type="checkbox"/> Visiting health center (8%) <p>Patterns:</p> <ul style="list-style-type: none"> <input type="checkbox"/> On feet (7%) <input type="checkbox"/> Motorcycle (58%) <input type="checkbox"/> Track-trailer (5%) <input type="checkbox"/> Bus or minivan (23%) 	<p>Purposes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (14%) <input type="checkbox"/> Sending and picking up children to and from school (1%) <input type="checkbox"/> Buy or sell products (13%) <input type="checkbox"/> Buy HH commodities (52%) <input type="checkbox"/> Maintain social network (7%) <input type="checkbox"/> Visiting health center (14%) <p>Patterns:</p> <ul style="list-style-type: none"> <input type="checkbox"/> On feet (11%) <input type="checkbox"/> Motorcycle (50%) <input type="checkbox"/> Track-trailer (3%) <input type="checkbox"/> Bus or minivan (28%)
County town	<p>Purposes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (17%) <input type="checkbox"/> sending and picking up children to and from school (0%) <input type="checkbox"/> Buy or sell products (24%) <input type="checkbox"/> Buy HH commodities (22%) <input type="checkbox"/> Maintain social network (8%) <input type="checkbox"/> Visiting health center (15%) <p>Patterns:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Motorcycle (29%) <input type="checkbox"/> Track-trailer (3%) <input type="checkbox"/> Bus or minivan (56%) <input type="checkbox"/> Car (6%) 	<p>Purposes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seeking job opportunities (8%) <input type="checkbox"/> Sending and picking up children to and from school (0%) <input type="checkbox"/> Buy or sell products (7%) <input type="checkbox"/> Buy HH commodities (46%) <input type="checkbox"/> Maintain social network (10%) <input type="checkbox"/> Visiting health center (20%) <p>Patterns:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Motorcycle (14%) <input type="checkbox"/> Track-trailer (0%) <input type="checkbox"/> Bus or minivan (68%) <input type="checkbox"/> Car (7%)

Source: Summary from HH survey data.

- **Frequency and Cost of Transport**

214. Women indicate that they have less time to travel than men, due to their heavy involvement in household and agricultural activities. Some work in enterprises as well as looking after families. Table 41 indicates that the frequency level of transport for women was less than that of men. Travel by men to the three destinations totaled 14.2 times a month compared to 11.3 for women. Women had lower travel costs than men because they tended to walk within villages or take public transport.

Table 41: Frequency and Cost of Transport by Gender

		Male (N=219)	Female (N=201)	Total (N=420)
Travel frequency (## of travels per month)	village	5.7	4.2	5.0
	township	5.1	4.2	4.7
	county	3.4	2.9	3.2
	province town	0.0	0.0	0.0
	Total	14.2	11.3	12.8
Travel time(Minutes/one return)	village	17.0	23.9	20.5
	township	42.0	42.3	42.2
	county	72.1	69.0	70.6
	province town	0.0	0.0	0.0
	Total	131.1	135.2	133.2
Cost of travel (Yuan/one return)	village	3.8	2.9	3.4
	township	18.8	16.5	17.7
	county	39.1	31.9	35.5
	province town	0.0	0.0	0.0
	Total	61.7	51.3	56.5

Source: Household survey data.

215. Women have similar transport needs to other social groups. Due to their higher level of domestic responsibility, women assign greater importance to transport that is easier, faster, and safer and provides more mobility, as this in turn provides more home time for productive work. Women also expect more buyers to come to the village, which would in turn further reduce travel time and thus save more time. Specifically, women are more reliant on public transport and prefer safe and regular public transports with fixed fares.

d) Project Impacts on Women

216. The Project will bring benefits equally to women and other social groups through improvement of rural road surface, upgrading of the Ning'er-Jiangcheng-Longfu and Meng'a Border Crossing-Menglian road. Shorter travel time on rural roads is beneficial to them, as it increases mobility, and allows more productive use of time.

217. Women are primary local travelers for buying home consumption goods and selling produce, sending and picking up small children to and from school, traveling for health purposes, more frequently accompanying family members to hospital. Accessing better roads, thereby, will provide them easier, faster and safer travel.

218. Public or private transport operators will be more willing to provide services when the road condition and road safety is improved. This could increase the potential for young women to travel outside the village to seek employment. Specifically, availability of public transport services, which are their primary means of travel, is important to women.

219. The Menglian-Meng'a and Ning'er-Jiangcheng-Longfu road rehabilitation would bring negative impacts on women in terms of land acquisition and resettlement due to housing demolition. Several vulnerabilities of women resulting from land acquisition or relocation should be addressed. First, women are often in a disadvantaged position at labor markets due to lower education levels or (traditional) gender bias, that might lead to less income or fewer job opportunities for them after land loss, compared to men. For example, at local labor markets, a skilled man can earn CNY150-200 per day against CNY100-120 for a skilled woman for the

same work. The wage for an unskilled man is CNY100-120 per day versus CNY80-100 per day for an unskilled woman. Second, women's needs or interests tend to be ignored during public consultation and participation since few women can voice their opinions in public and/or fewer women are invited to attend consultation meetings, for example, consultation on selection of resettlement sites. Third, a woman's burden might be increased because the resettlement site might be far away from farmland that might keep her busier between household work and land related activities. Relocation may also increase the distance between school or hospital and home, which would increase her travel time.

220. To facilitate livelihood restoration for affected women, various skill-training programs should be provided through a number of ongoing government initiatives. According to women's needs, relevant training courses such as housekeeping and handicrafts should be introduced to women through Women Federation, or the Human Resources and Social Security Bureau with close cooperation with the Project sponsor. Provision of jobs to women should be prioritized during project construction.

221. All the above measures have been included in the Gender Action Plan (GAP) which has been extensively discussed with project sponsor. The GAP addresses women's needs and ensures women will be benefited equally by the Project and to mitigate negative impacts for women that might arise from the Project.

VI. ETHNIC MINORITY DEVELOPMENT PLAN

A. Summary of Project Benefits and Impact

222. The project is expected to benefit a total population of about 405,000, including 287,000 or 71% ethnic minorities and 149,000, or 36.7% poor population. Among the three components, the rural road improvement component will benefit around 73,000 people in 16,280 households of 287 village groups of 110 administrative villages in 9 counties and one district of Pu'er prefecture. About 80% of them are ethnic minorities including Hani, Yi, Lahu, Wa, Dai, Yao, Bai, Hui, and Miao. The Ning'er-Jiangcheng-Longfu Road component and Menglian-Meng'a component will benefit population of 332,000, of which 260,720 or 69% are ethnic minorities. The main ethnic minority groups are Yi, Hani, Dai, Lahu, Wa, Yao and Bai. Table 41 summarized the degree of beneficiaries by livelihood patterns and roads. The darkest grey are the most benefit groups.

223. The major project direct benefits include: 1) shorten travel distance in the case of Ning'er-Jiangcheng-Longfu road, 2) shorten travel time by all components, 3) smoothen travel with improved road surface of rural roads and Ning'er-Jiangcheng-Longfu road, 4) increase all season accessibility by pavement of 31 rural roads and rural road maintenance, 5) reduced traffic jams of Menglian-Meng'a road, 6) improve rural transport service, 7) facilitate border trade through cargo flow centers, and 8) provide direct job opportunity during project implementation and operation phases, although which is not the main long term benefits envisioned by the surveyed villagers but they expressed willingness to work for the project during project implementation and operation.

224. The main potential negative impact on ethnic minorities including (i) land acquisition and house demolition, (ii) disturbance during construction, (iii) road safety issues might cause by speed drive, and (iv) potential risk of human and drug trafficking, and HIV/AIDS.

225. Based on the current livelihood patterns of villages in the PA, the Project's positive indirect impacts will most likely be: 1) promote and smooth the transitions of the villages from traditional agriculture to cash crop growing by attracting investors and eliminate the transport barriers, 2) better access to market for villagers who grow or are going to grow cash crops along the Project roads, 3) benefit villages who need to diversify their income sources through non-farming activities, including cross border trade, 4) promote villages near the urban areas or towns for sustaining their current trends in non-farming income, and 5) realize easier access to social services such as school, clinic, shopping and entertainment, and maintain social network.

226. It is worth pointing out that the Project will benefit ethnic minority groups in different ways. The benefits derive from the village location and livelihood pattern rather than on their ethnicity. Menglian-Meng'a road will benefit mainly Lahu, Dai and Wa while Ning'er-Jiangcheng-Longfu road will mostly benefit Hani, Yi, Yao, Bai, Dai, Han, Lahu, Hui, Bulang and Miao. The rural road component will benefit a diversified group of ethnic minorities along the 31 roads.

B. Objectives

227. This EMDP has been prepared in full consultation with EMs and follows the ADB's safeguard requirements and PRC policy to ensure the equitable sharing of project benefits. It proposes measures to mitigate adverse impacts and enhance positive impacts for the EM communities within the PA.

C. Activities

228. Based on the impacts and benefits identified, the actions in the EMDP target affected EMs and overall ethnic minorities of the PA. Three categories of actions include i) project benefits and enhancement measures, ii) potential negative impacts and mitigation measures, and iii) local government complementary ethnic minority development projects to enhance the indirect benefits of the Project in the long term.

229. Table 42 lists the EMDP activities.

D. Budget

230. The budget for the EMDP is derived under various sources within the project budget and includes budget for village road spot improvement (US\$ 4 million), rural transport services piloting (US\$ 500,000), road safety improvement (US\$ 400,000), EM cultural protection, minimizing risk of communicable diseases and minimizing risk of human and drug trafficking (US\$ 100,000). In addition, amount of US\$85,000 as M&E costs is included in the project budget to ensure the progress and results of the EMDP actions and results are monitored and reported separately.

E. Agencies responsible for implementation

231. The Pu'er Prefecture Municipal Government (PMG) as executive agency (EA) is responsible to endorse the EMDP. The Pu'er Municipal Transport Bureau (PMTB) the project IA is primarily responsible for implementing the EMDP and will coordinate with other key local governmental agencies. Details see section VIII.

Table 42: Ethnic Minority Development Action Plan

Proposed Actions	Target Group(s)	Agencies Involved	Timing	Funding Needs & Source(CNY)	Monitoring Indicators & Source
A. PROJECT BENEFITS AND ENHANCEMENT MEASURES					
<p>1. Design Features: Regional Roads development</p> <p>a) 33 sections totaling 600 km local road upgraded</p> <p>b) Rehabilitation/reconstruction of Ning'er-Jiangcheng-Longfu highway and Menglian-Meng'a roads</p>	<p>Communities along the road. Around 405, 000 populations including 71% of ethnic minorities</p>	<p>PMG and PMTB</p>	<p>2015–2018</p>	<p>US\$420.2 million in Project budget</p>	<ul style="list-style-type: none"> • Section (N)and length (km) of rural roads improved and maintained • Number of rural people served by improved roads, % of EM benefitted • Number of village roads spots fixed; number & km of village roads maintained
<p>2. Improved village roads and transportation services</p> <p>a) Village road spot improvement</p> <p>b) Piloting of rural transport services¹⁴</p>	<p>Communities along the village roads connecting the rural roads</p>	<p>PMG and PMTB, Golden Peacock Transport Company</p>	<p>2015–2018</p>	<p>a) US\$ 4 million for spot improvement b) US\$500,000 for piloting</p>	<ul style="list-style-type: none"> • Number of village roads improved • Length of village roads improved • No of days of (42,000 days) employment generated • Number of rural transport services introduced and functional

¹⁴ Limited purchases of buses and/or minivans have been provisioned. PMC support will focus on improved transport planning, including the selection of an appropriate commercial model and the provision of transport services for school children. The assistance will also support the piloting of township-based bus services and village-based pilot initiatives.

Proposed Actions	Target Group(s)	Agencies Involved	Timing	Funding Needs & Source(CNY)	Monitoring Indicators & Source
<p>3. Improved Road Safety¹⁵</p> <p>a) Installation of road safety measures such as signage, traffic calming strips, pedestrian crossings</p> <p>b) Organizing educational and community awareness programs</p> <p>c) Establishing Accident database established</p>	<p>Communities along the road. Around 405, 000 populations including 71% of ethnic minorities.</p>	<p>PMG and PMTB Local Police, Village communities and educational institutions along the project roads</p>	<p>2015–2018</p>	<p>US\$ 400,000 in Project budget</p>	<ul style="list-style-type: none"> • % reduction in traffic accident • No. of easy-identifiable roads safety signs installed • No. of effective measures taken for speed limitation • No. of local communities covered by road safety training • No. of awareness building material prepared and distributed
<p>4. Project Economic Benefits:</p> <p>a) 50% of unskilled jobs (estimated number of jobs 500 person year) for ethnic minorities, women, poor, project affected, and local people</p> <p>b) Use of local resources and local construction materials</p>	<p>Villages along road, priorities given to poor minorities, minority women, project affected people</p>	<p>PMG and PMTB and Contractors</p>	<p>2015–2018</p>	<p>Overall Project budget</p>	<ul style="list-style-type: none"> • Provisions included in the bidding documents • Number of unskilled jobs provided to local people (ethnicity and sex disaggregated data) • Average purchase of local products and other resources (contractor camps details) in Yuan

¹⁵ A program of road safety improvements will be implemented targeting: i) education and community programmes, ii) enforcement, iii) capacity building, iv) accident database establishment, and v) a program of equipment procurement. The PMC will provide the necessary guidance and oversight.

Proposed Actions	Target Group(s)	Agencies Involved	Timing	Funding Needs & Source(CNY)	Monitoring Indicators & Source
					<ul style="list-style-type: none"> • Number of establishments (houses/space) rented • Source of construction materials—money spent and % of total procurement (interviews with contractors)
<p>5. Capacity development measures (EM, poor, women)</p> <p>a) Technical training for cash crop growing¹⁶</p> <p>b) Non-farming job skill training</p>	<p>All 28 villages with APs, Priorities give to poor EM villages, total target trainees 5000 person</p>	<p>PMG and PMTB and Human resources bureau</p>	<p>2015–2017</p>	<p>Project budget In RP and local government budget</p>	<ul style="list-style-type: none"> • No. of training sessions held • No. of EM people trained (training report)
B. MITIGATION MEASURES TO ADDRESS SOCIAL RISKS					
<p>1. EM Cultural protection and awareness building</p> <p>a) Building cultural awareness and sensitivity of the construction workers during construction period</p> <p>b) Avoiding disturbance to the sacred trees/relics through project design</p> <p>c) Identification will be done by Cultural Protection Management Bureau in regard to sacred trees and relics</p> <p>d) EM cultural protection - documentation, disseminations and support ethnic cultural festivals, minority music, identifying and protecting ethnic minority ancient</p>	<p>Construction workers Villages with land close to the proposed road</p>	<p>PMG and PMTB contractors, ethnic minority bureaus, tourism bureaus</p>	<p>2015–2018</p>	<p>CNY30,000 in project management (EMDP Budget) CNY 10 million, (1 million per county) for ethnic minority bureaus budget</p>	<ul style="list-style-type: none"> • Avoidance of sacred trees and relics included in contractors' bids • No. of awareness building sessions and No of workers attended the sessions • No. of sacred trees/relics identified and saved • No of community

¹⁶ Refer to training program under the resettlement plans prepared for the project

Proposed Actions	Target Group(s)	Agencies Involved	Timing	Funding Needs & Source(CNY)	Monitoring Indicators & Source
<p>buildings, protecting EM model villages</p> <p>e) EM cultural awareness building via TV programs and booklets on ethnic minority music, historical stories, festivals, daily life, community norms, custom, religious practices</p> <p>f) Awareness building of visitors/tourists through information dissemination such as brochures, booklets and audio-visual presentations</p>					<p>consultations held with EM communities on cultural issues especially sacred trees/relics</p> <ul style="list-style-type: none"> • No of documentations and disseminations undertaken • No of cultural programs telecasted, booklets produced • No of tourist bureaus providing cultural information to visitors and frequency • No of information material produced

Proposed Actions	Target Group(s)	Agencies Involved	Timing	Funding Needs & Source(CNY)	Monitoring Indicators & Source
<p>2. Minimizing risk of communicable diseases:</p> <p>a) HIV/AIDs and STI awareness</p> <ul style="list-style-type: none"> • Contractors provide training to all workers and managers in accordance with the provision under bid contracts <p>b) Malaria Prevention and control— construction workers</p> <ul style="list-style-type: none"> • Ensure site sanitation and improved drainages • Use of mosquito nets and spraying of camps • Treatment of affected workers <p>c) Tuberculosis prevention and control among construction workers</p> <ul style="list-style-type: none"> • Annual health screening for all workers • Quarantine and treatment of affected workers • Communities (CDC) 	<p>Contractor staff, construction workers, villagers</p>	<p>PMG and PMTB and contractors and County CDC</p>	<p>2015–2018</p>	<p>CNY50,000 included in project management and local CDC budget</p>	<ul style="list-style-type: none"> • Contractors bids include provision for HIV/AIDS awareness training to all workers • Number of workers trained • Number of training programs conducted for workers • Number of awareness raising material produced & distributed • Number of condoms distributed • Number of mosquito nets provided • Number of times camps sprayed • Number of workers screened for TB • Number of workers quarantined and treated for TB

Proposed Actions	Target Group(s)	Agencies Involved	Timing	Funding Needs & Source(CNY)	Monitoring Indicators & Source
<p>3. Minimizing risk of Trafficking of human and drugs</p> <p>a) A multi-sector approach in coordination with various agencies</p> <p>b) Awareness building and information sharing with a focus on Lahu and Wa communities in coordination with local women's federation</p> <p>c) Awareness building and education on anti-drug trafficking especially targeting youths</p> <p>d) Improved law enforcement including setting up check points and surveillance equipment</p> <p>e) Posters and pamphlets in bus stations, border points</p> <p>f) Human and drug trafficking prevention expert appointed</p>	Villages and towns along port areas	PMG and PMTB, Police station, Customs Offices, and women's federation	2015–2018	CNY500,000 included in project budget for awareness building and information sharing. Law enforcement costs will from government regular budget. US\$ 80,000 for human and drug trafficking expert	<ul style="list-style-type: none"> • No. of posters in EM language or drawing • Number of training program and trainees • Number of check points and surveillance equipment installed • Number of youths provided training
<p>4. Minimization of disturbances during construction</p> <p>a) Avoidance of water sources contamination</p> <p>b) Avoidance of construction work at night nearby residential areas</p> <p>c) Minimization of dusts caused by construction</p> <p>d) Site cleaning up on work completion</p> <p>e) Provide temporary service during construction and reconstruction of irrigation, drainage systems and approach roads</p>	Villages close to the alignment corridor	PMG and PMTB and contractors	2015–2018	Included in project budget (refer to EMP)	<ul style="list-style-type: none"> • Number of complaints received and resolved • Length of irrigation and drainage canals, percentage of recover ratio • Clearance from village committees upon completion
C. LOCAL GOVERNMENT COMPLEMENTARY POVERTY REDUCTION MEASURES					

Proposed Actions	Target Group(s)	Agencies Involved	Timing	Funding Needs & Source(CNY)	Monitoring Indicators & Source
1. Promote non-farming employment in transport, border trade and tourism service sectors a) Promote skill training on transport, border trade, and tourism b) Provide micro-credit assistance to help establish non-farming establishments	Minority Household and individuals	Local PRADO, EMARB, and LSSB	2015–2018 onwards	On-going government project	<ul style="list-style-type: none"> • No of EMs trained • Amount of credit disbursed • number of minority borrowers, and type of activities
2. Tourism promotion a) Minority cultural protection and cultural and ecotourism development b) Advertising of tourism sites through varies approaches	Minority villages	LG and its tourism bureaus	2016 onwards	Government and tourism sector	<ul style="list-style-type: none"> • Minority festival celebration and re-storage • Number of advertisements • No. of home stay tourism site in EM villages • Income from tourism • Jobs created for EMs
D. MONITORING AND EVALUATION					
1. Monitoring and Evaluation	All ten counties and districts with project components	PMG and PMTB	2015–2018	CNY600,000 as part of project consultancy budget	<ul style="list-style-type: none"> • Report to ADB semi-annually

Note: CDC = Center of Disease Control, DRB = Development and Reform Bureau, EMARB = Ethnic Minority Affairs and Religion Bureau, EMs =Ethnic Minorities, EMP = environmental management plan, HH = household, IPMC = Industrial Park Management Committee, LSSB = Labor and Social Security Bureau, M=Million PRADO = Poverty Reduction and Development Office, PMO = Project Management Office, RP = resettlement plan, TB = Tourism Bureau, LG =Local Government, and WF = Women's Federation.

Sources: Pu'er Prefecture Municipal Government, PMO, County level of bureaus/office of transport, poverty alleviation, civil affairs, labor and social insurance, ethnic minority affairs and women's federation.

VII. PARTICIPATION AND CONSULTATION

A. Consultation Methods and Process

232. During the preparation of the project feasibility study reports, environmental impact assessment and resettlement plan, consultations were conducted with governmental agencies, villagers, enterprises, local groups and other people to be affected by the project to discuss environmental concerns, land acquisition and resettlement issues, and economic development potentials. Around two thirds of the participants are ethnic minority representatives and around one fourth are women.

233. Starting from the PPTA field assessments in April 2013, a number of participatory assessment sessions, consultations, discussions and interviews were held with over 2000 people, including around 80% were the minority population, 50% were the poor and around 50% were women. Participants included individual villagers, village leaders, urban residents, staff of government agencies such as the Ethnic Affairs Bureau, Industrial Park Committee, Tourism Bureau, Development and Reform Bureau, business owner and employees. The assessments, surveys and discussions provided the quantitative and qualitative materials that were used to prepare the SPA, RP, EMDP, EMP, and other documents to satisfy both ADB and PRC policy requirements.

234. Methods and tools used include (i) field visits to collect basic information on the project impact from project beneficiaries and APs; (ii) interviews and FGDs with representatives of households, villages or communities to find potential impacts, coping strategies and support needed; (iii) interviews with government agencies, development organizations and industrial parks to identify existing programs helping the poor and ethnic minorities to harness the project benefits stimulated, and (iv) workshops held to collect feedbacks on the RP, EMDP and GAP.

B. Public Participation Activities at the Project Preparation Stage

235. The project scope is a result of a series of public participation and consultation with various social groups and stakeholders including Yi, Hani, Yao, Dai, Lahu, Wa groups along rural roads, Ning'er-Jiangcheng-Longfu Highway and Menglian-Meng'a Highway, government agencies like PADO, Ethnic Minority Bureau, Women's Federation, Tea bureau, Tourism bureau, drivers, business owners along the road, Border authorities, local police, Local CDC, Design institute, etc. As a result of responding to feedback from technicians from each county line agencies, village leaders and representatives, affected enterprise owners, and public, the project scope has been modified/optimized many times, including selection of the rural road, replacing Pu'er ring road by Menglian-Meng'a road, avoiding house demolition of the rubber processing company and tea processing company in Menglian, realignment some sections of the Ning'er-Jiangcheng-Longfu road.

Table 43: Public Participation Activities at the Preparation Stage

Time	Organized by	Participants and number	Key activities	Key outputs/issues raised
Before April, 2013 and after by EA and IA	Pu'er Prefecture City PMO	Design institute, county transportation bureaus Township officials Village leaders Over 800 in over 2 years from initial individual project component to an integrated package. Around one fourth are female	<ol style="list-style-type: none"> 1. Project concept development 2. Preparation of FS 3. Reviewing project components and scope 4. Estimate APs and beneficiaries 5. Comparing and Soliciting options balancing project costs and distribution among counties/district 6. Selecting rural road 7. Prepare EIA 	<ol style="list-style-type: none"> 1. The proposed components were disclosed to project counties and sites communities in Jiangcheng, Ning'er and Simao 2. Rural roads for upgrading were selected 3. Potential affected communities were informed; feedback procedures were initiated trough community leaders 4. FS has been prepared 5. EIA reports have been prepared and approved
Apr.–Aug. 2013	Pu'er Prefecture City PMO and ADB PPTA Team	Beneficiaries, APs along project and relevant bureaus. Total 510 (42 village leaders, 20 business owners, 420 household, 28 key informants from various bureaus) with 201 female	Socio-economic survey for SPA, GAP, EMDP, border issues and rural transport service. Forms including focus group discussion, key informants interviews, consultation meetings, and HH surveys (420HH).	<ol style="list-style-type: none"> 1. Project scope and alignment 2. Rural road scope were refined 3. Potential benefits and negative impacts, possible enhancement measures and mitigate measures 4. Impact assessment and RP, EMP, SDAP and EMDP preparation requirement
Sep.–Nov. 2013	Pu'er Prefecture City PMO, RP Team contracted by EA, PPTA team, Field social survey team	Village leaders affected APs, local transport bureau and Ning'er, and Menglian County government, transport bureaus Total 500 people with 250 women	RP Consultation workshop village by village to generate opinions of the affected APs regarding degree of impact, coping strategies, issues concerned	<ol style="list-style-type: none"> 1. Major impact of each village along the road, number and degree of affected HH 2. Compensation arrangement, rate, procedures 3. Options of livelihood restoration 4. Feasibility of restoration plan backed by socio-economic analysis 5. Draft GAP, RP and EMDP

Time	Organized by	Participants and number	Key activities	Key outputs/issues raised
Nov.–Dec. 2013	Pu'er prefecture PMO, PPTA team	Bureaus of Transportation, Ethnic minority affairs, Poverty Alleviation office, 100 HH supplementary survey on Menglian-Meang'a road Total 220 people with 100 female	Village leader interview, focus groups discussion in 5 villages, state farm leader interview, EM bureau interview, Poverty Reduction and Development office, HH survey (100HH) etc.	<ol style="list-style-type: none"> 1. Poverty of state farm APs 2. Existing livelihood patterns of EMs along Menglian-Meng'a road area 3. Positive and negative impacts perceived by villagers within the project impact zone 4. Coping strategies of surveyed households 5. Most helpful actions needed in enhancing the project benefits to and mitigation the project negative impact from the EM, Women and the poor

Source: PMO and field survey

C. Public participation plan during project implementation

236. At the implementation stage, PMO will follow a proactive approach to ensure the affected ethnic minority communities: (i) participate in decision-making; (ii) are fully involved in implementation; and (iii) receive equitable and culturally appropriate benefits from the Project. Further consultation and participation plan is outlined in Table 44.

Table 44: Public Participation Activities at the Implementation Stage

Stage	Responsible	Participants	Main activities
Aug 2014	PMO	Governmental line agencies, local EM villages	EMDP as well as project information disclosure and information sharing
Sep. 2014- Feb. 2015	PMO	Governmental offices of various levels, local communities including various beneficiary groups (particularly EM peoples and women)	Collection of the beneficiaries' comments, suggestions, requirements etc. in terms of the project is a constant communication process. Different opinions are collected through PMO then forward to all the related agencies
Feb. 2015- Dec. 2018	PMO	Government of various levels	Any change in project implementation should be disclosed timely to relevant groups
Feb. 2015- Dec. 2018	External Monitor	Government offices of various levels, local ethnic minority communities	Timely report and feedback the results to all EM beneficiaries, EA and ADB. Provide monitoring reports to EA and ADB

Sources: PMO and PPTA team.

VIII. IMPLEMENTATION AND MONITORING & EVALUATION ARRANGEMENT

237. The EMDP will be implemented in parallel with the project construction works during 2015-2016.

238. The Pu'er Prefecture Municipal Government (PMG) as executive agency (EA) is responsible to endorse the EMDP. The PMO is primarily responsible for implementing the EMDP and will coordinate with other key local governmental agencies. For implementation of the EMDP, Pu'er Ethnic and Religion Affairs Bureau (PERAB) will provide support in terms of cultural awareness and monitoring of the EMDP effectiveness. Other key agencies for the implementation include poverty reduction and development office (PADOs), Center for Disease Control CDC, Labor and Social Security Bureaus (LSSB) and Women's Federations (WFs), Cultural Affairs, Tourism Bureaus, Police, and Border port authority. Organizational structure indicated in the below chart.

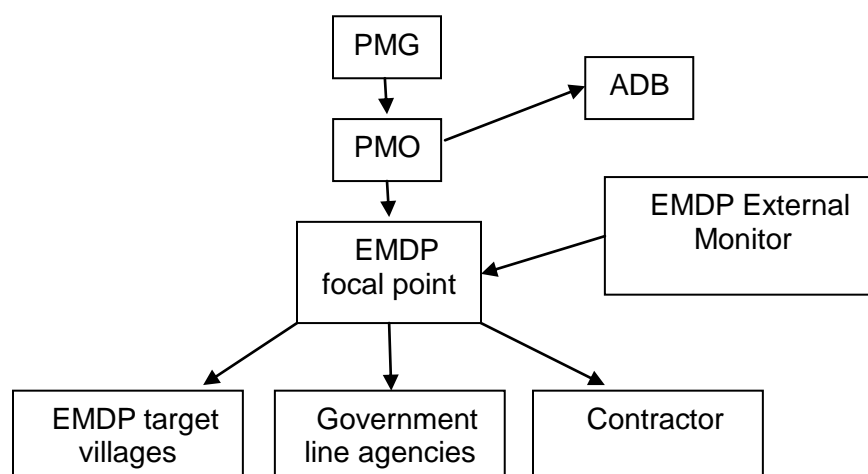


Chart 1: Institutional Arrangement for EMDP Implementation

239. The Project Leading Group will have a member responsible for the EMDP implementation. The PMO will ensure that (i) at least one focal point staff and resources will be available to implement the EMDP and report progresses to ADB semi-annually; (ii) EMDP M&E be included in the project independent agency M&E. The monitoring reports should include data disaggregated by ethnic group and by gender, by poor and non-poor wherever relevant.

240. **EMDP disclosure.** The draft EMDP will be reviewed and endorsed by PMG. A summary of the draft EMDP will be distributed to targeted villages for public disclosure and consultation by the end of October 2014. If there are no further comments from stakeholders, the EMDP will become final in December 2014 prior to commencement of the Project.

241. **Grievance redress mechanism.** The EMDP has a grievance redress mechanism to resolve any unforeseeable problems occurring in the implementation phase in an effective and transparent manner. The basic procedures for grievance can include any the following informal and formal channels:

- If any person within the project area is aggrieved by any aspect of the Project, he/she can state their grievance and appeal to the village committee in oral or in written form. If an oral appeal is made, the village/or township will record it on paper and process it. Village committee will make decision on or resolve it in two weeks; or
- He/she can state their grievance and appeal to the Contract Manager's Office in

oral or in written form. The Contract Manager's Office will make decision on or resolve it in two weeks; or

- He/she can appeal to the Project management office in oral or in written form. PMO will make decision on or resolve it in two weeks; or
- He/she can appeal to the EM representative of the Project Leading Group in oral or in written form. The Project Leading Group will make decision on or resolve it in two weeks.
- If the aggrieved person is still not satisfied with any of the above decisions, he/she can make a formal appeal to the township government. The township government will make decision on or resolve it in two weeks.
- If the aggrieved person is still not satisfied with of the decision of the township government, he/she can appeal to the city/county or prefecture level government. The city/county or prefecture level government will make decision on or resolve it in two weeks.
- At any stage, if the aggrieved person is dissatisfied with the decision of the local government, he/she will appeal to the civil division of a people's court according to the civil court procedure.

242. The person aggrieved by the project can also put forward grievance to external monitoring and evaluation agency, the external agency reports it to project management office. Or the APs can put forward grievance to project team of ADB for negotiated resolution. If good faith efforts are still unsuccessful and if there are grievances that stem from non-compliance with ADB's safeguard policy, the affected person may submit a complaint to ADB's Office of Special Project Facility or Office of Compliance Review in accordance with ADB's Accountability Mechanism (2012).¹⁷

243. The above offices and agencies will accept the grievance and appeals of the APs free of charge, and the reasonable expenses incurred there will be paid by the PMO from the Project's contingency fund.

244. **Capacity building.** PMG and IA have experience in implementation of foreign funds (KfW of German) financed projects (river improvement) and ethnic minority concerns but have no direct experience with ADB project. Training was provided to the PMO staff by the ADB social safeguards specialist during the missions (mainly fact finding mission). To further strengthen the EA/IA capacity to ensure that the EMDP is effectively implemented and the ADB's safeguards requirements III are met, a social safeguards capacity building expert will be procured under the ADB's consultancy services. The expert will work intermittently through the life of the project and a detailed ToR has been prepared. The expert will be procured under the 'advanced procurement' scheme to ensure that the EA/IA has timely support.

245. **Monitoring, reporting and evaluation.** Objectives of the monitoring and evaluation (M&E) include:

- Monitor and report the progress of EMDP actions and activities to ensure compliance with the EMDP and ADB policy principles;
- Assess the project impacts on livelihood and wellbeing of the ethnic minority groups;
- Identify areas for adjustment to enhance project benefits and avoid adverse impacts on ethnic minorities (if updates to the EMDP are required, seek approval of adjustments from ADB); and

¹⁷ For further information, see <http://www.adb.org/Accountability-Mechanism/default.asp>.

- Summarize lessons and experiences on enhancing ethnic minority development which can be replicated in other areas.

246. PMO is responsible for internal supervision and monitoring, with assistance from local government agencies, e.g EMRB; a summary of EMDP action plan progress, will be included in the quarterly Progress Reports submitted to ADB. In addition, an independent monitor with relevant EM experience will be contracted by PMO to carry out the external monitoring and evaluation, and prepare monitoring reports for submission semi-annually to PMG, and ADB until the completion of the Project. Field investigation will be conducted in twice a year. In the middle year investigations will focus mainly on EMDP implementation progress and end year survey include household surveys, village surveys, focus group discussions and key informant meetings with relevant agencies, focusing on the target groups and issues set out in the EMDP action plan. As the EMDP also includes villages with APs, it is time and cost saving to coordinate the M&E with RP in data collection and interview.

247. The TOR for the external EMDP monitor is provided in Annex 1. Reports will assess the effectiveness of each EMDP activity and will provide recommendations for follow-up by PMO. These reports will be made publicly available in local libraries and distributed to the relevant implementing agencies for the EMDP. ADB will upload these reports to their website.

ANNEX 1: TOR for the EMDP External Monitor

A. Terms of Reference

1. The ethnic minority development plan (EMDP) for the Pu'er Road Network Development Project consolidates all specific actions that target ethnic minorities from different documents so that it forms a stand-alone document to ensure compliance with ADB's Safeguard Policy Statement (2009), particularly Safeguard Requirement 3 for Indigenous Peoples. Measures to enhance the economic conditions of ethnic minorities have either been integrated into project design or specified separately in the EMDP. The EMDP includes actions for ethnic minorities primarily in all counties and district of Pu'er Municipality, the project areas with significantly affected ethnic minorities.

2. The objectives of the external monitor are to: (i) ensure the action plan of EMDP is implemented according to PRC regulations and ADB's Safeguard Policy Statement (2009); (ii) assess the impacts of the action plan of EMDP on ethnic minority welfare; (iii) assess the overall efficiency, effectiveness of the EMDP; (iv) suggest necessary adjustments to the actions in the EMDP and assist PMO to update the EMDP to ensure ethnic minorities are no worse off and that they benefit from the Project in an equitable and culturally appropriate manner; and (iv) deduce lessons for future road development projects in Pu'er and/or local governments' efforts on minority development.

3. The EMDP includes three types of action: (i) project benefits enhancement measures, (ii) mitigation measures to address social risks, and (iii) local complementary measures taken by local government. The focus of monitoring will be items (i) and (ii). The item (iii) will be implemented and monitored by other organizations. The external monitor will ensure that the data will be collected from other organizations and analysis the impact specifically linked with the proposed project. Additional data might be required from the field survey. Note timing of target might be the main issues to be carefully coordinated.

B. Methodology and Content

4. The general methodology will involve primary and secondary data collection, key informants interview, household survey, and participatory rapid appraisal techniques (PRA) repeated on a yearly basis before, during, and after the EMDP, associated with the project, is implemented.

5. The secondary data will cover statistic data, annual implementation plans and review reports related to EMDP done by various agencies involved. The team will also interview responsible persons in Transport Bureaus, Ethnic Minority Bureau, Poverty Alleviation Office, Tourism Bureau, Forestry Bureau, Agriculture Bureau, Health Bureau, All China's Women Federation, and other related institutions at the prefecture and county level. Local nongovernmental organizations (NGOs) will also be interviewed to learn the achievements, experience and recommendations.

6. Household survey will use the household questionnaire for the poverty and social assessment. This survey will selectively target certain number of ethnic minority households over the whole monitoring period and constantly record the household activities, including Yao, Wa, Lahu, Hani, Yi and Dai. The selection of villages and households will be based on consultation of with the local authorities and villagers themselves. This could enable analysts to have systematic data to assess the project impacts.

7. Participatory assessments should cover a wide range of issues that arise during the implementation process. The monitoring team will conduct the participatory assessment twice a year in relevant locations according to needs. The target populations include government

agencies and their staff, transport providers, rural people especially rural women, and members of ethnic minority communities. The outcome of participatory assessments would be of critical importance in future planning.

8. The tasks of external monitoring and evaluation will include:
 - (i) Regular monitoring of social and economic activities of sample ethnic minority households;
 - (ii) Conducting participatory assessments in villages;
 - (iii) Collection of secondary data of provincial, county and township levels;
 - (iv) Monitoring the impact of tourism development on sensitive minority cultures;
 - (v) Assessing the induced social impacts of the Project on ethnic minorities in the project areas;
 - (vi) Semi-annual investigation and reporting of monitoring and evaluation results to PMG, Pu'er ERAB, and ADB; and
 - (vii) Suggestions and feedback to IA and local governments for improving the implementation or revising the EMDP, if required.

9. The baseline survey will mainly focus on updating of the existing survey data collected during the PPTA. The secondary data will include statistic and each bureau's plan for activities of EMDP.

10. The subsequent survey will collect data through key informant interviews, focus groups discussion, and household survey and will focus on results of each EMDP activity. The team will also learn lessons and experiences regarding EMDP implementation. The recommendations will be drawn from the survey, interviews and field observations.

11. The final evaluation will also collect data, key information, and household survey and PRA survey. The survey will focus on overall impact of EMDP on minority livelihoods, capacity of implementing organizations engaged, and policy of ethnic minority. The team will also summarize the key lessons learned and experiences that would be relevant for the Project completion report.

C. Sampling

12. It is suggested to select 15 communities as sample villages, covering different ethnic minorities. The ethnic minorities groups will include: Yao, Wa, Lahu, Hani, Yi and Dai.

13. Ten households should be sampled in each selected community. The sample will be chosen according to their economic status at the beginning of the project. In general, 3 households will be in good conditions, 4 in average condition and 3 in poor condition (i.e. vulnerable). The criteria used to determine "good" "average" and "poor", and the "vulnerable households" should be clearly stated in the baseline report. In order to improve comparability, households selected for the baseline survey will be interviewed in all subsequent annual surveys.

D. Survey Timing

14. The schedule has been designed to provide, as required, 7 investigations throughout the implementation of the project (one baseline survey, 4 semi-annual monitoring and two evaluation surveys). The household surveys would be repeated once every year starting with the baseline survey implemented just before construction. All selected villages/communities

would be visited in February/March and August/September annually because this time the statistic data are available and household data are easily collected.

15. The baseline survey will establish the pre-project socio-economic conditions of villages as well county statistic data against which subsequent changes can be evaluated.

16. Semi-annual monitoring and evaluation surveys will provide a quantification of the changes in the social and economic conditions of ethnic minorities together with a more qualitative assessment of these changes and the reasons for them. These investigations will also provide interim assessments of the changes taking place in the sample villages. Village level indicators will be collected but the emphasis will be on qualitative information.

17. The final evaluation survey should take place approximately one year after the construction is completed in 2017. Its main objective is to assess whether the objectives of the EMDP were achieved, i.e. whether the measures taken in EMDP will enhance the potentials or mitigate negative impacts. This survey will also probe sample households and key informants on how the whole process might be better done next time.

E. Reporting and Distribution

18. The M&E reports shall be submitted semi-annually to PMG, Pu'er ERAB, and ADB. Copies sent to the ADB should be in English and Chinese. The Chinese versions should also be provided to local agencies involved in EMDP implementation, and should be made available to the affected communities (e.g. website, local libraries, etc.).

19. The baseline survey should be reported in full to PMG and ADB. Subsequent reports should provide principal findings, tabulations of key indicators, qualitative and quantitative descriptions of main changes in socio-economic changes of minorities and conclusions and implications, if any, for additional action/assistance.

20. The final M&E Report will constitute a final assessment on the EMDP process and detail the extent to which the EMDP has (i) complied with ADB policy and (ii) contributed to the welfare of minorities in project areas.

F. Qualification of Contracted Institute to Implement the M & E

21. The qualification of the contracted institute to carry out this external M & E includes:

- At least five years of working experiences in similar tasks with international development projects.
- Sound knowledge background on ethnic minorities in Yunnan, social sciences, and participatory development.
- Knowledge and skills with the designing of instruments for data collection, especially at the community level.

22. Experiences and skills in using participatory rural appraisal (PRA).

G. Estimated Budget

23. A total of US\$ 85,000 under the ADB consultancy services is earmarked to cover the costs of external monitoring and evaluation.

ANNEX 2: TOR for the Human and Drug Trafficking Prevention Expert

National Consultant (10 months/intermittent)

A. Objectives

1. The human and drug trafficking consultant will contribute to building capacity of enforcement officers at the major ports in Jiangcheng and Menglian County in Pu'er bordering Vietnam, Lao and Myanmar and coordinate with the agencies such as customs, police, Public Security Bureau Criminal Investigation, narcotics and public security squad, border detachment and police station, port office, Bureau of Justice, Bureau of Human Resources and Social Security, Bureau of Education, Health Bureau/HIV&AIDS Prevention Office and Women's Federation to effectively implement the Human and Drug Trafficking activities. The expert will also engage in educational and awareness building training for local communities, especially Lahu and Wa ethnic minority communities and develop necessary coordination with relevant local government bureaus. On drug trafficking prevention, the expert will focus mainly the youths in the border town areas and will develop coordination with educational institutions, village communities and relevant government agencies to implement a comprehensive educational and awareness building training program. The expert is expected to undertake the following:

- (i) Assist the PMO to effectively implement the activities related to prevention of human and drug trafficking within the project area;
- (ii) Based on the assessment undertaken during the PPTA undertake stakeholder consultation through rapid appraisal methods and develop effective measures to address the issues relating to human and drug trafficking;
- (iii) Ensure that these activities adequately focus on the 'vulnerable' groups such as Lahu and Wa communities identified under the PPTA;
- (iv) Develop coordination with other line agencies and seek support of the Pu'er Municipal Government (PMG) where necessary for such coordination;
- (v) In consultation with stakeholders and local communities, develop and produce culturally and gender sensitive awareness building and educational material;
- (vi) Organize stakeholders workshops (for various enforcement agencies) to develop a coordinated approach to deal with the issues of human and drug trafficking in the project area;
- (vii) Provide training and awareness building sessions for the vulnerable groups within the project area; and
- (viii) Collect data (gender and ethnicity segregated) on the impacts of these activities and prepare reports submitted to the PMO and ADB.

B. Qualification of Contracted Expert

- (i) At least ten years of working experiences in similar tasks with international development projects;
- (ii) Sound knowledge background on ethnic minorities in Yunnan, social sciences, and participatory development;
- (iii) Sound knowledge and background on human and drug trafficking prevention and demonstrated experience of implementing such programs;
- (iv) Knowledge and skills with the designing of instruments for data collection, especially at the community level; and

(v) Experiences and skills in using participatory rural appraisal (PRA).

C. Estimated Budget

2. A total of US\$80,000 under the ADB consultancy services and CNY500,000 from the project budget for various activities are earmarked.

ANNEX 3: TORs for the Social Safeguards (IR and IP) Capacity Development Specialists (ADB Consulting Service Support)

National Consultant (10 months/intermittent)

- (i) Assist the IA in implementing the RP/ EMDP as endorsed by the EA and disclosed to the affected peoples;
- (ii) Provide training to the IA resettlement staff on ADB's involuntary resettlement policy requirements and indigenous peoples requirements especially those related to the implementation of the RPs and EMDP Action Plan;
- (iii) Assist the IA to enhance the consultation and participation of APs including timely information disclosure on various resettlement and indigenous peoples related issues and policies;
- (iv) Provide guidance to the IA in internal monitoring the RP and EMDP implementation and preparation of reports;
- (v) Provide guidance to the IA in coordinating with various other agencies involved in RP and EMDP implementation;
- (vi) Provide assistance to the IA in strengthening its organizational arrangements to effectively implement the RPs and EMDP;
- (vii) Assist the IA to identify gaps in RP and EMDP implementation and suggest appropriate solutions in a timely manner;
- (viii) Assist the IA on managing grievance redress mechanism, its publicity amongst the affected people and in record keeping of related grievances and redress measures taken;
- (ix) Provide guidance on enhancing the effectiveness of the livelihood restoration program implementation;
- (x) Assist the IA on assessing needs of vulnerable group of APs and those APs who are significantly affected by land acquisition and relocation and help develop and implement additional mitigation measures to ensure that they do not fall below the pre-project level; and
- (xi) Assist the IA in developing coordination amongst various agencies responsible for implementation of RP and EMDP.

1. **Consultant Specifications.** She/he shall have at least 10 years working experience, including at least 5 years as a social safeguards (IR and IP) specialist in similar project assignments in the PRC or other countries in the region, as well as formal qualifications in social sciences (sociology, anthropology, international development) or closely related fields. She/he shall fully understand ADB's SPS 2009, safeguard requirement II (IR) and safeguards requirement III (IP), as well as the PRC policy and legislative commitments on these areas of social safeguards. She/he will have good English written and oral skills. Experience of working as safeguards specialist (IR & IP) for similar projects funded by ADB or other development partners is preferable.

2. **Budget.** A total of US\$ 70,000 under the ADB consultancy services is earmarked.

APPENDIX 1: Assessment Report on Human and Drug Trafficking

**Potential Impacts on Human/Drug Trafficking by
Integrated Road Network Development Program
in Pu'er Region**

Assessment Report

Preface

When it comes to assess the potential social impacts of road network and other infrastructural construction projects, traditional assessment tools are just not enough. Indeed, identifying relevant stakeholders and current policies and indicators of inputs and outputs of project implementation will help to track the progress, however, such indicators cannot promptly and fully reflect the effectiveness in rapid assessment, especially they are challenged by the Road Network Development Program in Pu'er because it requires establishing a coordination mechanism and strategy for human trafficking and migration of drug smuggling. For example, how to measure the changes of vulnerability of human/drug trafficking in the program? How to evaluate the effectiveness of responses by local units and stakeholders to the mechanism and strategy?

Therefore, I have applied my personal experiences and knowledge of developing policy, planning and implementing programs and participatory assessments during the assessment. The assessment includes not only previous quantitative indicators of human trafficking and migration of drug smuggling, but also increasing changes which cannot be reflected by indicators, especially the changes brought by policy and programs, as well as feedback by stakeholders. There are also focuses on results in responding- by local units and stakeholders- on vulnerability of human/drug trafficking issues, basing on activities and methods from gender and right perspective. Though some of the results did not lead to a change of tendency (like the drug smuggling), some did reduced risks faced by minorities, improved their lives and even saved lives of the vulnerable groups. Thus, such actives and policies should be included into the scope of the assessment.

I have adopted the participatory assessment which based on such rights and gender equality in my assessment and report. It is grounded and effective. Most importantly, it is a correct way to do so, in my opinion. Such methodology will promote a better environment building for the program in terms of establishing the coordination mechanism and strategy for human trafficking and migration and drug smuggling, and will also inspire the stakeholders greatly. Because such method both reflects people's need in the program region and requires hard working for relevant governmental units.

Structure of the Report

The report includes four parts:

Part 1. Evaluation on the Road Network Program in Pu'er Region. It describes the objectives, methodology, process, challenges and limitations of the assessment.

Part 2. The general situation and vulnerability of human/drug trafficking in the program region. This part reviews the situation, tendency and vulnerability of human trafficking and migration and drug smuggling in the region before the program.

Part 3. Policies in response to the human/drug trafficking issue in the program region. it focus on the policies on the vulnerability of human trafficking, migration and drug smuggling and analyzes the effectiveness of these strategies and policies adopted by relevant stakeholders.

Part 4. Main conclusion and recommendations. In this part, summaries on major findings through identifying stakeholders, discussing issues with them and analyzing the potential impacts by the program with guidance of assessment aims are made. Actions and recommendations are also presented in this part.

Abstract

The Road Network Development Program in Pu'er is the prioritized project of 12th Five-Year Plan by Pu'er government. It aims to link remote rural area to border regions by three components and provide infrastructural construction for the road. The program period is three years. The total investment is 575 million USD.

ADB invited Researcher, Ms. Tong Jiyu from Yunnan Province Academy of Social Sciences on Feb. 2014 to conduct an independent rapid assessment based on previous assessment for the Road Network Development Program in Pu'er. The aim of the assessment is to focus on the potential impact and risk on human/drug trafficking faced by minority community in the region. The assessment lasted for 20 days.

The assessment process includes: literature and project documentation review, field visit, 11 focus group discussions on 10 government units, 5 village committees in 4 counties, 78 persons in villages of Pu'er city, Ning'er County, Jiangcheng County and Menglian County. And the conclusions are following:

- (i) The incident and detection rates of females/children trafficking are stable and present a downward trend. Policies and measures of governmental units and stakeholders in response to human trafficking are all effective. Therefore, the project will not increase the risk on human trafficking. However, it will result in increased human movement and travel thus will put pressures on the existing systems of surveillance, detection, prevention and intervention.
- (ii) Given the situation of drug smuggling and the great negative impacts on teenagers in the region, local government and stakeholders adopted effective and comprehensive measures and interventions. If unchecked, the project has the potential to bulk and transit drugs smuggling to some extent and thus brings difficulties in investigation of drug smuggling and pose heavy working burden, but little effect on small drug smuggling.

Recommendation

- (i) Adopting multi-sector anti-trafficking cooperation mechanism as well as combating and prevention strategy, strengthening anti-trafficking education and improving the awareness of gender equality and legal rights to reduce the risk of minority female trafficking and rights impairment.
- (ii) Recommending healthy units to carry out management on floating population and provide comprehensive prevention and treatment of diseases for them, as well as establishing temperate clinic, adding more sentinel surveillance points to deal with the risk of epidemic spreading.
- (iii) In the program planning, it is suggested to set up system in comprehensive law enforcement area/service areas in traffic hotspots, and adding more drug inspection stations/points.
- (iv) Increasing funding and technical supports in anti-drug and HIV/AIDS prevention education to local minorities, especially teenagers through special campaign or project.

Part 1: Evaluating the Road Network Program in Pu'er Region

A. Background

1. Pu'er City is the only city that links Vietnam, the Laos and Myanmar with the length of border at 486 kilometers in Yunnan Province. The great location makes it an important place in southwestern China and it has the irreplaceable status both in Bridgehead Strategy of Yunnan and in transportation with countries in Southeast Asia. The project is a prioritized one under the 12th Five-Year Plan by Pu'er government.

B. Assessment Aim and Content

2. The ADB TA team has conducted impact assessment on human trafficking (especially women and children) and drug smuggling through the Road Network Development Program in Pu'er (hereinafter referred to as the project). Researcher Tong Jiyu of Yunnan Province Academy of Social Sciences was invited on Feb. 2014 to conduct an independent and rapid assessment.

3. In the TOR of the consultant, it defined the aim of the assessment is to focus on the potential impact and risk on human/drug trafficking for minority communities in Pu'er region through investigation and rapid assessment on the following aspects:

- The level of vulnerability of the communities to human and drug trafficking within the Project area;
- Current situation and trends including qualitative information on the trafficking of humans (women and children) and drugs in the Project influence area;
- Current patterns of migration (in-migration, out-migration, temporary migration for work, daily cross border movements) in the Project influence areas;
- Measures being undertaken in the Project area to deal with the issues of human and drug trafficking and assess their effectiveness;
- How the Project will impact on the current trends of trafficking by enhanced population mobility; and
- If the Project increases risks, additional measures that will need to be formulated and implemented.

4. Giving the nature of the assessment and its complexity and political sensitivity that human/drug trafficking is illegal; the assessment could not be carried out as a comprehensive quantitative material collection on effectiveness of measures. Since the data collected during the assessment can only be used with approval of Pu'er Prefecture Bureau of Protection of Confidential Documents, in accordance with the principal of confidentiality of Chinese government, the assessment uses information from quantitative interviews and field evaluation with participation of related departments and stakeholders.

C. Scope and assessment subject selection

5. The assessment lasted for 20 days. 10 days of field visit, 5 days of writing report, and the rest of the time assigned for documents collection and translation of the report. For details of the field visit arrangement, please refer to Appendix 1.

6. Scope of the assessment: this rapid assessment covers the geographical scope of the

program, on governmental units of different level in Pu'er city and stakeholders. The field visit involves related governmental units of Pu'er city, Ninger County, 1 township in Ninger, 2 village committees in Menglian; related governmental units of Jiangcheng county, 2 townships which are Baozang and Qushui, 1 village committee in Nuna, 1 village team in Longfu; related governmental units of Menglian county, 1 township in Mengma, 2 village committees which are Manghai and Menga.

7. Subject of the assessment: governmental units in the project region and stakeholders, including responsible officials and key governmental personnel in both prefecture and county level such as comprehensive management office of politics and law committee, Public Security Bureau Criminal Investigation, narcotics and public security squad, border detachment and police station, port office, Bureau of Justice, Bureau of Human Resources and Social Security, Bureau of Education, Industrial and Commercial Bureau, Family Planning Commission, Health Bureau/HIV&AIDS Prevention Office and Women's Federation; responsible officials and key personnel in charge of social security in each project community such as leaders of township/county/village government, villagers, migrated population, female and IDU. The field visit paid attention to keep a gender perspective and had active participation of female leaders and representatives.

D. Methodology, data collection and analysis

8. Methods adopted include: literature collection and review, qualitative and quantitative analysis, participatory assessment and field visit. Field visit focuses on participatory focus group discussion and individual interviews on key persons.

9. Data collected from:

- Governmental units and stakeholders in the region;
- Literature and documentations about this topic;
- Governmental websites of Pu'er city, Jiangcheng County, Ninger County and Menglian County; and
- Face to face interviews and field visits at Pu'er city, Jiangcheng County, Ninger County and Menglian County, 4 townships and 5 villages of Ninger, Baozang, Qushui and Mengma and Port Office of Kongfu.

10. During the 10-day field visit, consultant had focus group discussions with 10 governmental units in Pu'er city, 13 in Jiangcheng County, 10 in Ninger County and 13 in Menglian County, leaders from governments and female leaders in Ninger, Baozang, Qushui and Mengma County, 5 villages in Manlian, Nuna, Manghai and Menga, 1 village leader and 1 female leader in Longfu Village, IDUs in Menglian MMT Clinic; face to face group interviews on 78 individuals (20 females, 58males), and 6 individuals(1female, 5males) in-depth interviews who are the key persons from public security bureau, border Police station and women's federation in prefecture, county and township levels.

11. Descriptive content analysis is adopted for data processing. The assessment conclusion is assured with cross check of data and information, which was collected from multi-sources. Through the process, it clarifies the key questions and challenges of the assessment, and detailed analysis has been done on through assessment framework, policy in responding vulnerability and potential impact by the project.

E. Limitations

12. The main challenges and limitations include:

- There is no specific governmental agency responsible for the management of population migration, neither a consistent definition of population migration. The Regulation on Service and Management of Population Migration in Yunnan Province (passed by the 32th meeting of 11th provincial the standing committee of people's congress on July 2012 and became effective on January 1st, 2013) regulates implementing the principle of dependency administration for migrated population. However, actual practice only works for registration and documentation of residency for immigrated population which involves several departments of public security, family planning commission, health bureau, and community. To floating population, there is no such particular institution managing registration or providing services to them, unless they are cross border immigrants or object of the family planning service. Therefore, it is a big challenge for floating population data collection and objective description on its mode.
- As for human trafficking in minority community, the assessment only carried out discussions with related units and female leaders in the community because of time constrains in the field. And as a result, detailed investigation in the communities in Lahu and Wa ethnic minorities which are at risk of human trafficking and families of trafficking victims were not able to be conducted. Therefore, there is limitation in terms of risk assessment. However, the consultant had done similar assessment among Lahu minority of Lancang County in Pu'er city before. The objectiveness of this risk assessment in human trafficking would not be impaired.

Part 2: The General Information and Vulnerability of Human/Drug Trafficking in the Program Region

A. General information, tendency and vulnerability of human trafficking in the region

13. Pu'er City, which links the Vietnam, the Laos and Myanmar, is composed of 1 prefecture and 9 autonomous counties with 7 of them in poverty. It is a poverty-stricken area with the characteristics of mountainous, minority inhabited, borders and poverty. Because of historical background and geographic environment, the population who suffers from poverty is large with great extent. Since 1980s, more and more females migrate out for job opportunities and living condition improvement. Young females become the target of human trafficking because they are lacking of self-protection awareness and easily being cheated. There were cases like this in the program region of Menglian, Jiangcheng and Ninger during late 80s and 90s. Such situation not only harmed women's legal rights, but also their physical and mental health.

14. Concerning the trend of minority females migrating for jobs, Prevention of Female and Children Trafficking Program in Sub-Mekong Region had been implemented with the supports of both provincial women's federation and ILO in the counties of Jiangcheng, Pu'er, Menglian and Ximeng. This program had conducted active intervention and policy advocacy that the awareness of gender equality has been improved and multi-sector cooperation and long term mechanism of prevention has been established. As a result, human trafficking rate was reduced; orderly migration of poverty-stricken females was promoted; farmers had generated more income; more children attended schools and legal rights of female and children were protected. Program experiences and anti-human trafficking work have been then integrated into the government programming and daily work for keeping the social order in Pu'er City. Program results had been spread to governmental units in agriculture, labor, education and women's federation integrating with their routine works. Public security bureau combats human-trafficking cases continuously and reduced the vulnerability of female and children trafficking in Pu'er.

15. According to statistics, during 2011 and 2013, such cases accounted only 0.1% of all criminal cases in Pu'er. Here are the details.

Year	No. of Case on file		No. of Case solve		No. of Victims released		No. of Suspects captured	Detection Rate (%)
	Female	Child	Female	Child	Female	Child		
2011	11	4	9	2	11	2	16	73%
2012	14	5	13	4	12	5	39	89%
2013	10	0	8	0	10	0	35	80%
Total	35	9	30	6	33	7	90	82%

16. The result from analysis on case distribution and situation is:

- There are 15 females and children trafficking cases on file in 2011 that 6 are in Lancang, 4 in Ximeng, 2 in Menglian, 2 in Simao and 1 in Jingdong. Among these cases, 4 were children trafficking: 2 in Simao, 1 in Jingdong and 1 in Menglian. Among released 11 female victims, 2 were Burmese and the rest of 9 were either Lahu minority or Wa minority in Pu'er region. There are 19 cases on file in 2012: 12 in Lancang, 3 in Ximeng, 2 in Menglian, 1 in Jingdong and 1 in Simang. Among them, 3 were children trafficking, 1 in Jingdong and 2 in Lancang. Among released 12 females, 2 were Burmese, 1 Han people and the

rest of 9 were either Lahu minority or Wa minority. In 2013, the number of case on file was 10 with 5 in Lancang, 2 in Menglian and 3 in Ximeng. No children trafficking case. Among released 10 female victims, 3 were Burmese, the rest of 7 were either Lahu minority or Wa minority.

17. Generally, the incidence rate and detection rate are stable and present a downward trend with annual number of cases at the range of 10 to 20 and detection rate is 70%. The number of foreign female victims remains below 10. 90% of the cases happened to Lahu or Wa minority in Lancang, Ximeng and Menglian. However, it is noticed that the number of suspects kept high. This meant that public security bureau needs to intensify its power to suppress the situation on one hand. Such situation also presented the obvious tendency of gang crime on the other hand. In addition, high number of human migration is due to employment or marriage, relatively low level of education and awareness, especially the females from Lahu and Wa minority.

B. General information, tendency and vulnerability of drug smuggling in the region

18. The border line links Pu'er with Vietnam, the Laos and Myanmar is 486 km long, while Lancang River and Mekong River, so called the "eastern Danube", flow across the territory with first class waterway ports in Simao and Mengkang, and second class in Menglian, as well as 17 border roads. Pu'er administrates 9 countries and 1 prefecture, including 4 border counties (Lancang, Menglian, Ximeng, Jiangcheng). Due to its location near the Golden Triangle, Pu'er becomes the 7th biggest national border pass and the 3rd biggest provincial pass for drug trafficking. Most of the trafficking is mass smuggling that transits from Myanmar and Kunming and delivers to Chongqing, Hubei and Hunan. Small drug trafficking is the one that effects minority in the region through sidewalk along the border and border bazaar. During recent years, the Public Security Bureau of Pu'er has intensified its combat against drug trafficking that both the detection rate of cases and the weight of drugs confiscated ranked the top in Yunnan Province. Here is the statistics of drug trafficking cases since 2009.

Year	No. of incidences	Weight of drugs confiscated (KG)	No. of suspects captured
2009	996	1487	1182
2010	998	2381	1044
2011	1304	2433	1334
2012	1401	2750	1482
2013	1381	32000	1090
合计	6080	122500	6172

19. The tendency and feature of drug trafficking in Pu'er during recent years are as following:

- (i) The amount of traditional drug (heroin) trafficking remains the same, while the number of new types of drug increases. This lead to a huge impact on teenagers in the region and growth of criminal rate. For example, among the drugs confiscated by the Public Security Bureau of Pu'er in 2012, traditional drug (heroin) accounted for 864KG. The figure went down to 372 KG in 2013, decreased 38% while the new types of drugs reached 2.4 tons. There were 112 cases solved in Ninger in 2013 with the amount of drug confiscated at 160.576KG, including 12.404 KG of heroin and 148.172 KG of Crystal methamphetamine, which is 11 times more than the traditional drugs. In Menglian, 6 cases were solved by border police station in Mengma Township.

More than 20 KG drugs were confiscated and all of them are new types like ephedrine and crystal methamphetamine. This lead to a huge impact on teenagers in the region and growth of criminal rate. The population of Mengma Town is about 29700. However, since 2011, the number of teenagers who uses new types of drugs and the number of teenage criminal have been increased. There were 52 teenagers who aged between 18-25 sent to rehab center in 2012 and 62 teenagers in 2013. Some were even sent to compulsory detoxification settings.

- (ii) The sources of drug trafficking are diverse and running through all territory and the tendency is going up. Drug trafficking to southern Yunnan (Simao and Xishuangbanna) comes from the Wa State in Myanmar remained the same. And drug trafficking to southern Yunnan (Lincang and Dehong, etc) sprung up and accounted for 60% of traditional drug confiscated. During 2009 and 2013, there were 1283 cases and 1274 suspects were captures with 2.4 tons of drugs confiscated in Menglian Township. Among these, 812 cases were in the administrative area of Menglian with 863 suspects captured and 1.6 tons of drugs confiscated. The amount of drug confiscated increased gradually, implying the situation of drug trafficking from abroad is quite severe.
- (iii) There is a growing tendency of internally produced precursor chemicals exporting abroad. There were 430 tons of precursor chemicals confiscated in 2012, and 693 tons in 2013. Most of these were from other provinces.
- (iv) The ways of smuggling are difficult to detect, such as high-tech and communication, using frame modified cargo vehicles to deliver, or hiding drugs in the bodies of special groups (pregnant women, children and AIDS patients). These all increased difficulties to detect.
- (v) Family model and contacting international traffickers become a trend. This is typical for some of the important cases solved in Pu'er. Most of drug traffickers are from Hunan, Anhui, Jiangxi, Sichuan and Guizhou. The mode is working by collecting money among family members for drug business. The money collected would give to an experienced drug smuggler among all family members. This person then contacts smugglers abroad for business. When the business is done, the person will deduct operation cost and distribute the income among all family investors. Because the profit in drugs is big and the close relationship within family members, they would more likely to formed a conspiracy of silence. Some of the major drug smuggling cases broken these years in Pu'er are run by family mode.

20. Generally, though the situation of drug trafficking in the project region is sever, local governments and other units have conducted several measurements to control the situation, such as establishing cross border investigation and control, combating drug trafficking actively, conducting special narcotics collaborating operations like narcotics campaigns and keeping safe, safety waterway, cutting sources of drugs trafficking, prohibiting drug use and planting, promoting rehabilitation, education on drug prevention and international collaboration on narcotics on the borders. Because of these actions, 5 counties and 73 townships/villages in Pu'er do not have tracks of drugs, especially the Qushui Township of Chengjiang County. The Public Security Bureau of Pu'er had solved several major cases successfully by public investigation basing on the arrangements according to Narcotics Control Law of the People's Republic of China and People's War against Narcotic of Yunnan Province. Through the number of drug trafficking cases was still high in 2013, the detection rate is 80% which curbed the situation effectively.

C. General information and modes of human migration in the region

21. According to current laws and regulations in Yunnan Province, immigrated population includes: citizens who leave their permanent residences in other provinces, prefectures to Pu'er for 5 days or cross-county citizens in Pu'er for 5 days; foreigners who entered border of Pu'er because of residence, job and marriage. Migrated population includes citizens who leave their permanent residences to other provinces, prefectures for 5 days and citizens who go abroad from Pu'er because of residence, job and marriage.

22. According to the principle of dependency administration, local public security units or service institution for migrated population entrusted by local public security units are responsible for the management of immigrants by registering and issuing residence permits to them. Besides that, family planning units provide registration and other services for the population of childbearing age including both migrants and immigrants. Labor units provide vocational trainings for migrant farmers and re-employed residents. Health units conduct inspection, prevention and treatment of epidemics for the floating populations. As for cross border population, they get registered by border public security units and the entry-exit inspection and quarantine departments.

23. According to the statistics from the Pu'er Public Security Bureau, till January 2014, there are 94370 registered floating population with 95.06% of them have the residence permits, while 4647 of immigrants do not have the permits. For Ning'er County, the number of registered immigrants is 4452, the unregistered is 4647 and the rate of immigrants who have the residence permits is 95.06%. In Jiangcheng County, the number of registered immigrants is 9346, the unregistered is 182 and the rate of immigrants who have the residence permits is 98.05%. While the number of registered immigrants is the number of registered immigrants is 8584, the unregistered is 2404 and the rate of immigrants who have the residence permits is 46.39%.

24. According to the statistics from the Family Planning Department of Pu'er: to the end of September of 2013, the total number of floating population was 264149; 112537 of them are immigrants and 151612 are migrants. The Labor Bureau of Pu'er provides training for 8000 to 10000 migrant workers annually.

25. According to the statistics from the border public security units: in 2011, there were 800,000 people and 160,000 cars crossed border both exit and entry; in 2012, there were 900,000 people and 180,000 cars crossed border both exit and entry; and in 2013, there were 1,000,000 people and 200,000 cars crossed border both exit and entry. The number of both people and cars are increased year by year. Each port in Pu'er witness 2500 people and 500 cars a day. And the number of people and cars crossed via ports of Menga and Mangxin in Menglian County accounted for 80% in the total number of Pu'er. In 2013, the amount of export-import trade through Menglian Port is 1.667 billion RMB, which ranked Pu'er the second biggest in Yunnan Province behind that of Ruili City. The daily number of people who cross the port is 2763 with 1366 entry and 1370 exit.

26. The human migration modes include: led by friends/relatives and voluntary migration. Some are Chinese who moved to neighboring countries through company recruitment and have relevant documents of residence or employment (for example, the workers who are doing substitute plants cultivation in the Wa State in Myanmar or the technical staff of ODA projects). Some are floating legally because of marriage, children's education or employment (such as Burmese workers at the tea factory in Hongan Village of Nayun Town of Menglian County), while others are illegal including those who do not register the marriage or do not have the residence

permits. For example, there are 685 international marriages with only around 100 couples registered. 90% of the marriages have foreign wives.

27. For migrants: migrants are mainly farmers who are looking for job in Shanghai, Fujian, Guangdong and other coastline regions. Those who go to neighboring countries, especially to the Wa State in Myanmar, are mainly for substitute planting, business, mineral development or others. Those who migrate to the Laos and Vietnam are for border trading and some are for business purpose. For example, there is a border market which opens regularly when the date has 3 in Longfu Port of Jiangcheng County. There are about 2000 traders from both China and Vietnam on the day usually. In other times, the daily average number of people who exit and enter border is 94 and 95 only, while the number of vehicles of exit and entry is 36 and 58 respectively in 2013. Besides, there are some migrated for marriage who are mainly females. For example, there were 50 to 60 females migrated from Manghai Village of Mengma Town of Menglian County to Thailand. And there are about 100 people went to Singapore, Malaysia and Thailand in Menga Village. In recent years, there are about 10 females went to Malaysia and Thailand.

28. Migrants: internal migrants in Pu'er are mainly from Jiangsu, Zhejiang, Sichuan, Hunan, Anhui and other places within Yunnan Province for business, employment and economic crop planning. For example, 37 % the migrants in Menglian are working at construction sites, 21.5% are engaged in agriculture, 22% of them are doing business, and the rest 12.5% are for service industry employment, medical care and visiting relative purposes. International immigrants from neighboring countries are normally for the purposes of border trade, visiting relative, mineral development, running grocery or business, other employment, medical care, education, marriage and living with relatives. For example, migrants entered or exited border from Longfu Port in Qushui Town are for visiting relative, attending weddings or funerals or family reunion during Spring Festival. Almost no one crossed border for employment in either Vietnam or the Laos.

29. According to statistics from the Women's Federation of Menglian Town on May, 2013, there are 1644 international marriages in the region. Among them, 128 people immigrated to Singapore, Malaysia and Thailand, 1478 people married to Burmese spouse. There are 750 immigrants for marriage did not register their marital status with 88% are foreign females. 90% of foreign males live with their spouses in China. There are more than 120 international marriages in Manghai Village of Mengma Town of Menglian County and 186 in Menga Village. 90% of couples did not register their marriage because the females could not provide proper documents for either not reaching marriage age or cannot afford expensive charges of getting such document in Myanmar.

30. It is found out during the field visit that with the rapid economical development in Pu'er, when it is encountered great opportunities because of its location. Chances of development and sustainable benefits of livelihoods also brought to farmers and women through measures such as prosperity project for people living in the border, policies on strengthen and benefit farmers and promotion of gender equality at schools and communities. Therefore, the number of migrants from Pu'er decreases while the figure for immigrants to Pu'er increases, especially in the counties along the borders. According to the statistics from family planning units in Menglian County, immigrants to Menglian are mainly for employment from Jiangsu, Zhejiang, Sichuan, Hunan and Anhui. The growing economy attracts more people from other provinces while discourages local residence to leave home. In 2011, there were 5147 immigrants in Menglian County. Among them, 2025 were from other provinces. The number of migrants was only 924. In 2012, there were 4987 migrants in Menglian County. Among them, 2062 were from other

provinces. The number of migrants was only 709. In 2013, there were 5045 migrants in Menglian County. Among them, 2048 were from other provinces. The number of migrants was only 795.

Part 3: Policies in Responding to the Human/Drug Trafficking Issue in the Program Region

A. Policies and measurements by governmental units and stakeholders

- (i) Given the increasing number of female labors migrate for employment, an international anti-human trafficking project was carried out between 2001 and 2008, with implementation of different trainings and various community promotion activities. The awareness on anti-human trafficking has been improved.

31. In order to decrease the criminal rate of labor-exploitive purposed human trafficking and protect legal rights for the vulnerable, with the supports of All-China Women's Federation, Yunnan Provincial Women's Federation and ILO, two phases of Prevention of Female and Children Trafficking Program in Sub-Mekong Region had been implemented between 2001 and 2008 in Pu'er City. The first phase was from 2001 to 2006 in Jiangcheng County. Based on the experience accumulated, the second phase between 2006 and 2008 had been extended to Menglian, Ximeng and Ninger. There were various active interventions and community promotion with 1123 governmental key figures trained at various levels. For example, in Ninger County, a promotion material of so-called Explaining Law with Cases was produced. By using familiar cases, it aims to warn and educate females and children on different risks. Another anti-human trafficking booklet and agricultural technical training materials were produced in Jiangcheng County which not only increased the power of promotion but also kept females at home and children at school through micro-loans to assisting females in carrying out animal husbandry, as well as encouraging children back to school. Thus, the risk of human trafficking and unregulated and meaningless migration was decreased. As a result, no female/children trafficking case happened in Jiangcheng during 2011 and 2013. And there were only 1 to 2 cases happened in Ninger and Menglian each year at the same time.

- (ii) Establishing sound anti-trafficking leading group and including project experience and anti-trafficking task into governmental programming and daily routine of social security work.

32. In implementation of ILO anti-trafficking project, a steering committee was established with members of Pu'er government leaders and representatives from 13 member departments and units. The committee carried out anti-trafficking promotion and explored long term multi-sector cooperation mechanism. In 2005, an official document (No. 30) was issued by prefectural government with the title of Suggestions on Prevention Female/Children Trafficking and Actions against Human Trafficking. The documents called for improving awareness, achieving common understanding, enhancing the leadership; insisted on prevention through social propaganda and education, providing access to education for migrated children, improving policy on management of migrants to decrease human-trafficking rate; clarified responsibilities of related governmental units such as public security, judicature, civil service and education for a better function and working structure on anti-trafficking; established a sound long term mechanism of prevention on and action against human trafficking, improved services and providing safeguard.

33. In 2008, when the ILO anti-trafficking program was completed, Pu'er Municipal Government timely integrate the experience gained from it and the work of anti-trafficking into the city's Women's Development Program and Children's Development Program. The Municipal Politics and Law Committee combined women and children trafficking issues into the routine of the comprehensive treatment of social order for the city and enlisted it as one of the tasks in management objectives with clarified staff responsibilities on this respect so that it would be

included into their performance management. In this way, the sustainability and institutionalization of work on anti-trafficking can be fully guaranteed. On border areas, comprehensive joint service force from military, police and civilian mechanism would strengthen border management and patrolling as a server measure to combat crimes involving smuggling of firearms and drugs, human trafficking and gambling. Since 2008, even Pu'er has an anti-trafficking program; the municipal finance bureau has included it into the local government budget. Every year, there would be 50000 CNY allocated specially for policy promotion and education on knowledge about anti-trafficking and gender equality.

- (iii) Public Security Organs have intensified the fight against trafficking. The Comprehensive Management Office of Politics and Law Committee and Women's Federation systems have all sustainably integrate anti-trafficking into its routine work.

34. For trafficking of women and children, all levels of public security organs in Pu'er have all seriously enforced every special action for unified fight against trafficking in women and children's deployed by the Ministry of Public Security. Rapid finding mechanism for missing children has been established with leaders from key departments of municipal and county level public security bureaus. Anti-trafficking has been taken as an important measure for care about, guarantee and serving the people's livelihood. All these measures enhanced combat on human trafficking, protect legal rights of women and children and keep the incidence rate decreasing in a steady pace. During 2011- 2013, annual incidence of trafficking was between 10 to 20 cases and according detection rate was above 70%. Trafficking cases only took 0.1% of the municipal total criminal cases.

35. On promotion and education, Comprehensive Management Office of Municipal politics and law committee have included the anti-trafficking promotion and education into its contents for platforms for legal promotion (including text messages). More than 20 member organizations and units in politics and law committee on municipal, county and township levels would have one-month legal promotion activity in March every year to strengthen promotion and education on prevention of HIV/AIDS, drugs, human trafficking and illegal employment of child labor. As women and children rights' protecting organization, Women's Federation systems on different levels would also combine experiences of anti-trafficking projects and community education into its daily work. They use Women's Homes as information sharing venues. Using public holidays and festivals, they organize performance teams to make shows and organize entertaining activities to enrich forms for promotion and education so that community people's awareness on laws and anti-trafficking can be kept strengthened. On the other hand, education on prevention of human trafficking and promotion on gender equality have been enlisted into working "family safety" objectives management liability statement so that it can be as an criteria for staff performance management within women's federation on county and district levels. Third, the government has been actively seeking for all kinds of resources to help ethnic minority people in poverty reduction so that the living condition of women and children can be improved and trafficking risks due to blind and unordered migration can be prevented and reduced. For years, with the support from provincial level women's federation, Pu'er Women's Federation has implemented micro-credit for women, Credit exemption and subsidy as well as other projects for poverty-reduction for women. In 2011, they have even got support from provincial project on Rural Poor Single Mothers Housing Reconstruction. Till the end of 2013, there were 29 rural poor single mother households helped with 55000 RMB government input totally, which produced good social effect on increasing women's income, reducing trafficking risks and protecting women's legal rights.

36. Looking from incidence rate and detection rate on women and children trafficking in Pu'er and the interview findings on field, I think the trafficking tendency in the project area is steadily declining. The existing anti-trafficking mechanism and policies are effective.

B. Government departments and stakeholders' policies for dealing with drug smuggling

37. In recent years, related government departments and stakeholders have earnestly enforced Narcotics Law of People's Republic of China. Since 2005, three rolls of anti-drug combating campaign have been conducted with main measures that include the following:

- a) Adopting multiple measures to strengthen anti-drug efforts and education on drug prevention.

38. While fully enforcing the state's Narcotics Law and provincial narcotics regulations, Menglian County and Lancang County has made detailed anti-drug rules according to their practical situations in 2013 so that they can increase investment on anti-drug efforts and management as well as clarify responsibilities and detailed measures taken by different units. In March every year, member organizations of the comprehensive social security treatment committee would jointly conduct anti-drug campaigns that covers large scales and in divers forms. For counties, townships and villages with serious drug problems, community patrol team, promotion team and education centers have been established so that education on drug and HIV/AIDS prevention for villagers and youth can be enhanced and motivate the local people's involvement. For example, Menglian County has established 10-household-participated defense teams in every villages among the 52 villages along the border to guard against human/drug trafficking. It has also established cadre responsible areas (eg. leaders from politics and law committee are directly responsible for the so-called "1st village on gate of the country", Meng'a Village). Together with these, special rules for prevention of HIV/AIDS and drugs have been clearly put into the village rules. Border police, education departments and grass-root government has jointly established a "Youth HIV/AIDS and Drug Prevention education base" in Hongta Middle School of Mengma Township. In Manglang Primary School, Meng'a County, Minor Crime Prevention Education Demonstration Project has been implemented. In 2013, Pu'er Collage successfully applied 35000 RMB from Innovation Fund provincial HIV/AIDS Prevention Bureau for "Border Area College Students' anti-drug AIDS Education". All these actions have effectively raised local students, youth and ethnic minorities' awareness on anti-trafficking and HIV/AIDS and drug prevention.

- b) Preventing from the source and increasing efforts to crack down on drug smuggling.

39. For offshore bulk drug transit trends and characteristics, the public security departments and units have used: 1) establishing stereoscopic searching and seizing network on main transit trunk roads and seizing police points on border port lines, temporary checking points along main passages (including waterways), paths and road sections as well as establishing police guard stations along highways; 2) based on information collected, including reports from the masses, to strengthen human and technical information collection for combating on particular cases to cut off drug smuggling channels, destroy its network and arrest drug traffickers; 3) carefully organization on enforcements of special joint actions like "wipe off drug for safety", "safe lanes" to work on combating drug trafficking.

- c) To strengthen prohibition of drug plants and promote alternative plants as well as

enhancing sharing and cooperation with border international police forces.

40. For many years, Pu'er Municipal Government has been supporting alternative planting in neighboring Wa State in Myanmar to eliminate plantation of drug plants. Meanwhile, it also strengthens international narcotics law enforcement cooperation to cooperate and meeting with police forces from neighboring countries in regular basis. On municipal level, the bilateral meetings would be held once or twice a year, while in Menglian, Jiangcheng and other border counties, it would be held 2-3 times annually. For example, the Jiangcheng Border Police has adopted strategy of "Caring of the People and Strengthen the Border" as well as provincial anti-drug campaign, which help it to establish cooperation with border checking points with the Laos and Vietnam for joint efforts on management and combating on illegal immigration, narcotics, information sharing and regular meeting. Besides these, it also signed with the border defense of the Laos on a "friendly team work mechanism" to guarantee mutual visit, communication and sharing with them. In 2013, three meetings with immigration department from neighboring countries have been held. Together with civil police, village leaders and community people, the local people's involvement in anti-drug efforts have been motivated so that it can work as an effective supplementary force. Under such arrangements, 102 villages in border area in Jiangcheng have achieved a 2-year zero incidence rate on criminal cases. Menglian County and the government of Wa State in Myanmar have had meetings for legal cooperation and got their promise that they would not let drugs from Myanmar be smuggled to Menglian.

- d) To strengthen prohibition on drug use, insist to conduct comprehensive clean-up for drug users in communities and put them all into drug rehabilitation centers, detention and detention places, to screen any possible sites and points and to help and educate the drug users so that the harm from drugs can be reduced.

41. On helping the drug users, Pu'er City has always insisting comprehensive clean-up for drug users in communities and put them all into drug rehabilitation centers, detention and detention places and actively pushing forward the establishment of a three-in-one rehabilitation infrastructure that combining municipal drug rehabilitation center and education center, rehabilitation cultural park and drug rehabilitation base as well as construction on voluntary rehabilitation centers in Lancang and Menglian so that it would be a comprehensive service for rehabilitation of the drug users. The methods adopted currently are including: methadone maintenance, community drug treatment, community-based rehabilitation and compulsory treatment. By the end of January 2014, the total number of drug addicts whose withdrawal is less than three years was 3910. 2341 people had taken rehabilitation measures, including 885 in compulsory detoxification, 703 in compulsory community detoxification and 753 in compulsory community rehabilitation. Besides these, the Ministry of Health has also opened 3 methadone maintenance clinics and 2 promotion offices in Langcan County, Menglian County and Simao District. 193 addicts were receiving IDU treatment in these clinics. While the clinics is providing methadone maintenance and behavioral intervention, they also provide free examination on HIV, hepatitis B and syphilis. 5 clean needle exchange spots have been opened throughout the whole city, providing free and clean needles and condoms for 340 IDU patients as well as interventions for reducing harm of drugs. According to statistics, the HIV infection rate among the drug users in Pu'er has been dropped from 30% to 5.8%.

42. The consultant believes that even the tendency of drug smuggling in Pu'er is up-rising, the local government and related stakeholders' comprehensive measures and policies are effective in combating it.

C. Functional government departments' services and management on migrant labors

43. Based on existing management system, Chinese government's management and services for migrant labors is divided into work of different functional departments. Based on the Service Management of the floating Population in Yunnan Province and Service and Management on Floating Population in Pu'er, the No.132 Document issued by municipal government in 2011, Pu'er public security units conduct residence registration and residence permit system following the principle of human-centered, equal treatment, high efficiency and reasonable guidance to keep a dynamic management over the floating population. For population in child-bearing age floating in and out, the Family planning units would do the registration. For migrant labors, the Human Resource and labor and social security units would provide vocational trainings. For returning and flow-in labors, health units would provide education on disease prevention and treatment. For immigrants, except the illegal labors and people stay for marriage that coming through paths along the border or with border passes, other people would have to go through examination, inspection and registration of Entry-Exit Inspection and Quarantine Bureau. For those who cross the border for alternative planting activities, a certificate from Agriculture and Animal Husbandry Bureau is required. Precisely, the management over the floating population can be categorized as two:

(i) Registration of residence and Residence permit

44. According to related laws and regulations, the management over the floating population shall follow the principle of territorial management and conduct residence registration and residence permit system. These would be responsible by the public security units and the entrusted service organizations for floating populations. The floating population service organizations would be set up in townships, sub-district offices and communities. Every 500 floating population and 200 renting houses would be equipped with a full-time coordinator for serving and managing them. The migrants themselves and their leasers, employers, hospitals, schools and hotels shall report and register to the public security units within 5 working days and on their arrival and departure.

45. In 2013, 153 floating population service station have been established in Pu'er City and equipped with 562 full-time coordinators, including 11 stations in Ning'er County with 15 coordinators; 9 stations in Jiangcheng County with 9 coordinators and 8 stations in Menglian with 20 coordinators.

(ii) Public service and guarantee of rights and interests

46. Based on related laws and regulations, the migrants enjoy right to participate in elections; participate in management of related social affairs. They can attend social insurance in accordance with the relevant provisions and enjoy related rights. Their children can accept pre-school education and compulsory education. The ones that qualified by restrictions can apply indemnificatory housing in resident place. They have rights to enjoy legal aid. The ones follow the state's birth control policies would enjoy birth control services. All of them can enjoy 10 public health services and rights that including epidemic prevention, child vaccination and women and children health care.

47. By the end of 2013, Pu'er Municipal Birth Control units have opened 11 service centers in city, county levels to provide service for floating populations. All together, these centers have equipped with 111 management staff (full-time and part-time) and 264 coordinators. The birth control services for floating population have been included into the related health units' performance management system and documents and policies have been issued, such as The Opinions on Service and Management for Floating Population in Pu'er and Notice for Further

Complete Service and Management for Floating Population in Pu'er.

48. The Municipal Health Bureau's work for disease prevention and service for floating population are usually conducted as monitor in migrant labors in large-scale construction areas and commercial sex workers. They also elaborate with health service organization to give trainings or authorize local health clinics, village clinics and other health organizations in community for VCT and STD examinations and treatment. A number of peer educators have been recruited for HIV/AIDS knowledge promotion and intervention on high risk behaviors. They also help to distribute free condoms for people with high risk behaviors. The local CDC would go into construction areas for education, test and STD examination and intervention on high risk behaviors for 1-2 times a year to prevent the spread of diseases. Besides, health units also collaborate with public security and civil affair units and launched a Floating Population Disease Prevention and Control Measures. With this measure, migrant children can enjoy equal treatment as the local residents on children epidemic prevention for children age of 0-6 and vaccination. The pregnant women in corss-border marriage (as long as one of the spouses is Chinese) can enjoy free antenatal examination, postnatal care and new rural cooperatives medical services. In 2013, Municipal Health Bureau, Public Security Bureau and Industry and Commerce Bureau jointly issued a Notice to Strengthen HIV Antibody Detection for Employee in Entertainment Venues to require at least a half-year HIV examination for employees working in entertainment venues. All of them have to have Qualified Card on their employment so as to maximize the finding, prevention and reduction of new infection.

Part 4: Main Conclusion and Recommendations

A. Conclusion

49. The incident and detection rates of female/children trafficking are stable and present a downward trend. Policies and initiatives of governmental units and stakeholders in response human trafficking are effective, therefore the program will not raising the risk of human trafficking. However, it will increase human migration and therefore puts pressures on the workloads for the surveillance detection, prevention and treatment of infectious disease, as well as intervention.

50. The consultant believes that considering the stable rate of both incident and detection of human trafficking and the downward trend, the program will not increase the risk of human trafficking in the region. On one hand, the risk of human trafficking is related to human migration though it is not relevant to the convenience of road. On the other hand, because of the economic development, decrease in the number of migrants, and effective actions by relevant units in increasing the awareness of human trafficking prevention among minority females and children and effective management by the public security units and migration service institutions, the program will not increase the risk of human trafficking in the region.

51. However, what should pay attention to is the greater pressure and heavier workloads of infectious and epidemic diseases brought by floating populations because of the program. According to statistics from the health bureau of Pu'er, until end of 2013, among all reported cases, 70% of them are migrant workers. Among the screening test positive cases in 2013, 8.65% are immigrants to Pu'er, 17.09% are migrants from Pu'er (according to report from other places). The percentages of immigrant positive cases in both Ninger and Menglian were above average at 9.09 % and 10.20 % respectively. As for migrant positive cases, there were 51.43% from Jiangcheng, 40.80% from Ninger and 27.01% from Menglian. Besides HIV/AIDS monitoring tests for migrants, attention should also be given to dengue fever and measles which happened in Myanmar and the Laos frequently. The dengue fever happened on the second half of 2013 increased workload and pressure on local health units dramatically.

52. Given the grim situation of drug smuggling and drug's great negative impacts on teenagers in the region, local government and stakeholders adopted effective and comprehensive initiatives and intervention. The program will provide convenience for drugs smuggling which transit borders in a big amount to some extent and thus brings difficulties in investigation of drug smuggling and heavy working burden, but little effect on small drug smuggling.

53. The drug trafficking in Pu'er is mainly new types of drug which transits border in bulk amount by using frame modified cargo vehicles for delivery. In this case, the program provides convenience for the transportation in a sense. Besides, during the construction period, there might be situations like changing route or traffic congestion which would give criminals chance to flee or separating cargo with carriers, increasing both workload and difficulty of detecting criminals for public security units.

54. It is also found that small dealing of the new types of drugs affects local residents and teenagers the most through sideway or trade market. Therefore, the program has little impact on such small drug trafficking. For example, there was no drug/drug trafficking reported in Baozang Town of Jiangcheng County and the police had never confiscated drugs before. However, because of a custom of opium smoking in Yao minority in history, 7 male adults were detected of

opium smoking in the past two years and the opium was bought from small drug dealers. The IDUs in Menglian County also confirmed that their access to drugs has nothing to do with the convenience of road transportation. Small drug dealers normally use sidewalk to reach their clients. Thus, the secret, the better.

B. Recommendations

55. Using multi-sector anti-trafficking cooperation mechanism, beating and prevention strategy; strengthening education of anti-trafficking and improving the awareness of gender equality and legal rights, to reduce the risks of minority female trafficking and rights impairment.

56. On one hand, various and targeted anti-trafficking promotion and skill training should be provided to the vulnerable Lahu and Wa minority females in an easy operational manner. On the other hand, gender awareness promotion training should be given to both genders in the community to prevent gender inequality in both community and family, especially targeting domestic violence. Therefore, the awareness of gender equality and protection of legal rights can be promoted, and thus decrease the risks of human trafficking and rights impairment.

57. Recommending health units carrying out management of floating population and the comprehensive prevention and treatment of diseases for them, as well as establishing temperate clinics, adding more sentinel surveillance points to deal with the risk of epidemic spreading.

58. It is recommended to set up more HIV inspection spots for migration workers and sexual workers in the areas where floating population is concentrated. For area or program road section which has more than 2000 population of medical treatment, a temperate clinic should be built by both local health units and the program, to provide services for these floating population such as setting up a health record, collecting data of epidemic disease or infections, first aid and treatment and HIV test and intervention. Both local government and health units should pay high attention to the epidemic disease or infections caused by floating population and set up contingency plans.

59. In the program planning, it is suggested to set up comprehensive system in law enforcement in area/service areas in traffic hotspots, and adding more drug inspection stations/points.

60. In responding the increasing volume of land transportation because of the program, during the discussion, governmental units at all levels proposed that it is better to consult with public security units to set up comprehensive law enforcement area/service area and equip surveillance equipment along main roads and key roads. Thus, this would provide convenience for public security units to establish check points, track suspect vehicles at key areas and roads, and carry out two-way inspects. In addition, collaboration between the program and local public security units is needed during the construction period, in order to strike drug trafficking activities.

61. Increasing funding and technical supports in anti-drug and HIV/AIDS prevention education to local minorities, especially teenagers through special campaign or project.

62. During the field assessment, it was found that there were wrong cognitions about new types of drugs among minorities, especially teenagers. They consider these drugs as a type of fashion product which brings strong senses of happiness and excitement without addiction or

getting sick. Everyone is using drug, so do them. According to the IDUs in Menglian MMT clinic, 70 to 80 percent of middle school students they knew had experiences of using ephedrine or crystal meth. The correspondent data from border police station of Mengma Town also showed the growing trend of teenage drug user and criminal rate. Therefore, it is recommended to establish an anti-drug/AIDS prevention platform or educational base by either local governmental units or the project, to provide fund and technical support in carrying out anti-drug and AIDS prevention education in the region for teenagers, in terms of special activities or project. At the end of February 2014, under the coordination of the consultant, AIDS Prevention Office of Pu'er will provide certain amount of fund and technical support in carrying out anti-drug and AIDS prevention education for the teenagers at Hongta Middle School of Mengma Town, as a project, in order to increase their awareness and ability in anti-drug and AIDS prevention and grow up happily.

APPENDIX 2: Field Visit Agenda of Potential Impact on Human/Drug Trafficking by Road Network Development in Pu'er Program

	Morning	Afternoon
Feb 11 th		KM – Pu'er
Feb 12 th	Discuss with the Project Management Office about the working procedures and detailed schedule	Together with PMO, go to the Municipal government and Security Bureau for work approval, submit working plan. The Pu'er Government will then issue official notice to related departments and units about the survey.
Feb 13 th	Meeting with officers and directors from 10 related government departments and sectors in Ning'er County	Discussion with governor of Ning'er Town in charge of human/drug trafficking, women's director from Minzheng Village, Manlian Village as well as the village head from these places. In-depth individual interview on head of the town Police Station.
Feb 14 th	Pu'er-Ximeng - Menglian	Discussion with directors/key informants from 11 related government departments and sectors in Menglian County; interview on IDU group
Feb 15 th	Menglian – Mengma Town Meeting with leaders of Mengma Town, border police station, village committee and women's directors from Manghai Village and Meng'a Village, in-depth individual interview on head of the police station	Mengma – Menglian – Ximeng – Pu'er
Feb 16 th	Menglian - Jiangcheng	Work with Jiangcheng government for work coordination in the field
Feb 17 th	Meeting with officers and directors from 10 related government departments and sectors in Jiangcheng	Jiangcheng - Longfu Meeting with official leaders of Baozang Town, Qushui County and women's directors and village heads from Baping Village.
Feb 18 th	Jiangcheng–Pu'er	Meeting with directors/key informants from 10 related government departments and sectors in Pu'er City
Feb 19 th	in-depth individual interview/focus group interview on directors/key informants from anti-drug brigade and criminal investigation brigade of Pu'er Public Security Bureau	in-depth individual interview/focus group interview on directors/key informants from Municipal Women's Federation, Politics and Law Committee
Feb 20 th	in-depth individual interview/focus group interview on directors/key informants from migrant management units	Reference collection and follow up with other informants
Feb 21 st	Pu'er/Banna – KM	