



Global Environmental Facility）

China’s Protected Area Reform for Conserving Globally Significant Biodiversity（C-PAR1）

**C-PAR1 Environmental and Social Impact Assessment Report**

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**Abbreviations/Acronyms**

C-PAR China’s Protected Area Reform

CSO Civil Society Organization

CPC Communist Party of China

EIA Environmental Impact Assessment

ESIA Environmental and Social Impact Assessment (ESIA)

ESA Environmental Sensitive Areas

ESMF Environmental and Social Management Framework

FECO Foreign Environmental Cooperation Center

FPIC Free and Prior Informed Consent

GEF Global Environment Facility

HWC Human-Wildlife Conflict

KBA Key Biodiversity Area

KM Knowledge Management

LNPMA Local National Park Management Agency

NGOs Non-Government Organizations

M&E Monitoring and Evaluation

NP National Park (NP)

IUCN International Union for the Conservation of Nature

PA Protected Area

PMO Project Management Office

SAPA Social Assessment for Protected Areas

SES Social and Environmental Standards

SESP Social and Environmental Screening Procedure

SFD Sichuan Forestry Department

TA Technical Advisor

TRS Three-River Source

UNDP United Nations Development Programme

WWF World Wide Fund for Nature

# 1. Executive Summary

The C-PAR1 ESIA report first outlines national legislation, policies and regulations, international agreements and treaties and UNDP’s social and environmental standards that are relevant to the project.

This report then introduces the main objectives of the project and provides an overview of the pilot sites and villages selected for project interventions. Furthermore, this report establishes baseline data covering socioeconomic, environmental, climate and bioclimate characteristics within project implementation areas.

This report identifies the potential environmental impacts of NP establishment and project activities by collecting and analyzing baseline data on the ecological environment, species, and habitat quality from Local Government Environmental Protection Bureau and the National Park Service. The identification of the potential social impacts of the NP establishment and related project activities has been assessed through community surveys and stakeholder engagement interviews.

Environmental and social risks have been assessed and categorized as arising from three distinct elements of the C-PAR1 project, all of which fall within the scope of this ESIA. The first is the impact of the establishment of national parks, including the increase of protection intensity, area, and tourism infrastructure construction. The second comprises activities conducted in pilot villages, including collaborative management activities, human-wildlife conflict management plans, tourism partnerships, and environmental education projects. The third is comprised of co-financed activities, including infrastructure construction. Based on these elements, this report provides alternatives and mitigation measures to reduce the potential adverse impacts of project activities. Finally, this report presents an outline of the relevant stakeholders for this project, the regulations and standards that require their active participation, and a grievance redress mechanism. Detailed Stakeholder Engagement and Monitoring/Reporting Plans are provided in the ESMP which has been produced as an ancillary document to this ESIA.

In order to avoid or mitigate the potential negative environmental and social impacts, recommendations are as follows. Firstly, alternatives may be identified for proposed activities including pilot site selection, making use of existing buildings and infrastructure, establishing invisible boundary pillars, and developing eco-tourism opportunities. Secondly, social mitigation and management measures include strengthening the management of Human-Wildlife Conflict, strengthening the protection and conservation of cultural heritage and enhancing gender mainstreaming. Thirdly, environmental mitigation and management measures include controlling the scale of ecotourism, systematically including climate change impact planning in decision-making, management of air quality, noise and vibration and traffic-related issues associated with NP infrastructure development.

# 2. Legal and Institutional Framework

## 2.1 National Legislation, Policies and Regulations

### 2.1.1 General Environmental Protection

**The Environmental Protection Law (2015)** is the most stringent environmental law passed in China, with a strong emphasis on nature conservation. In its purpose, this law incorporates the ‘building of ecological civilization’ and it declares environmental protection as ‘the basic national policy’. The law establishes a set of legal instruments for ecological protection, such as ecological functional zoning, ecological restoration and ecological compensation. Especially, Article 29 stipulates that the state shall draw up an ecological protection redline in key ecological functional zones, ecological environmental sensitive zones, and vulnerable zones, and that strict protection should be implemented. The implementation of C-PAR1 activities must adhere, at all times, to this law.

**The Environmental Impact Assessment (EIA) Law** (2003, revised in 2016) stipulates two types of EIA: an ElA for plans (including land use planning) and an ElA for construction projects. Before the implementation of any projects that may have an impact on the environment within the territory of PRC or other sea areas under the jurisdiction of PRC, an EIA has to be conducted in accordance with this law. For such projects that have the potential to cause significant environmental impacts, an environmental impact report is needed and a comprehensive EIA should be conducted. For projects with the potential to cause mild environmental impacts, an environmental impact form is needed and an EIA or special assessment should be conducted. For projects that have the potential only to cause minimal environmental impacts, an environmental impact registration form should be filled with no need to conduct an EIA.

In the case that a construction project may have a significant impact on the environment and an environmental impact report needs to be prepared, the construction unit shall hold an argumentation meeting, hearing or other forum to solicit the opinions of the relevant departments, experts and the public before submitting the environmental impact report for approval. The environmental impact report submitted by the construction department shall include an explanation of whether or not the opinions of the relevant departments, experts and the public are adopted.

So far, no activities relating to the C-PAR1 UNDP-GEF project are relevant to the requirements of this law. However, in the future, Co-Financing activities such as construction of the science popularization and education center in Ya'an, construction of conservation and management houses in Baoxing, Wenchuan, Beichuan, Shifang, Jiuzhaigou, Qingchuanw will fall within the scope of this law.

### 2.1.2 Legislation Related to Air, Water and Noise Standards

The aim of **Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution**（revised in 2018）is to protect and improve the environment, prevent and control air pollution, safeguard public health, promote ecological civilization and promote sustainable economic and social development. The law stipulates that the competent ecological and environmental departments of the people's governments at or above the county level shall exercise unified supervision and administration over the prevention and control of air pollution. Other relevant departments of the people's governments at or above the county level shall, within the scope of their respective functions and duties, exercise supervision and administration over the prevention and control of air pollution.

The goal of the **Law of the People's Republic of China on the Prevention and Control of Noise Pollution（2022）**is to prevent and control environmental noise pollution, protect and improve the living environment, and ensure human health. It stipulates that local people's governments at various levels shall be responsible for the quality of acoustic environment within their respective administrative areas and take effective measures to improve the quality of acoustic environment. The emission of noise and the generation of vibration shall conform to the noise emission standards, the relevant environmental vibration control standards and the requirements of relevant laws, regulations and rules.

The purpose **of Law of the People's Republic of China on the Prevention and Control of Water Pollution**（revised in 2017）is to protect and improve the environment, prevent and control water pollution, protect water ecology, ensure drinking water safety, safeguard public health, promote ecological civilization construction, and promote sustainable economic and social development. The law stipulates that the discharge of water pollutants shall not exceed the national or local standards for the discharge of water pollutants and the total discharge control targets of key water pollutants. In particular, people's governments at or above the county level may delimit protection zones for water bodies in scenic spots, important fishery water bodies and other water bodies of special economic and cultural value, and take measures to ensure that the water quality in the protection zones meets the water environmental quality standards for specified purposes.

In the C-PAR1 UNDP-GEF project, there are no large-scale infrastructure construction projects planned that may cause large-scale air, water and noise pollution. There are no significant potential negative impacts to the health and safety of communities during the project construction and operational phases as a result of noise, air and disease during construction and operation.

### 2.1.3 Land Rights

According to Article 2 of the Land Administration Law, China implements socialist public ownership of land, that is, ownership by the whole people and collective ownership by the working people. Ownership by the whole people means that the ownership of state-owned land is exercised by the State Council on behalf of the state. Land in urban areas belongs to the state. Land in rural and suburban areas belongs to the collective ownership of farmers, except for those owned by the state as stipulated by law.

China has a long history of establishing and implementing laws and regulations associated with displacement and resettlement. The National Construction Land Acquisition Measures, promulgated in 1953, was the first statute on land acquisition, demolition, removal and resettlement. These measures outlined the principles and procedures for land acquisition and set the standards for payment of compensation for acquired land, serving as the basis for the subsequent Land Administration Law.

**The Land Administration Law** has been updated and amended several times, with regulations added to enhance the land law, including the Land Acquisition and Resettlement Regulation for Construction of Large and Medium-Sized Water Conservation Projects (1991 and 2006). The 2006 Regulations added subsidies for relocation and training for livelihoods, annual post-relocation fund support of RMB 600 per year per capita for 20 years, and community infrastructure construction and improvement based on the needs of resettled people. Additional guidelines promulgated in 2006 stipulated that the compensation and rehabilitation package should also include a social security fund for rural farmers whose land is acquired[[1]](#footnote-1).

### 2.1.4 Administration of Resettlement

Under the decentralized model of resettlement administration and management, local governments issue their own administrative standards within the guidelines of national regulations relating to resettlement and compensation.

Thus far, ecological migration has not been implemented in all three NP pilots and no related regulation has been promulgated. Different provinces and even different counties apply different standards of compensation. The county government sets the multiplication factor within the range of the national standard. Major projects of national interest, such as highways and energy development (including large dams), tend to attract lower compensation standards than commercial projects. Paddy fields attract a higher multiplication factor than mountainous woodlands, and orchards have a higher multiplication factor than economic woodlands. The 2006 Regulations are also weighted towards compensation as a means of restoring rights rather than benefit sharing or development.

The laws and regulations on resettlement discussed above have been applied for cases of ecological migration[[2]](#footnote-2). Central government notices have been issued that reinforce the land rights of farmers[[3]](#footnote-3) and restrict involuntary requisition of collectively-held farmland. For example:

* Notice issued by the State Council on 27 December 2010 on Strictly Regulating a Balance between Urban Development and Practical Treatment of Rural Land Issues: Point No.8 indicates that it is forbidden to encroach on farmers’ interests. Local communities need to be informed of planned developments and exchange of land cannot be realized without consent by the local communities and farmers. Consent will be given/documented by local government. This means the C-PAR1 activities regarding local community land must be conducted only with the consent of local communities.
* Notice issued by the Ministry of Land Resources on 26 June 2010 on Land Requisition Management: Point No. 11 states that after a proposal for land requisition is approved, public notice and compensation planning should start synchronously. If farmers have differing opinions regarding the arrangements, the government must provide further information to the farmers until their consent is granted. Involuntary land requisition is forbidden.
* Urgent Notice issued by the Ministry of Land Resources on 14 June 2006 on Strict and Impartial Law Enforcement to Restrain Illegal Land Uses: Point No. 4 indicates that the legal rights and interests of farmers whose land will be requisitioned must be protected. Prior to requisitioning collectively-held farmland, farmers must be informed of and agree to the arrangements. If compensation and a new residence is not provided, the planned land requisition will be stopped.
* Urgent Notice issued by the State Council on 30 April 2004 on Conflict Resolutions Associated with the Current Rural Land Contract: Point No.21 indicates that it is forbidden to force farmers to transfer their land rights against their will.

### 2.1.5 Ethnic Minorities

There are a total of 56 ethnic groups identified in China, mainly based on their similarities such as common ancestry, language, society, and culture. Of the 56 ethnic groups, Han ethnicity is the ethnic majority and the other 55 ethnic groups are considered ethnic minorities. The term “indigenous peoples” is not used in China. Nonetheless, certain ethnic minority groups[[4]](#footnote-4) within the project boundaries will result in the triggering of the UNDP SES Standard on Indigenous Peoples.

**The Constitution** (1982, revised in 2004) emphasizes that all nationalities/ethnicities in the People's Republic of China are equal. The State protects the lawful rights and interests of minority nationalities and upholds and develops a relationship of equality, unity and mutual assistance among all of China’s nationalities. The State assists areas inhabited by minority nationalities in accelerating their economic and cultural development according to the characteristics and needs of the various minority nationalities. Regional autonomy is practiced in areas where people of minority nationalities live in concentrated communities. In C-PAR1 pilot villages, there are four villages located in Tibetan autonomous prefecture, including Niandu, Masai, Hongqi and Chaze. They are all located in the Three-River Source National Park.

**A**ll these provisions are reiterated in **the Regional Ethnic Autonomy Law** (1984, revised in 2001), which established mechanisms for self-governance in areas inhabited by ethnic minorities, thus assisting these communities in their ability to exercise the right of autonomy and to independently manage the internal affairs of their respective regions.

**The Rules of the State Council on the Implementation of the Law of the People's Republic Of China on Regional National Autonomy** (2005) stipulates that the state strengthens the alleviation of poverty and development of the ethnic autonomous areas. Particular emphasis is put on development of infrastructure and the basic construction of farmland in poorer rural sectors within the autonomous areas.

### 2.1.6 Cultural Heritage

Cultural heritage includes material cultural heritage and intangible cultural heritage. Cultural heritage refers to cultural relics with historical, artistic and scientific value. Intangible cultural heritage refers to various traditional cultures that exist in non-material forms and are closely related to people's life and inherited from generation to generation.

In order to inherit and carry forward the fine traditional culture of the Chinese nation, **Law of the People's Republic of China on the Protection of Cultural Relics** (revised in 2017) stipulates thatpeople's governments at all levels shall attach importance to the protection of cultural relics, correctly handle the relationship between economic construction, social development and the protection of cultural relics, and ensure the safety of cultural relics. Capital construction and tourism development must abide by the guidelines for the protection of cultural relics, and their activities shall not cause damage to cultural relics. Public security organs, administrative departments for Industry and commerce, customs, urban and rural construction planning departments and other relevant state organs shall earnestly perform their duties of protecting cultural relics according to law and maintain the order of cultural relics management.

**Intangible cultural heritage law of the People's Republic of China (2011)** stipulates that the State adopts measures such as identification, recording and filing to preserve intangible cultural heritage, and adopts measures such as inheritance and dissemination to protect intangible cultural heritage that embodies the excellent traditional culture of the Chinese nation and has historical, literary, artistic and scientific values.

### 2.1.7 Community Health and Working Conditions

Workers' right to working environment is the right of workers to protect their physical and mental health from being harmed by working environment. **Law of the People's Republic of China on Employment Contracts** (revised in 2012) stipulates that where an employing unit is under any of the following circumstances, it shall be subject to administrative punishment according to law. If such a case constitutes a crime, criminal responsibility shall be investigated according to law. Those who cause damage to laborers shall be liable for compensation.

## 2.2 International Agreements and Treaties

China is a signatory to several multilateral agreements and conventions that are relevant to the program; including but not limited to the following:

* 1971 - Convention on Wetlands of International Importance (Ramsar)
* 1972 - Convention Concerning the Protection of the World Cultural and Natural Heritage
* 1992 - Convention on Biological Diversity
* 1992 - United Nations Framework Convention on Climate Change
* 1995 - Beijing Declaration (a resolution adopted by the UN at the end of the Fourth World Conference on Women on 15 September 1995. The resolution adopted to promulgate a set of principles concerning the equality of men and women)
* 1998 - International Covenant on Civil and Political Rights (ICCPR); signed in 1998, not yet ratified
* 2000 - Cartagena Protocol on Biosafety on the Convention on Biological Diversity
* 2007 - United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)

## 2.3 UNDP’s Social and Environmental Standards

This project will comply with UNDP’s Social and Environmental Standards (SES), which came into effect 1 January 2015. These Standards underpin UNDP's commitment to mainstream social and environmental sustainability in its programs and projects to support sustainable development and are an integral component of UNDP's quality assurance and risk management approach to programming. Through the SES, UNDP meets the requirements of the GEF’s Environmental and Social Safeguards Policy.

The objectives of the SES are to:

* Strengthen the social and environmental outcomes of Programs and Projects
* Avoid adverse impacts to people and the environment
* Minimize, mitigate, and manage adverse impacts where avoidance is not possible
* Strengthen UNDP and partner capacities for managing social and environmental risks
* Ensure full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people.

In accordance with UNDP SES policy, the Social and Environmental Screening Procedure (SESP) has been applied to this project during the project development phase. In accordance with UNDP SES policy, a SES principle or standard is ‘triggered’ when a potential risk is identified and assessed as having either a ‘moderate’ or ‘high’ risk rating based on its probability of occurrence and extent of impact. Risks that are assessed as ‘low’ do not trigger the related principle or standard. For C-PAR1, the screenings conducted during project development indicate that three of the nine social and environmental principles and standards have been triggered due to ‘high’ risks:

* Principle 1: Human Rights (due to the risk that land use and resource access rights will be impacted by the establishment of new PAs and enhanced regulations for these areas or areas of critical habitat connecting/buffering PAs)
* Standard 5: Displacement and Resettlement (due to potential voluntary resettlement and economic displacement associated with PA expansion and enhanced enforcement of regulations in existing PAs)
* Standard 6: Indigenous Peoples (due to the presence of ethnic minorities in project demonstration sites include core zones of national park pilots that will be potentially impacted by resettlement and/or economic displacement impacts).

One of the nine social and environmental principles and standards has been triggered due to ‘moderate’ risk:

* Principle 2: Gender Equality and Women’s Empowerment (due to the gender disparities that exist at demonstration sites)

Two of the nine social and environmental principles and standards have been identified as ‘low’ level risks:

* Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management
* Standard 2; Climate Change Mitigation and Adaptation

Based on the project risk categorization assigned to each project and their specific risks, the following procedures for screening, assessing, and managing those risks must be undertaken during the inception phase of the relevant project (for the instance of this ESIA report, this refers to C-PAR1 and its associated activities):

a) Environmental and Social Impact Assessment (ESIA): In accordance with UNDP’s SES policy, High Risk projects require comprehensive forms of assessment. An ESIA will be developed and carried out by independent experts in a participatory manner with stakeholders during the inception phase. Each ESIA will further identify and assess social and environmental impacts of each project and its area of influence; evaluate alternatives; and design appropriate avoidance, mitigation, management, and monitoring measures. It will address all relevant issues related to the SES Overarching Principles and Project‐level Standards. A key output of the ESIA is an ESMP, as described next.

b) ESIA report and Environmental and Social Management Plan (ESMP): An ESIA report and ESMP will provide a set of avoidance, mitigation, monitoring and institutional measures – as well as actions needed to implement these measures – to achieve the desired social and environmental sustainability outcomes. Complementing what has already been identified in the ProDocs, the ESMP will further identify project activities that cannot take place until the relevant mitigation measures are approved and put in place. The measures will be adopted and integrated into the project activities, monitoring and reporting framework, budget, and captured in a revised SESP for each project.

## 2.4 Gap Analysis

China has established various types of protected areas which have played an important role in the protection of biodiversity conservation. They are extremely important to safeguard national and regional ecological security and to protect China's economic and social sustainable development. However, contradictions and shortcomings within the national regulatory framework still do exist.

(a) Lack of comprehensive and specific law for PAs: There are 10 types of protected area including national parks, which are regulated by separate laws or regulations.

(b) Outdated legislative concepts: Most of the relevant laws were formulated in the 1980s in the era of the planned economy and are not suitable for the demand of PAs today.

(c) Low level of legislation authority: Both the Regulations on Nature Reserves and the Regulations on Scenic and Historic Areas are administrative regulations which are not as effective as laws.

(d) Contradiction of laws: There are some conflicts in content between legislations on PAs with different effective grades, which greatly affect the authority of legislation and the unity of legal system.

(e) Under-consideration of ecological principles: Many provisions in these legislations do not incorporate the new development of ecological principles such as ecological restoration, ecological functions of PAs.

(f) On December 27, 2020, the state level Ecological Protection Compensation Regulations completed the stage of soliciting opinions from the public, but has not yet been officially promulgated.

Compared with the environmental and social safeguards policies and standards of UNDP’s SES, and relevant policies/laws of Government of China, the gaps are identified as follows:

(a) According to the Implementation Plan of Establishing the National Park (NP) System, issued on 26 September 2017, residents in key protection areas should be allowed to voluntarily migrate way from key ecological zones. It must be noted that this implementation plan is independent from the C-PAR projects. However, no formal law or regulation about physical migration or economic replacement due to ecological conservation has been promulgated in China before this program was launched. The Law on Land Management can be referred in relevant cases, and different provinces/ counties apply different policies or standards regarding compensation. As of the date of this ESIA report, ecological migration has not taken place in all three NP pilots. In the instances where some resettlement cases may occur voluntarily, local government will offer houses and compensation for migrants, which will improve their housing and access to the city and its associated amenities[[5]](#footnote-5).

(b) The legal basis of wildlife accident compensation in China is the Wildlife Protection Law, which stipulates that the main party responsible for compensation for wildlife accidents is the local government. The local government takes preventive and control measures as well as managing the funds required for compensation. The central government gives subsidies in accordance with the relevant national regulations. Wildlife protection has a strong positive externality, the cost of protection is borne by the region and the community, and the local financial funds are limited, so it is difficult to effectively make up for losses sustained through HWC.

This project will adhere to the host country, international, and UNDP requirements listed above. Should any conflict arise relating to the respective stringency of particular requirements, the most stringent of the conflicting requirements will apply, in accordance with UNDP best practice.

# 3. Project Background

## 3.1 Project Description

This project will aim to establish an effective National Park (NP) System[[6]](#footnote-6) through protected area regulatory reform, increasing coverage of protected areas, and improving effectiveness of PA management for conservation of globally significant biodiversity.

The project includes three components: (1) Establishment of a national park system; (2) strengthening the provincial-level national park/protected area system; and (3) program coordination and knowledge management.

Component 1 involves supporting the Government reform process of the national protected area (PA) system, particularly the national park (NP) system, which is envisaged by the central government to act as the cornerstone for the national PA system. The project will provide support to the process by establishing effective governance and legal frameworks for the national PA system. Human-rights based approaches will be mainstreamed by ensuring transparent selection, planning, and monitoring procedures for different types of PAs under the new framework, as well as ensuring a legal framework that provides for various forms of collaborative management of PAs and natural resources.

**Table 3-1 Work plan for Component 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Output** | **Detailed output** | **Estimated Duration** | **Progress** |
| 1.1: Strengthened legal and governance framework for the national park system, with NP system guidelines and regulations mainstreamed into land‐use planning and ecological redlining. | 1.1.1. Facilitate C‐PAR1 Advisory Group. | 2021 - 2024 | 2021 planned |
| 1.1.2. Develop NP system guideline. | 2021 – 2024 | 2020 implemented |
| 1.1.3. Produce draft legislations. | 2021 – 2024 | 2021-2024 planned |
| 1.1.4. Draft specific regulations. | 2020 | 2020 implemented |
| 1.1.5. Develop report on PA governance. | 2021 – 2024 | 2020 implemented |
| 1.1.6. Assess results of governance pilot, convene workshop. | 2021 - 2024 | 2021-2024 planned |
| 1.2: National gap and connectivity analysis and advanced policies and guidelines developed for effective expansion and management of the NP system. | 1.2.1. Carry out national PA gap analysis. | 2021 – 2023 | 2020 implemented |
| 1.2.2. Develop guideline on ecological corridors. | 2021 – 2023 | 2020 implemented |
| 1.2.3. Develop guideline on HWC management. | 2021 –2023 | 2020 implemented |
| 1.2.4. Develop climate‐response PA planning guideline | 2021 – 2023 | 2020 implemented |
| 1.3: Introduction of PA competency‐based standards and delivery of training to key central level change agents. | 1.3.1. Formulate capacity development plan. | 2021 – 2023 | 2020 implemented |
| 1.3.2. Prepare manual on PA competency‐based standards. | 2021 - 2023 | 2020 implemented |
| 1.3.3. Deliver training of trainers, operationalising standards | 2021 - 2024 | 2021 planned |
| 1.3.4. Training on social inclusion, community develop (central) | 2021 - 2024 | 2021 planned |
| 1.3.5. Facilitate E‐learning through group sessions. | 2021 - 2024 | 2021 planned |
| 1.3.6. Organise knowledge transfer trainings for central staff. | 2021 – 2024 | 2021-2024 planned |
| 1.3.7. Provide TA for NP training centre at TRS NP agency. | 2021 -2024 | 2021-2024 planned |
| 1.3.8. Deliver international knowledge transfer trainings. | 2021 – 2024 | 2020 implemented |
| 1.3.9. Deliver training for PMO and central consultants. | 2021 – 2023 | 2020 implemented |
| 1.4: PA financing strengthened through policy and demonstrations of diversification of funding sources, improved efficiency in access and utilisation of available funds, broadened participation through concession arrangements and value‐based eco‐compensation appropriations. | 1.4.1. Comparative analysis of PA financing performance. | 2021 – 2023 | 2020 implemented |
| 1.4.3. Provide TA on strengthening eco‐compensation schemes. | 2021 – 2023 | 2021 planned |
| 1.4.4. Perform analysis on extra PA budgetary contributions. | 2021 – 2023 | 2021 planned |
| 1.4.5. Prepare guideline on tourism partnerships/concessions. | 2021 – 2023 | 2020 implemented |
| 1.4.6. Prepare consolidated PA financing annual reports. | 2021 – 2023 | 2021 planned |
| 1.4.7. Organise a national workshop on sustainable PA financing. | 2021 – 2023 | 2021 planned |

Component 2 involves bringing about expansion of the national PA system, an increase in environmental sensitive areas (ESA) and capacity building for development and sector planning personnel. Human-rights approaches will be mainstreamed by establishing clear safeguards for project operation to ensure protected area expansion or ESA designation of an area does not infringe on human rights. Local community consent and participation will be assured for PA or ESA planning, designation, and management. A detailed description of expected outputs and plans is set out below, and the progress of each activity in each NP will be discussed in Section 3.2.

**Table 3-2 Work plan for Component 2**

|  |  |  |
| --- | --- | --- |
| **Output** | **Detailed output** | **Estimated Duration** |
| 2.1 Dynamic conservation planning, NP regulations, and collaborative governance arrangements for NP pilot system implementation. | 2.1.1. Facilitate comprehensive conservation planning and assessment of coverage of KBAs across the proposed national park. | 2020 - 2024 |
| 2.1.2. Provide TA on developing PA management plans. | 2020 - 2024 |
| 2.1.3. Facilitate collaborative PA governance. | 2020 - 2024 |
| 2.1.4. Provide TA on strengthening PA regulatory frameworks. | 2020 - 2024 |
| 2.1.5. Summarise lessons learned on diversified funding model. | 2020 - 2024 |
| 2.2: Institutional capacities of NP pilot management agencies enhanced through implementation of PA competency standards, introduction of international best practices, implementation of technical guidelines and strengthened partnerships. | 2.2.1. Develop capacity development plans for NP pilots. | 2020 - 2024 |
| 2.2.2. Training on social inclusion, community development. | 2020 - 2024 |
| 2.2.3. Deliver domestic knowledge transfer trainings. | 2020 - 2024 |
| 2.2.4. Deliver international knowledge transfer trainings. | 2020 - 2024 |
| 2.2.5. Provide TA on strengthening capacities of CSOs. | 2020 - 2024 |
| 2.3: Community benefits strengthened through demonstration of collaborative management arrangements, including implementation of human‐wildlife conflict management plans, tourism partnerships and concessions, and environmental education programs. | 2.3.1. Strengthen collaborative PA management arrangements. | 2020 - 2024 |
| 2.3.2. Strengthen and promote sustainable livelihoods. | 2020 - 2024 |
| 2.3.3. Enhance public participation. | 2020 - 2024 |
| 2.3.4. Expand involvement of the enterprise sector. | 2020 - 2024 |
| 2.3.5. Improve management of human‐wildlife conflict. | 2020 - 2024 |

Under Component 3, the requisite enabling conditions for sustaining the project results will be strengthened through targeted knowledge management, monitoring & evaluation, and gender mainstreaming and social inclusion.

**Table 3-3 Work plan for Component 3**

|  |  |  |  |
| --- | --- | --- | --- |
| **Output** | **Detailed output** | **Estimated Duration** | **Progress** |
| 3.1. Effective project management and program coordination supported through proactive steering committee functions; aggregated reporting mechanisms; and inclusive monitoring & evaluation. | 3.1.1. Organise and report on project inception workshop. | 2019 | 2020 implemented |
| 3.1.2. Organise and report on program inception workshop. | 2019 | 2020 implemented |
| 3.1.3. Develop and implement aggregated reporting mechanism. | 2020 – 2024 | 2020 implemented |
| 3.1.4. Organise annual project steering committee meetings. | 2021 – 2024 | 2021 planned |
| 3.1.5. Organise annual program steering committee meetings. | 2019 – 2024  Annually go on | 2020 implemented |
| 3.1.6. Coordinate cross learning exchanges with child projects. | 2019 – 2024  Annually go on | 2020 implemented |
| 3.1.7. Carry out midterm assessment of results. | 2022 mid-term | 2021-2024 planned |
| 3.1.8. Procure independent midterm review. | 2022 mid-term | 2021-2024 planned |
| 3.1.9. Carry out terminal assessment of results. | 2019 – 2024  Annually go on | 2021-2024 planned |
| 3.1.10. Procure independent terminal evaluation. | 2019 – 2024  Annually go on | 2021-2024 planned |
| 3.2: C‐PAR knowledge management strategy developed and implemented, supporting raised awareness of decision makers and the public on the values of the national park system. | 3.2.1. Design and deliver baseline KAP survey. | 2020 - 2024 | 2020 implemented |
| 3.2.2. Develop program KM strategy and project KM action plan. | 2020 - 2024 | 2020 implemented |
| 3.2.3. Advocate global environmental benefits of the project. | 2021.10 | 2021 planned |
| 3.2.4. Design and deliver end‐of‐project KAP survey. | 2020 - 2024 | 2021-2024 planned |
| 3.3: Operationalizing a dynamic biodiversity knowledge platform; providing a unified system for knowledge sharing; and uptake of best practices and broader participation. | 3.3.1. Develop a biodiversity knowledge platform. | 2021 - 2024 | 2021 planned |
| 3.3.2. Support operation of the biodiversity knowledge platform. | 2021 - 2024 | 2021 planned |
| 3.3.3. Design and deliver promotional campaigns. | 2021 - 2024 | 2021 planned |
| 3.4: Environmental and social management plan and gender mainstreaming plan implemented with inclusive participation of local communities, including women and ethnic minorities. | 3.4.1. Carry out ESIA and develop ESMP. | 2020 - 2021 | 2020 implemented |
| 3.4.2. Provide support to the provincial government for the review (as part of the ESIA) and finalization of targeted resettlement plans for voluntary resettlement. | 2020 - 2021 | 2020 implemented |
| 3.4.3. Support/review voluntary resettlement plans | 2021 - 2024 | 2021 planned |
| 3.4.4. Implement ESMP and monitor project results (SAPA in Y4) | 2021 - 2023 | 2021 planned |
| 3.4.5. Implement gender action plan. | 2020 - 2024 | 2020 implemented |
| 3.4.6. Organise a national workshop of social inclusion for NPs. | 2021 - 2024 | 2021 planned |
| 3.4.7. Develop and disseminate knowledge products. | 2021 - 2024 | 2021 planned |

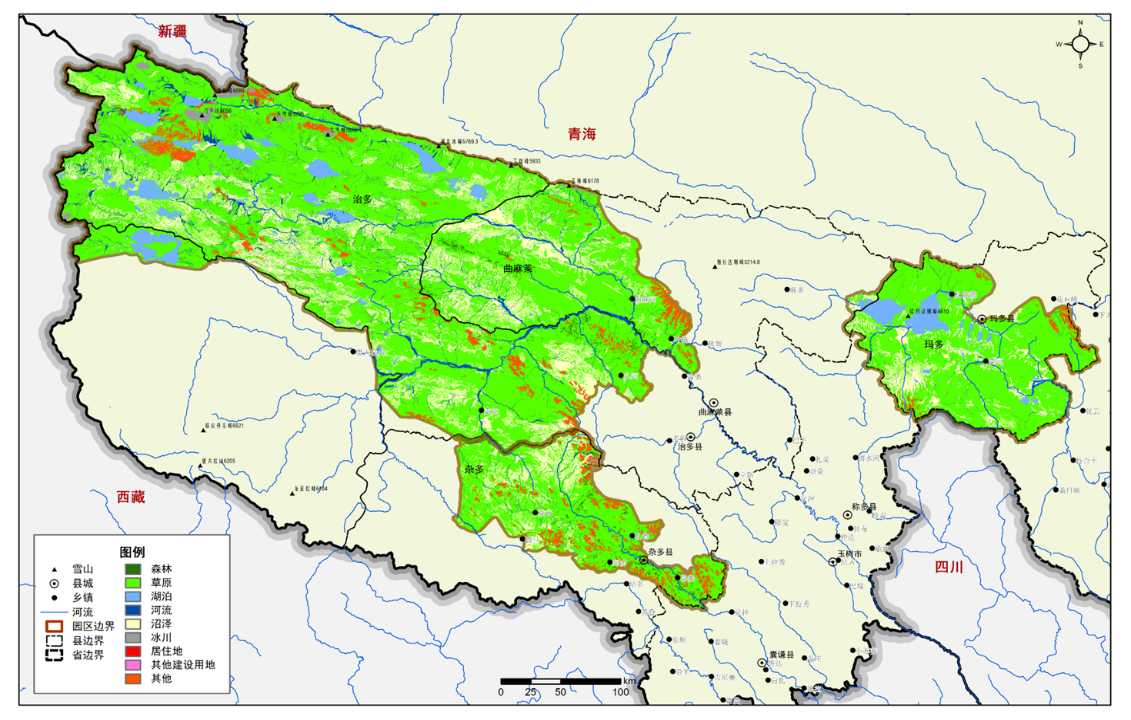
The three demonstration sites of the C-PAR1 project are: (a) Three-River Source National Park pilot, Qinghai Province; (b) Giant Panda National Park pilot, Sichuan/Gansu/Shaanxi Provinces; and (c) Xianju National Park pilot, Zhejiang Province. Given the geographic location of sites, not transboundary impacts are foreseen.

## 3.2 Overview of the Pilot Sites

### 3.2.1 Three-River Source National Park Pilot

Located at 34.712°N and 94.052°E, the Three-River Source NP is situated in the southern part of Qinghai Province (see Figure 3-1), and consistent with the name of the park, the NP is established within the headwaters of three of main rivers in China and southeast Asia, specifically the Yangtze River, Yellow River, and Lancangjing/Mekong River.





**Figure 3-1 Location map, Three-River Source National Park**

**(1) Basic Information and Interventions of the Three-River Source National Park**

**Table 3-****4** **Three-River Source National Park pilot**

|  |  |
| --- | --- |
| Name of the PA/CA or group of contiguous PAs/CAs to be assessed | Three-River Source National Park |
| Year of establishment | 2020 |
| Designation of each PA/CA: park, reserve, conservancy, sanctuary, etc | Park |
| Area of each PA/CA in km2 | 123,100 km2 |
| Owner(s) of each PA/CA | State-owned |
| Managers of each PA/CA | Three-River Source National Park Management Agency |
| IUCN governance type of each PA/CA | NP |
| Main threats to conservation | Degradation of regional ecological environment, conflict between livestock and wildlife, road construction, mining, railway, poaching, and climate change. |
| Underlying causes of main threats to conservation | Administrative ambiguity in institutional mechanism and potential conflict derived from different plans, underdeveloped social economy, traditional husbandry as the main source of livelihood. |
| PA/CA management plan(s):   * Timeframe of the current plan * Start of the next planning cycle | Current plan: 2015-2035.  Establish Three-River Source National Park formally by 2020.  Improve the protection and management mechanism, perfect the legal policy system and the standard system, and achieve orderly and efficient management and operation by 2025. |
| Border communities, number of:   * Villages * Local government/administrative units | 53 administrative villages in 12 villages. |
| People living in PA/CA (if any):   * Number of people * Their main source of livelihood | 64 000 rural villagers from 16,621 households in 12 townships in 2016. Traditional husbandry is the main source of livelihood. |
| Permanent platforms for stakeholder participation in PA/CA-related planning/decision making | Promoting the government information disclosure, the consensus on major issues, and the social credit system; soliciting opinions and suggestions from communities before the implementation of major plans and policies; establishing the mechanism for opinion adoption, feedback and supervision. |
| Permitted resource use within the PA/CA (if any) | Ecological animal husbandry and franchised business, including ecological experience and environmental education service, organic livestock product processing, ethnic clothing, catering, lodging, tourism products and cultural industry etc. |
| Number of people employed in PA/CA management   * From local community * From outside | 16,621 employees in for the voluntary ecological management and protection, the number of which is consistent with the number of local households[[7]](#footnote-7).  354 employees in the Three-River Source National Park Management Agency. |
| Number of people employed in other conservation related work   * From local community * From outside | N/A |

**(2) Villages Selected for** **Project Interventions**

In Three-River Source National Park, the target villages selected in C-PAR1 are Hongqi Village, Niandu Village, Masai Village and Chaze Village, respectively. Prior to the interventions of this project, i.e., most specifically through the establishment of the NP, those four villages (mentioned above) were located inside the Three-River Source national reserve. Nature reserves are the most stringent form of protection in China, as such the establishment of the Three-River Source National Park (which is one of the key components of C-PAR1 activities) has very limited negative social impact on local communities. This is due to the fact that additional restrictions/impositions are not likely to exceed the stringency of the requirements/restrictions the communities currently encounter. Details of project background information in each target village are outlined below.



**Figure 3-2 Location map of villages selected for intervention,Three-River Source National Park**

**Table 3-5 Villages selected for project interventions, Three-River Source National Park**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Village** | **Prefecture, County** | **Population** | **Area** | **Indicative project intervention** |
| Niandu | Yushu, Zaduo | 1,400  (100% Tibetan) | Mekong River source | * **Collaborative PA management** (strengthening herder cooperatives for natural resource co-management); * **Sustainable livelihood alternatives** (e.g., guided tours for eco-tourists); * **Human‐wildlife conflict management** (including involvement of insurance sector); * **Public participation** (environmental education); * **Involvement of the enterprise sector** (e.g., through tourism partnerships and concessions); |
| Masai | Yushu, Zhiduo | 1,615  (100% Tibetan) | Yangtze River source | * **Collaborative PA management** (strengthening herder cooperatives for natural resource co‐management); * **Sustainable livelihood alternatives** (e.g., traditional crafts, sourcing of organic meat); * **Public participation** (environmental education, including for primary and middle school students); |
| Hongqi | Yushu, Qumalai | 2,450  (100% Tibetan) | Yangtze River source | * **Collaborative PA management** (strengthening herder cooperatives for natural resource co‐management; * **Sustainable livelihood alternatives** (e.g., guided tours for eco‐tourists); * **Public participation** (environmental education); * **Involvement of the enterprise sector** (e.g., through tourism partnerships and concessions); |
| Chaze | Guoluo, Maduo | 306  (100% Tibetan) | Yellow River source | * **Collaborative PA management** (strengthening co‐management of Ramsar wetland site, grassland rehabilitation, climate‐responsive monitoring); * **Public participation** (e.g., increased involvement of local environmental NGOs); * **Involvement of the enterprise sector** (e.g., through tourism partnerships and concessions); |
| **Total:** | | **5,771 (100% Tibetan)** | | |

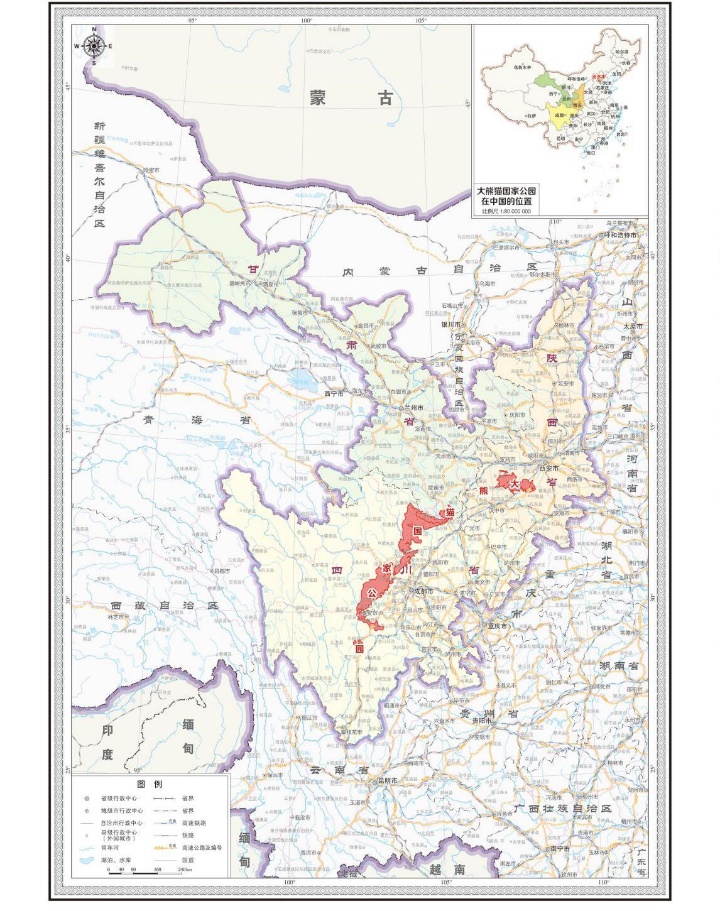
**Table 3-6 Project inplementation progress, Three-River Source National Park**

|  |  |  |
| --- | --- | --- |
| **Output** | **Detailed output** | **status** |
| 2.1 Dynamic conservation planning, NP regulations, and collaborative governance arrangements for NP system pilot implementation. | 2.1.1. Facilitate comprehensive conservation planning and assessment of coverage of KBAs across the proposed national park. | 2021 planned |
| 2.1.2. Provide TA on developing PA management plans. | 2021-2024 planned |
| 2.1.3. Facilitate collaborative PA governance. | 2021 planned |
| 2.1.4. Provide TA on strengthening PA regulatory frameworks. | 2021 planned |
| 2.1.5. Summarise lessons learned on diversified funding model. | N.A. |
| 2.2: Institutional capacities of NP pilot management agencies enhanced through implementation of PA competency standards, introduction of international best practices, implementation of technical guidelines and strengthened partnerships. | 2.2.1. Develop capacity development plans for NP pilots. | 2021 planned |
| 2.2.2. Training on social inclusion, community development. | 2020 implemented |
| 2.2.3. Deliver domestic knowledge transfer trainings. | 2021 planned |
| 2.2.4. Deliver international knowledge transfer trainings. | 2021 planned |
| 2.2.5. Provide TA on strengthening capacities of CSOs. | 2021-2024 planned |
| 2.3: Community benefits strengthened through demonstration of collaborative management arrangements, including implementation of human‐wildlife conflict management plans, tourism partnerships and concessions, and environmental education programs. | 2.3.1. Strengthen collaborative PA management arrangements. | 2020 implemented |
| 2.3.2. Strengthen and promote sustainable livelihoods. | 2020 implemented |
| 2.3.3. Enhance public participation. | 2020 implemented |
| 2.3.4. Expand involvement of the enterprise sector. | 2020 implemented |
| 2.3.5. Improve management of human‐wildlife conflict. | 2021 planned |

### 3.2.2 Giant Panda National Park Pilot

In December 2016, the Central Leading Group on Comprehensively Deepening Reforms (CLGCDR) adopted the Pilot Program of Giant Panda National Park System, encompassing giant panda habitat in Sichuan, Shaanxi and Gansu provinces (see Figure 3-3).

**(1) Basic Information and Interventions of the Giant Panda National Park**



**Figure 3-3 Location map, Giant Panda National Park**

**Table 3-7** **Giant Panda National Park pilot[[8]](#footnote-8)**

|  |  |
| --- | --- |
| Name of the PA/CA or group of contiguous PAs/CAs to be assessed | Giant Panda National Park |
| Year of establishment | 2020 |
| Designation of each PA/CA: park, reserve, conservancy, sanctuary, etc | Park |
| Area of each PA/CA in km2 | 21347 km2 in total |
| Owner(s) of each PA/CA | 71.4% state owned, 28.6% collective owned |
| Managers of each PA/CA | Giant Panda National Park Management Agency |
| IUCN governance type of each PA/CA | National park |
| Main threats to conservation | The fragmentation of giant panda habitats and consequent population segmentation. Frequent natural disasters like earthquake and Bamboo blossom. The conflict between conservation and livelihood. |
| Underlying causes of main threats to conservation | Simple industrial structure with resource-dependent industry like mining and hydroelectric generation as the main source of local fiscal revenue. Underdevelopment of local economy with contiguous poor counties. Conflict derived from too many administrative units and departments from different administrative levels being involved. |
| PA/CA management plan(s):   * Timeframe of the current plan * Start of the next planning cycle | Current plan: 2019-2025.  Complete the system pilot work of Giant Panda National Park by 2020.  Create the demonstration area for biodiversity conservation, the pioneer area for ecological value realization and the model area for world’s ecological education, achieving the overall goal by 2035. |
| Border communities, number of:   * Villages * Local government/administrative units | 151 townships in 30 counties in 12 municipalities. |
| People living in PA/CA(if any):   * Number of people * Their main source of livelihood | The population in the proposed NP is 120 800 in 151 townships.  The main source of livelihood is traditional crop farming[[9]](#footnote-9). |
| Permanent platforms for stakeholder participation in PA/CA-related planning/decision making | Establish the mechanism for the social engagement in the operation of Giant Panda National Park, and encourage local communities, businesses, schools and individuals to participate in the construction and development of Giant Panda National Park. |
| Permitted resource use within the PA/CA (if any) | Human activities that do not cause damage to ecological functions, including a small amount of planting, grazing, fishing, and breeding necessary for the life of indigenous residents without expanding the existing scale; moderate tourism and the construction of necessary infrastructures; the construction of linear infrastructure, embarkment and water supply facilities that is necessary and unavoidable and conforms to the territorial spatial planning above the county level. |
| Number of people employed in PA/CA management   * From local community * From outside | 5,076 employees in management agencies.  11,993 employees for the voluntary ecological management and protection and more employees will be hired. |
| Number of people employed in other conservation related work   * From local community * From outside | 8,224 rangers for the Natural Forest Protection Project, 3,305 employees in State-owned Forest Industry Enterprises, and 4,151 employees (hired or temporary) in state-owned forest farms. More employees will be hired for the voluntary social service. |

**(2) Villages Selected for Project Interventions**

In Giant Panda National Park, the target villages selected in C-PAR1 are Heping Village, Yanfeng Village, Lianhe Village and Caojia Village. Heping Village was near the Daxingling PNR before the establishment of the NP, after which part of it (913.8 ha) is now included within the NP area. Yanfeng Village was partially included in the PA and is now completely included within the NP area. Lianhe Village was within the PA area and is included in the NP area totally. Caojia Village was near the PNR and part of it (365 ha) is now included within the NP area. The establishment of Giant Panda National Park may result in impacts (both positive and adverse) which may affect community well-being in the four villages. The potential impacts/effect to community well-being will be assessed in detail in the following sections.

Details of the basic situation and project interventions in each target village, as well as the project implementation progress are given below.

**Table 3-8 Villages selected for project interventions, Giant Panda National Park[[10]](#footnote-10)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Village** | **Prefecture, County** | **Population** | **Area** | **Indicative project intervention** |
| Heping | Xingjing County of Ya’an City | 320  (5% ethnic minorities, including Tibetan, Qiang, Hui and Yi) | Near Daxingling PNR | * **Sustainable livelihood alternatives** (e.g., traditional Chinese medicine, sustainable bamboo farming); * **Involvement of the enterprise sector** (e.g., strengthening economic viability of sustainable bamboo farming); |
| Yanfeng | Chongzhou city | 702  (100% Han) | Qionglai Mountains | * **Collaborative PA management** (strengthening co‐management of forest resources); * **Sustainable livelihood alternatives** (e.g., traditional Chinese medicine); * **Involvement of the enterprise sector** (e.g., strengthening economic viability of traditional Chinese medicine farming); |
| Lianhe | Dujiangyan City | 402  (100% Han) | Minshan Mountains | * **Sustainable livelihood alternatives** (e.g., guided tours for eco‐tourists); * **Public participation** (strengthening collaboration with NGO sector including WWF, environmental education); * **Involvement of the enterprise sector** (e.g., through tourism partnership and concession); |
| Caojia | Baoxing County of Ya’an City | 981  (100% Han) | Qionglai Mountains | * **Sustainable livelihood alternatives** (e.g., guide tours for tourists, processing and marketing of traditional Chinese medicine); * **Public participation** (e.g., environmental education, traditional knowledge); * **Involvement of the enterprise sector** (e.g., through tourism partnership and concession); |
| **Total:** | | **2,405** | | |

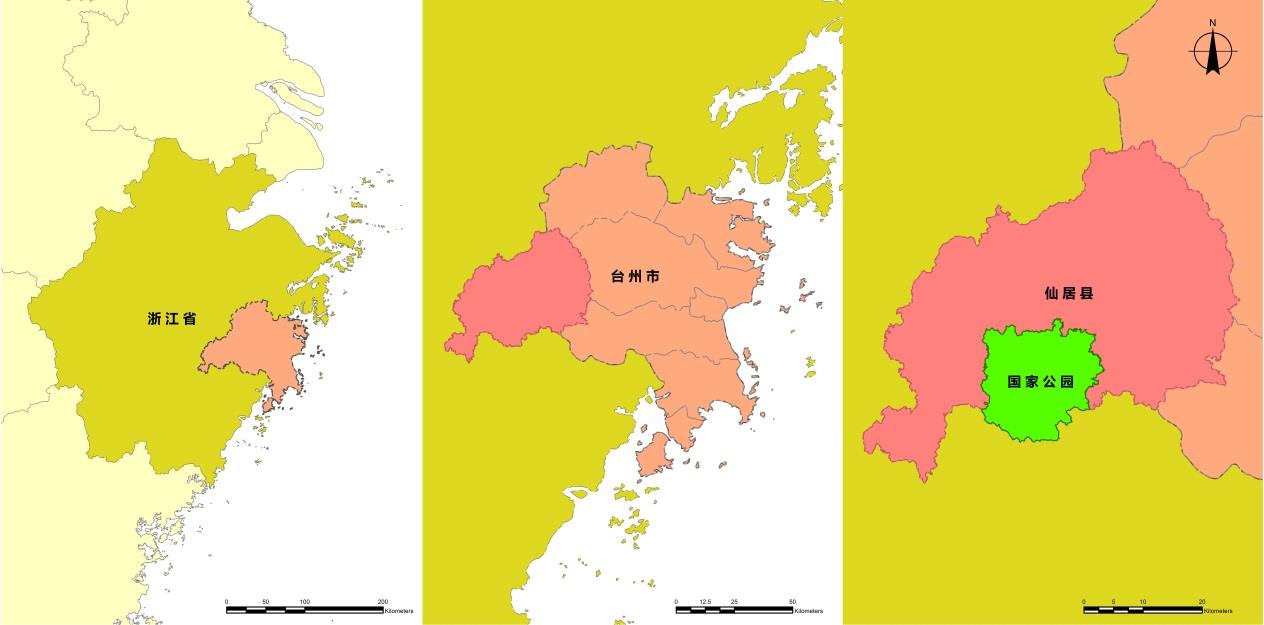
**Table 3-9 Project inplementation progress, Giant Panda National Park**

|  |  |  |
| --- | --- | --- |
| **Output** | **Detailed output** | **status** |
| 2.1 Dynamic conservation planning, NP regulations, and collaborative governance arrangements for NP system pilot implementation. | 2.1.1. Facilitate comprehensive conservation planning and assessment of coverage of KBAs across the proposed national park. | 2020 implemented |
| 2.1.2. Provide TA on developing PA management plans. | 2021-2024 planned |
| 2.1.3. Facilitate collaborative PA governance. | N.A. |
| 2.1.4. Provide TA on strengthening PA regulatory frameworks. | 2021-2024 planned |
| 2.1.5. Summarise lessons learned on diversified funding model. | 2021-2024 planned |
| 2.2: Institutional capacities of NP pilot management agencies enhanced through implementation of PA competency standards, introduction of international best practices, implementation of technical guidelines and strengthened partnerships. | 2.2.1. Develop capacity development plans for NP pilots. | 2021 planned |
| 2.2.2. Training on social inclusion, community development. | 2021 planned |
| 2.2.3. Deliver domestic knowledge transfer trainings. | 2021 planned |
| 2.2.4. Deliver international knowledge transfer trainings. | 2021-2024 planned |
| 2.2.5. Provide TA on strengthening capacities of CSOs. | 2021-2024 planned |
| 2.3: Community benefits strengthened through demonstration of collaborative management arrangements, including implementation of human‐wildlife conflict management plans, tourism partnerships and concessions, and environmental education programs. | 2.3.1. Strengthen collaborative PA management arrangements. | 2021 planned |
| 2.3.2. Strengthen and promote sustainable livelihoods. | 2021 planned |
| 2.3.3. Enhance public participation. | 2021 planned |
| 2.3.4. Expand involvement of the enterprise sector. | 2021-2024 planned |
| 2.3.5. Improve management of human‐wildlife conflict. | N.A. |

### 3.2.3 Xianju National Park Pilot

**(1) Basic Information and Interventions of the Xianju National Park**

The Xianju National Park is situated in Xianju County in the southeast part of Zhejiang province (28.624°N and 120.584°E) (see Figure 3-3), and covers 301.89 km2 of terrestrial ecosystems. The NP is a consolidation of four existing protected areas, including the Xianju National Scenic Area, the Xianju National Forest Park, the Cangshan (Kuocang) Provincial Nature Reserve and the Shenxianju National Geological Park.



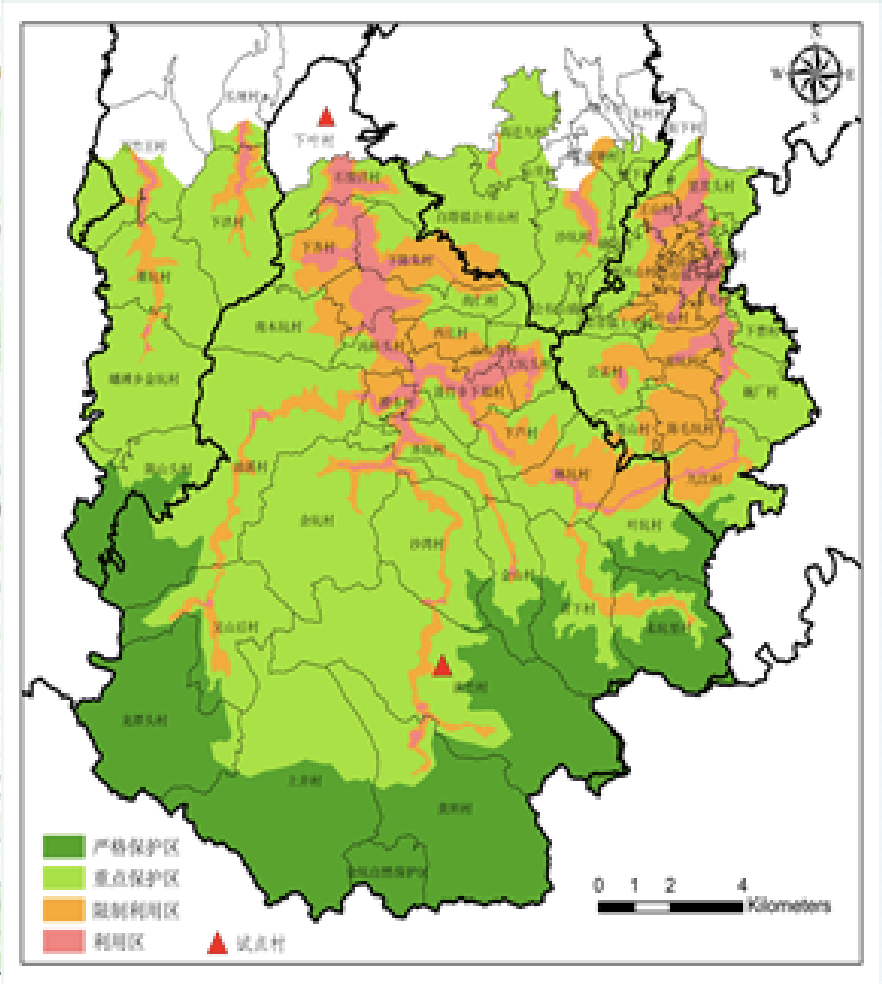
**Figure 3-4 Location map, Xianju National Park**

**Table 3-10 Xianju National Park pilot[[11]](#footnote-11)**

|  |  |
| --- | --- |
| Name of the PA/CA or group of contiguous PAs/CAs to be assessed | Xianju National Park |
| Year of establishment | 2015 |
| Designation of each PA/CA: park, reserve, conservancy, sanctuary, etc | park |
| Area of each PA/CA in km2 | 301 .89 km2. |
| Owner(s) of each PA/CA | State-owned (1.54 km2, 0.51%) and collectively owned (297.32 km2, 99.49%) |
| Managers of each PA/CA | Shenxianju National Park Management Agency |
| IUCN governance type of each PA/CA | Collaborate under IUCN’s Green List program. |
| Main threats to conservation | Administration from multiple departments undermines the integrity of regional ecosystem. Disorderly and overly development is carried out with the lack of the unified planning. Frequent human activities in contiguous areas without adequate protection facilities or funds to support ecological protection. Potential natural disasters. |
| Underlying causes of main threats to conservation | The absence of unified and scientific management. Insufficient protection facilities and funds. Conflict between conservation and human activities like construction, development and traveling. Potential natural disasters like flash flood, fire and extreme weather. |
| PA/CA management plan(s):   * Timeframe of the current plan * Start of the next planning cycle | Current plan: 2015-2025.  The next stage begins in 2021. |
| Border communities, number of:   * Villages * Local government/administrative units | 58 administrative villages in 4 counties. |
| People living in PA/CA(if any):   * Number of people * Their main source of livelihood | The number of people is 33 241 in 2014.[[12]](#footnote-12)  The main source of livelihood is agricultural activities. |
| Permanent platforms for stakeholder participation in PA/CA-related planning/decision making | Establish a NP community co-management system and encourage community members to participate in the management and protection of NP. |
| Permitted resource use within the PA/CA (if any) | Livelihood including herding, husbandry, planting, herbal medicine digging and lumbering, infrastructure construction as well as most tourism activities are permitted under specific conditions or in specific areas. |
| Number of people employed in PA/CA management   * From local community * From outside | 46 employees in the Xianju National Park Management Committee. |
| Number of people employed in other conservation related work   * From local community * From outside | 50-100 employees from local communities to be hired in NP resource patrol, publicity and education, sanitation, supervision, etc. |

**(2) Villages Selected for Project Interventions**

In Xianju National Park, the target villages selected in C-PAR1 are Xiaye Village and Danzhu Village. Xiaye Village was outside the previous PA area and it is not included in the NP area after the establishment of Xianju National Park (although it is located in close proximity to the NP). Danzhu was previously included in the scenic area and it’s not included in the current NP area either. The establishment of NP will not likely have major impacts on these two target villages.



**Figure 3-5** **Location map of villages selected for intervention, Xianju National Park**

**Table 3-11 Villages selected for project interventions, Xianju National Park[[13]](#footnote-13)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Village** | **Prefecture, County** | **Population** | **Indicative project intervention** |
| Xiaye | Danzhu County of Xianju City | 300  (100% Han) | * **Sustainable livelihood alternatives** (e.g., services for eco‐tourists); * **Public participation** (environmental education, traditional knowledge); * **Involvement of the enterprise sector** (e.g., tourism partnerships and concessions); |
| Danzhu | Danzhu County of Xianju City | 400  (100% Han) | * **Sustainable livelihood alternatives** (e.g., services for eco‐tourists); * **Public participation** (environmental education, traditional knowledge); * **Involvement of the enterprise sector** (e.g., tourism partnerships and concessions); |
| **Total:** | | **700** | |

**Table 3-12 Project inplementation progress, Xianju National Park**

|  |  |  |
| --- | --- | --- |
| **Output** | **Detailed output** | **status** |
| 2.1 Dynamic conservation planning, NP regulations, and collaborative governance arrangements for NP system pilot implementation. | 2.1.1. Facilitate comprehensive conservation planning and assessment of coverage of KBAs across the proposed national park. | 2021 planned |
| 2.1.2. Provide TA on developing PA management plans. | 2021-2024 planned |
| 2.1.3. Facilitate collaborative PA governance. | 2021 planned |
| 2.1.4. Provide TA on strengthening PA regulatory frameworks. | 2021 planned |
| 2.1.5. Summarise lessons learned on diversified funding model. | N.A. |
| 2.2: Institutional capacities of NP pilot management agencies enhanced through implementation of PA competency standards, introduction of international best practices, implementation of technical guidelines and strengthened partnerships. | 2.2.1. Develop capacity development plans for NP pilots. | 2021 planned |
| 2.2.2. Training on social inclusion, community development. | 2020 implemented |
| 2.2.3. Deliver domestic knowledge transfer trainings. | 2021 planned |
| 2.2.4. Deliver international knowledge transfer trainings. | 2021 planned |
| 2.2.5. Provide TA on strengthening capacities of CSOs. | 2021-2024 planned |
| 2.3: Community benefits strengthened through demonstration of collaborative management arrangements, including implementation of human‐wildlife conflict management plans, tourism partnerships and concessions, and environmental education programs. | 2.3.1. Strengthen collaborative PA management arrangements. | 2020 implemented |
| 2.3.2. Strengthen and promote sustainable livelihoods. | 2020 implemented |
| 2.3.3. Enhance public participation. | 2020 implemented |
| 2.3.4. Expand involvement of the enterprise sector. | 2020 implemented |
| 2.3.5. Improve management of human‐wildlife conflict. | 2021 planned |

# 4. Baseline Data

## 4.1 Socioeconomic Environment

### 4.1.1 Socioeconomic Background of the National Park Sites for C-PAR1

#### (1) Three-River Source National Park

The Three-River Source National Park (NP) covers a total area of 123,100 km2 and consists of three sub-park areas: Yangtze River Source, Yellow River Source and Lancang River Source. The Three-River Source NP encompasses four counties: Zhiduo, Qumalai, Maduo, and Zaduo. In March 2016, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the "Pilot Program of the Three-River Source National Park System", initiating the practical exploration of the establishment of a national park system in China. As a consequence, China's first national park and the world's largest national park pilot was created.

The residents of the Three-River Source area are mainly ethnic Tibetans, which accounts for 93% of the total population within this area. The four counties have a total herdsman population of 128,000 and a poverty-stricken population of 39,000, including 16,621 herdsmen households (population of 64,000) and a poverty-stricken population of 24,000 within the bounds of the NP area[[14]](#footnote-14). The per capita disposable income of urban residents in the four counties is 25,099 Yuan, and the per capita net income of herdsmen is 5,876 Yuan. The four counties are all key counties for national poverty alleviation and development, with a low level of social development and traditional animal husbandry as the main industry.

The Yangtze River Source sub-Park covers an area of 90,300 km2, accounting for 73.35% of the total area of the Three-River Source NP. It contains a total of 15 administrative villages and 21,143 people in Zhiduo and Qumalai counties. In 2019, the population of Zhiduo County was 34,637 and was made up of 17,131 males and 17,506 females. The population of Qumalai County was 34,111 and was made up of 17,078 males and 17,033 females. In 2019, the GDP of Zhiduo and Qumalai counties was 0.59 billion Yuan and 0.595 billion Yuan respectively, of which the primary sector accounted for over 60% in both cases (primary sector meaning livestock rearing). The per capita disposable income of herders was 8,520 Yuan and 8,199 Yuan respectively.

The Lancang River Source sub-Park is located in Zaduo County, covering an area of 13,700 km2. It is comprised of 5 townships, namely: Moyun, Ado, Chatan, Zhaqing and Angsai, with 19 administrative villages and 33,205 people. In 2019, the population of Zaduo County was 70,624 and was made up of 35,221 males and 35,403 females. In 2019, the GDP of Zaduo County was 1.045 billion Yuan, including 0.76 billion Yuan in the primary industry, accounting for more than 70% of the total. The primary industry consists mainly of livestock rearing. The per capita disposable income of herders was 7,896 Yuan.

The Yellow River Source sub-Park is located in Maduo County, covering an area of 19,100 km2, accounting for 78.01% of the total area of Maduo County. It includes 19 administrative villages. In 2019, the population of Maduo County was 15,845 and was made up of 8,064 males and 7,781 females. In 2019, the GDP was 3.24 billion Yuan and the per capita disposable income of herders was 7,401 Yuan.

#### (2) Giant Panda National Park (NP)

The Giant Panda NP covers a total area of 27,134 km2, encompassing 12 cities and 30 counties in Sichuan, Gansu and Shanxi provinces. Among them, Sichuan Province accounts for 20,177 km2, accounting for 74.36% of the total area, including 7 cities and 20 counties. Shaanxi Province covers 4,386 km2, accounting for 16.16% of the total area, including 4 cities and 8 counties. Gansu Province covers 2,571 km2, accounting for 9.48% of the total area, including 1 city and 2 counties.

The industrial structure of the local economy of the Giant Panda NP is relatively homogeneous. Resource development-based industries, such as mining and hydroelectric power generation are the main source of local financial revenue. The economic sources of community residents are mainly traditional farming, with some residents also engaged in mining and processing labour. With the implementation of community co-management projects in nature reserves, some communities have developed bee keeping, and herbal medicine cultivation.

The economic income level of the Giant Panda NP is generally low. Sixteen counties are considered key counties for poverty alleviation and development at the national level in China, relying mainly on financial transfer payments[[15]](#footnote-15). In 2017, except for Shifang City, the annual per capita GDP of the remaining 29 counties was lower than the national average. The pilot area involved 120,800 people, including 89,900 in Sichuan Province, 7,700 in Shaanxi Province and 23,200 in Gansu Province.

#### (3) Xianju National Park (NP)

The Xianju NP has a total area of 301.89 km2 and covers 4 townships in Xianju County. The total population of the Xianju NP is 33,241 of which 650 are non-agricultural, with a natural population growth rate of 6.42 per thousand and a population density of 110 people per km2.

The per capita gross product of the Xianju NP is 27,331 yuan, the average gross household income of urban residents is 29,426 yuan and the per capita net income of rural residents is 11,632 yuan.

### 4.1.2 Household Surveys and Assessment of the National Parks

The research team conducted a background consultation to discover other pertinent information through collaboration with residents of the pilot villages. This initial consultation was undertaken to register community concerns, feedback, and potential grievances. In doing so, this exercise also informed the environmental and social impact assessment in the Three-River Source NP, the Giant Panda NP and the Xianju NP.

In the Three-River Source NP, the research team visited one administrative village from each of the following counties: Mado, Zaduo, Qumalai and Zhiduo[[16]](#footnote-16).

In the Giant Panda NP, the research team visited one administrative village from each county of Dujiangyan, Chongzhou, Baoxing and Xinjing counties in Sichuan Province[[17]](#footnote-17).

In the Xianju NP, the research team selected Danzhu and Xiaye village from Danzhu Township in Xianju County.

Survey data was collected from local stakeholders between February and April 2021. This primary survey data was supplemented with secondary data. The secondary data referenced and utilized for this exercise included: (i) National Park Planning (master plan and special plan for spatial development, community development and green industry development); (ii) policy documents (including national park management measures, natural resource management measures and franchise management measures); (iii) annual summary report of the National Park; and (iv) EIA reports on infrastructure construction, project proposals, and monitoring data on ecological environment, species, and habitat quality by the Local Government Environmental Protection Bureau and the National Park Service.

The primary data that was attained through this exercise includes household surveys, interviews, and participatory seminars. Data was collected by a local consultant and local project contacts. Surveys in the Three-River Source NP were provided in both Tibetan and Mandarin. The language used for surveys in the Giant Panda and Xianju NP was Mandarin. Survey objectives and questions were explained to local stakeholders/participants to minimize potential miscommunications when administering the questionnaire. The head of the household was invited to participate in the survey, and questionnaires were completed with the assistance of an on-site investigator (Figure 4-1, Figure 4-2, Figure 4-3).



**Figure 4-1 Household investigation at the Three-River Source NP in Qinghai Province**



**Figure 4-2 Household investigation at the Giant Panda NP in Sichuan Province**



**Figure 4-3 Household investigation at the Xianju NP in Zhejiang Province**

The research team collected a total of 233 household questionnaires from the three national parks. Of these, 93 household questionnaires were collected in the Three-River Source NP, 13 being from Chaze, 30 from Niandu, 27 from Hongqi, and 23 from Masai village. A further 12 stakeholders were interviewed, 1 from the Three-River Source NP, 1 from the local government. Two of them are the village cadres and eight of them were herdsmen. 105 household questionnaires were collected in the Giant Panda NP, 15 being from Lianhe, 30 from Yanfeng, 40 from Caojia, and 20 from Heping village. 35 questionnaires were collected in the Xianju NP, 15 being from Danzhu, and 20 from Xiaye village.

In terms of household characteristics (Table 4-1), respondents in the Three-River Source NP were the youngest, with an average age of around 42 years old. Those in the Giant Panda NP were around 52 years old, and those in the Xianju NP were the oldest, at around 63 years old.

In terms of education, respondents in the Three-River Source NP had the lowest educational attainment, with an average of no more than two years of schooling, and most of those who had attended school had only attended primary school. Respondents in the Giant Panda NP had the highest level of education, with an average of 7.85 years of schooling, while respondents in the Xianju NP had an average of 5.64 years of schooling. In terms of ethnicity, all respondents in the Three-River Source NP are Tibetan, and the language spoken is mainly Tibetan, with the majority of respondents speaking only Tibetan. Respondents in the Giant Panda and Xianju NP are generally Han nationality and communicate more smoothly in Mandarin.

Further information about the respondents' households was obtained, including health status, marital status and gender (Table 4-1). As can be seen, the Three-River Source NP has the lowest proportion of female respondents (8.7%), which also represents the fact that men are generally considered the head of the household, while 21.90% and 33.33% of respondents in the Giant Panda NP and the Xianju NP are female respectively.

Due to the large size of the Three-River Source area, the research team mainly used village officials to gather herders from the pilot area to travel to the identified sites for research. Because of the long distances travelled, the research participants who came were mainly male heads of households, resulting in the highest proportion of male respondents. Respondents are generally in good health, with 86.96% of respondents in the Three-River Source NP indicating that they have no serious illnesses and are in relatively good health. In terms of marital status, more than 80% of respondents were married, while very few were unmarried or divorced. In terms of whether there are persons with disabilities in the family, the Three-River Source NP has the highest proportion at 24.73%, and the Xianju NP has the lowest proportion at 8.33%.

**Table 4-1The basic characteristics of the respondents’ household**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| National Park pilot | Number of respondents | Average age/year | Average Education/year | Main nationalities | Proportion of physically fit | Proportion of married | Proportion of male | Proportion of female | Proportion of households with disabilities |
| Three‐River Source | 93 | 42.25 | 1.46 | Tibetan | 86.96% | 89.13% | 91.30% | 8.70% | 24.73% |
| Giant Panda | 105 | 51.93 | 7.85 | Han nationality | 62.86% | 80.10% | 78.10% | 21.90% | 11.21% |
| Xianju | 35 | 62.88 | 5.64 | Han nationality | 83.33% | 91.67% | 66.67% | 33.33% | 8.33% |

## 4.2 Manmade Environment

### 4.2.1 Physical Planning

In 2005, the State Council approved the implementation of The Master Plan for Qinghai Three-River Source Nature Reserve Ecological Protection and Construction, marking a comprehensive stage of systematic and large-scale ecological protection and construction in the Three-River Source area.

In 2012, the State Council approved the implementation of The General Program for the Qinghai Three-River Source National Ecological Protection Comprehensive Pilot Area, further elevating ecological protection of the entire Three-River Source area to a major national strategy.

In 2014, the State Council approved the implementation of The Qinghai Three-River Source Ecological Protection and Construction Phase II Project, marking a new stage of ecological protection of the Three-River Source area.

In 2015, the 19th meeting of the Central Leading Group for Comprehensively Deepening Reform considered and adopted The Pilot Program for the Three-River Source National Park System.

In 2016, the national government officially issued The Pilot Program for the Three-River Source National Park System, which clearly defines the mission statement, timetable, and roadmap for the establishment of the Three-River Source NP.

In 2018, the National Development and Reform Commission issued The Master Plan for Three-River Source NP. The plan takes into account the current functional zoning and control requirements for protected areas, clarifies functional zoning, unifies and standardizes the management of the Three-River Source area, and systematically protects the originality and integrity of the natural ecosystem and cultural heritage contained within the NP area.

These plans implement three major categories of projects. Firstly, ecological and environmental protection and construction projects such as returning pasture to grass, returning farmland to forest, managing degraded grassland, forest and grassland fire prevention, grassland rodent control and soil and water conservation.

Secondly, the construction of infrastructure projects for the production and living of farmers and herdsmen, such as the construction of small towns, supporting projects for grassland protection and drinking water for people and animals.

Thirdly, the construction of ecological protection support projects with artificial rainfall, ecological monitoring, and scientific and technological support as the main content.

The planning system of the Three-River Source NP consists of a master plan and special plans for ecological protection, ecological experience and environmental education, industrial development and concessions, community development, and infrastructure construction. The master plan is a strategic plan that guides the spatial layout of the NP at the macro level, while special plans implement specific construction tasks and implementation plans according to the master plan.

**The special plans include:**

1. The Special Plan for Ecological Protection Plan in the Three-River Source NP: aimed at completing secondary functional zoning, implementing control objectives and measures proposed in primary functional zoning, refining conservation measures, and formulation of protection and management plans.
2. The Special Plan for Ecological Experience and Environmental Education in the Three-River Source NP: aimed at designing ecological experience sites, and developing more specific task plans for environmental education.
3. The Special Plan for Industrial Development and Concessions in the Three-River Source NP: aimed at reducing the direct use of natural resources, improving livelihoods, and promoting positive industrial development in the park.
4. The Special Plan for Community Development and Infrastructure Development in the Three-River Source NP: formulate a list of tasks and an implementation plan for community development and infrastructure development in the national park.
5. The Management Plan for the Three-River Source NP: sets out the requirements for the construction of the park's protection and patrol system, and the administration of ecological management and public welfare positions.

The various special plans are based on the framework of The Master Plan for Three-River Source NP and rely on each other to ensure unity of purpose and coordination of tasks.

**The key projects to be constructed in the Three-River Source NP are as follows:**

(1) Smart National Park Construction Project: This projec aims to build the national park into a demonstration base for science and technology, ecological monitoring and nature education of international standard. It mainly includes: township information-sharing infrastructure project, cloud computing and big data center, and collaborative office capacity enhancement project.

(2) Key projects for eco-experience and environmental education: Construction of public facilities to support ecological experience and environmental education. These include the construction of the Three-River Source NP Exhibition Centre, the Three-River Source Museum, and the Kekexili Education and Exhibition Centre. In addition, a park education and reception center will be built in Mado, Zhiduo, Zaduo and Qumalai counties. In addition, service points and rescue facilities will be built, as well as sanitation facilities, public toilets and waste and sewage treatment facilities.

(3) Key infrastructure construction projects: In terms of transportation, the road projects related to the construction of the national park in the 13th Five-Year Plan of Qinghai Province will be implemented, and a network of patrol roads will be built based on main roads as the external access to the park and county and village roads, including 6 township roads and 53 patrol roads. In terms of electricity, the park will carry out power grid extension projects to achieve effective power grid coverage. In terms of communications, the park will implement fiber optic access to villages and full satellite communications coverage. As for water conservation, the park will improve facilities for flood prevention and mitigation, and protection of drinking water sources. In terms of environmental protection, the park will build sewage and rubbish treatment stations in centralized settlements and purchase rubbish bins, rubbish trucks and other environmental protection facilities. In terms of public services, the park will improve grassroots medical care, health care and education.

A series of rules and regulations have been studied and formulated for the ecological management of the Giant Panda NP relating to: concessions, traditional livelihoods, cultural heritage protection, ticket reservations and visitors, volunteer services, construction projects, social donations, compensation for wildlife accidents, financial budgets, international cooperation and exchange, target accountability and performance assessment.

In order to fully connect with the objectives and tasks of the master plan and further implement key tasks such as: the ecological protection and management system; natural ecological protection and restoration; sustainable community development; nature education and experience; and the construction of a long-term operational mechanism, the state has prepared special implementation plans for the Giant Panda NP.

**The key infrastructure projects to be constructed in the Giant Panda National Park are as follows:**

(1) Construction of management infrastructure: Improvements to the infrastructure, office facilities, and communication and security equipment for the Authority's stations.

(2) Field patrol equipment construction project: Purchase of patrol vehicles, monitoring and positioning equipment for the Authority's stations to improve field patrol capacity.

(3) Road infrastructure construction project: Consolidate and repair patrol roads damaged by disasters in 2020. The aim is to rebuild and maintain 500 km of traffic arteries, access roads and patrol roads by 2025.

(4) Digital national park construction project: Implementing digital equipment construction projects for comprehensive management, monitoring and patrolling and public services, and developing a comprehensive information management system for giant panda national park.

The State has issued the Xianju National Park Construction Plan. The management body of Xianju NP was further established, the integration of management bodies was completed and the management system was optimized. The Measures for the Management of Xianju NP were formulated to clarify management functions and authority. Detailed plans for ecotourism, science education and scientific research and monitoring were completed to guide and regulate the development and use of resources within the NP.

**The key projects to be constructed in Xianju National Park are as follows:**

(1) Ecological Protection Project: Includes the conducting of a biodiversity background survey in Xianju National Park, and the establishment of four centres for the breeding of important protected wild animals and wild plants in Nanmuikeng, Shangren, Gaoqianjiu and Shimengyang villages. 20 monitoring points for exotic species were established and regular monitoring of exotic species is being carried out. This project also included the undertaking of natural relic surveys in Xianju National Park, with regular monitoring of important natural relics. Another aspect of the Ecological Protection Project was to establish teams to monitor forest pests and prevent and control natural disasters. This was done through the identification of 20 forest pest monitoring points to regularly monitor their activity.

(2) Scientific research and monitoring project: A new meteorological observation station is planned to be built by the ropeway bridge in the Da Shen Xian Jiu scenic area. Instruments and equipment related to meteorological observation will be acquired. Three to five soil quality monitoring points will be built in the national park to monitor soil quality and the impact of human activities on soil quality. This project will also include the construction of an ecological and environmental monitoring station in the national park to carry out ecological and environmental monitoring activities.

(3) Publicity and education projects: An awareness raising/ education center will be built in Baita Town of Xianju County. A secondary visitor center will be built in Xiaxi Village of Tianshizhen Town, and in Xiaye Village and Shangjing Village of Danzhu Township.

(4) Infrastructure projects: Five service stations are to be built, each with a construction area of 300 m2. Separate rubbish bins are to be set up at the service stations and in areas where visitors are concentrated to achieve full coverage of rubbish collection. During the planning period, the road between Shimengyang Village and Ha Zheng Village will be widened to a length of 7 km and a width of 10 meters. The road between Likantou Village and Yeshan Village in the National Park will be increased in size to be 3.6 km by 10 m. The road between Linkeng Village and Xixia Village will be lengthened by 1.8 km. 150 parking spaces are planned for the entrance of Shi Meng Yang village, 80 parking spaces at the entrance of Gao Qian Jiu village, and 120 parking spaces at the entrance of Likantou village.

### 4.2.2 Agricultural Practices

Based on the household surveys/analysis undertaken, it can be determined that there are significant differences in the type of employment in which respondents were engaged in the three National Parks respectively (Figure 4-4). 84% of respondents in the Three-River Source NP were employed in farming only, indicating that most household income in the Three-River Source area relies mainly on livestock farming. 63% of respondents in the Xianju NP were employed in farming only, while only 44% respondents in the Giant Panda NP were employed in farming only. The highest proportion of respondents in the Giant Panda NP (40%) chose farming as their main occupation (also working part-time in their own village), while only 8% of respondents in the Three-River Source NP were mainly engaged in farming (while also maintaining other sources of income). Over 10% of respondents in both the Giant Panda NP and the Xianju NP chose non-farming as their employment type, while only 1% of respondents in the Three-River Source NP chose non-farming employment. The proportion of those who chose exclusively non-farming employment was generally low, with the location of employment mainly chosen for work in the county. In addition, a very small number of respondents were not employed.

**Figure 4-4 The employment types of respondents**

### 4.2.3 Cultural Heritage

The residents of the Three-River Source NP have lived on the Tibetan Plateau for generations, leading to the creation and maintenance of a culture that is in harmony with the natural environment. The uniqueness of the natural landscape, the biodiversity, the authenticity of the natural cultural heritage and the ethnic culture are all intertwined. The simple ecological concepts of reverence for nature and conformity to nature have been passed down from generation to generation, leaving an original ecological cultural landscape for future generations.

In the four counties where the Three-River Source NP is located, one cultural heritage item is on the National Intangible Cultural Heritage List (i.e. Guozhang dance), two people are the national representative inheritors[[18]](#footnote-18).

Seven cultural heritage items are on the Provincial Intangible Cultural Heritage List[[19]](#footnote-19) and nine people are the provincial representative inheritors. There are a total of 78 immovable cultural relics in the four counties, of which one is a national key cultural relic and five are provincial key cultural relics.

The Giant Panda NP involves the two World Natural Heritage Sites of Sichuan Giant Panda Habitat and Huanglong. The main giant panda habitats of the two World Natural Heritage Sites are now included in the Giant Panda NP. The cultural heritage practices of communities within the Giant Panda NP are rich and varied[[20]](#footnote-20).

There is also a rich cultural heritage in the Xianju NP. Notable practices and objects/sites include:

* The site of a primitive village in Xiatang during the Neolithic period,
* Ancient Yue script from Guangdu during the Spring and Autumn Period,
* Rock paintings from Zhuxi during the Han Dynasty,
* Stone pillar lanterns, a stone meditation temple dating from the first year of Xingping in the Eastern Han Dynasty,
* The world's largest surviving Jin Dynasty cliff carving of the word "Buddha" outside the temple,
* Ancient inhabitants of Gaoqian and the site of a Song kiln,
* The "Tadpole Writing" in the Xianju NP, whose origins are said to be related to Dayu's healing of water, has a mysterious and primitive atmosphere that will strongly attract the attention of future generations.

### 4.2.4 Tourism

The Three-River Source NP is located in the heart of the Tibetan Plateau, the birthplace of the Yangtze, Yellow and Lancang rivers. As an important ecological security barrier and a germplasm resource bank for plateau organisms, its conservation value is of great significance to the whole country and the world. The Park has 760 species of vascular plants and 270 species of wild terrestrial vertebrates. The rich flora and fauna resources, large pristine ecosystems and plateau-authentic ethnic and cultural resources have attracted countless domestic and foreign tourists, making the Three-River Source NP one of the most promising areas for ecotourism development in China.

As the Three-River Source NP is dominated by Tibetans, influenced by religious beliefs about sacred mountains and lakes, local residents generally have a high awareness of ecological protection, which provides a solid baseline for the development of ecotourism.

Nature education and experiences include nature classes, online nature education, field patrol experiences, and limitations on number of visitors. The Giant Panda National Park Administration is responsible for planning the interpretation system of the Giant Panda National Park, planning nature education thematic activities and building the Giant Panda National Park website. Based on the premise of minimal impact on the natural resources of the national park, ecological experience programs are carried out in moderation in densely populated areas and entrance communities.

The tourism industry within the Xianju NP is developing rapidly, with the main projects of Shenxianju Tourism Zone and Jingxingyan Tourism Zone being completed and officially opened to the public. In 2019, Xianju County received 19.07 million tourists and achieved a total tourism revenue of 21.33 billion yuan, including 60,400 international tourists and a tourism foreign exchange income of US$18.56 million; domestic tourists 19.02 million tourists, domestic tourism revenue of 21.20 billion yuan, and admission revenue from attractions of 267 million yuan.

There are still many problems with the development of ecotourism in the Three-River Source NP.

Firstly, the infrastructure construction is outdated and in certain regards inadequate. For example, the road construction grade is low, and regional connectivity is still insufficient. Regional communications, energy, electricity, sewage, waste disposal and other infrastructure construction is also lagging behind, many areas are not yet connected to electricity.

Secondly, there is a shortage of ecotourism professionals. The current ecotourism reception is dominated by local herdsmen, who have certain barriers to providing ecotourism experiences due to their education level and language restrictions. Furthermore, there is a lack of high-level local tourism planning and management talent to achieve a rational planning layout for local ecotourism.

## 4.3 Climate Characteristics

### 4.3.1 Climate

**Three-River Source NP**

The Three-River Source NP has a typical plateau continental climate, mainly characterized by alternating hot and cold seasons, distinct dry and wet seasons, small annual temperature differences, large daily temperature differences, long sunshine hours, strong radiation, and no climatic characteristics that distinguish between the four seasons. The cold season is controlled by the Qinghai-Tibetan cold high pressure, which lasts for seven months, with low heat, low precipitation and high wind. The warm season is influenced by the south-west monsoon producing thermal air pressure, abundant moisture, and precipitation. The average annual temperature is at -4.4°C, with the coldest month (January) averaging -16.5°C and the hottest month (July) averaging 7.5°C.

Precipitation decreases from south-east to north-west, with annual precipitation ranging from 262.2 to 772.8mm, with June to September accounting for about 75% of the annual precipitation. The Three-River Source area is cold and windy, with an annual average wind speed of 4 m/s and a maximum wind speed of 40 m/s. The annual sunshine hours range from 2,300 to 2,900 and the annual solar radiation from 5,658 to 6,469 MJ/m2.

**Giant Panda NP**

The Giant Panda NP is located in the mid-latitudes of China and its climate is significantly influenced by the East Asian monsoon circulation. From southeast to northwest, as the altitude rises, it transitions from a subtropical humid climate in the river valleys to a temperate semi-humid and alpine humid climate. Due to the mountain ranges and complex terrain, a variety of complex microclimates can be found within this area. The average temperature throughout the year is 12 to 16°C, with an extreme minimum temperature of -28°C and a maximum temperature of 37.7°C. The annual precipitation is 500 to 1200 mm, with an uneven seasonal distribution (i.e., more in summer and autumn and less in winter and spring). The spatial distribution of precipitation is also uneven, with southwestern areas receiving more rainfall than north-eastern regions.

**Xianju NP**

The Xianju NP is located in the subtropical monsoon climate zone, with a mild climate, abundant rainfall, and four distinct seasons. Key climatic data for the Xianju NP includes:

* + Average multi-year temperature of 17.2°C,
  + Average precipitation of 1,644 mm,
  + Average annual sunshine hours of 1932.6 hours,
  + Average annual evaporation of 1260.8 mm,
  + Average annual wind speed of 1.28 m/s,
  + Average multi-year frost-free period of 246.2 days, and
  + Average multi-year rainfall of 1,628 mm.

Rainfall is unevenly distributed between years, with a maximum annual average of 2,220 mm and a minimum annual average of only 1,150 mm between 1957 and 2008. At the same time, the climate has a clear vertical distribution pattern due to the influence of regional topography and landforms.

### 4.3.2 Wildlife

There are 760 species of vascular plants in the Three-River Source National Park, belonging to 241 genera in 50 families. There are 125 species of wildlife in the park, most of which are endemic to the Tibetan Plateau. Among them, 47 species of animals, including snow leopards, Tibetan antelopes, wild yaks, Tibetan wild asses, white-lipped deer, musk deer and leopards, are protected at the national level. 59 species of birds, including black-necked cranes, white-tailed sea eagles and golden eagles, are protected at the national level.

**Table 4-2 Main protected species in the Three-River Source NP**

|  |  |
| --- | --- |
| **Protection level** | **Species** |
| National first-grade protection animals | Snow leopard, Panthera pardus, Tibetan antelope, Wild yak, Tibetan wild ass, White-lipped deer, Horse musk, Black-necked Crane, White-tailed Sea Eagle, Golden Eagle, etc. |
| National second-grade protection animals | Tibetan foxes, Stone martens, Manul, Lynxes, Tibetan antelopes, Bharal, Leopard cats, Wapiti, Argali, Brown bear, Great buzzard, Eagle owl, Kite, Vulture, Little long-bellied owl, etc. |

There are 1,631 wild pandas in the Giant Panda NP, accounting for 87.5% of the total number of wild pandas in China. There are 116 species of wild animals under national key protection. There are 22 species of national first grade protection wild animals, including the Giant panda, the clouded leopard, the golden leopard, the snow leopard, the forest musk, the antelope, the Chinese sand duck and the ibis. There are 94 species of wild animals under national second grade protection. There are 35 species of wild plants under national protection, and four species of wild plants under national first grade protection, including the red bean fir, and southern red bean fir. There are also 31 species of wild plants under national second grade protection.

**Table 4-3 Main protected species in the Giant Panda NP**

|  |  |
| --- | --- |
| **Protection level** | **Scientific name** |
| National first-grade protection animals | Giant panda, Golden snub-nosed monkey, Clouded leopard, Panthera pardus, Snow leopard, Forest musk, Horse musk, Antelope, Chinese autumnal sand duck, Golden eagle, White-tailed sea eagle, White-shouldered eagle, Bearded vulture, Green-tailed rainbow pheasant, Pheasant quail, Spotted-tailed hazel grouse, Black stork, Eastern white stork, Black-necked crane, Crested ibis |
| National first-grade protection plants | Red bean fir, Southern red bean fir, One-leafed grass, Dove, etc. |

There are four species of National first grade protection wildlife in the Xianju NP, namely, Syrmaticus ellioti, Neofelis nebulosa, Panthera pardus fusca and Muntiacus crinifrons. In addition, National second grade protection wildlife within Xianju NP includes Macaca mulatta, M. arctoides, Manis pentadactyla aurita, Lutra lutra, Viverricula indica pallida, Accipiter gentiles and 33 other species. National first grade protection plants include Tuxuswallichiana var. mairei. 15 species belonging to National second grade protection plants are present in the Xianju NP including Phoebe chekiangensis, Heptacodium miconioides, and Magnolia officinalis.

**Table 4-4 Main protected species in the Xianju NP**

|  |  |
| --- | --- |
| **Protection level** | **Scientific name** |
| National first-grade protection animals | Syrmaticus ellioti, Neofelis nebulosa, Panthera pardus fusca, Muntiacus crinifrons |
| National second-grade protection animals | Macaca mulatta, M. arctoide s, Manis pentadactyla aurita, Martes flavigula, Lutra lutra, Viverricula indica pallida, Accipiter gentiles, Glaucidium cuculoides, etc. |
| National first-grade protection plants | Tuxuswallichiana var. mairei |
| National second-grade protection plants | Phoebe chekiangensis, Heptacodium miconioides, Magnolia officinalis, Torreya jackii, Cinnamomum camphora, Phoebe chekiangensis,Toona ciliate var. pubescens, Ormosia henryi, Zelkova serrata, Glycine soja, etc. |

### 4.3.3 Ecosystem

The Three-River Source NP has a total of 8.68 million hectares of various types of grassland, including 7.43 million hectares of usable grassland. Forests and scrub are less distributed in the park, accounting for only 0.4% of the total area, and are mainly distributed in the Angsai Conservation Area of the Three-River Source Nature Reserve. The Three-River Source NP has a total of 3.07 million hectares of rivers, lakes, wetlands, and snow-capped glaciers which have significant implications for the purification, storage and supply of water in the area. The desert area of Three-River Source NP is mainly located in the Kekexili Nature Reserve, which has not been disturbed by human activities and still retains its original appearance, making it an extremely valuable natural heritage area.

## 4.4 Water Environment

The Three-River Source is the waterhead of three large rivers, the Yangtze River, Yellow River and Lancang River, with snow-capped mountains, glaciers, and a dense network of rivers. The Yangtze, Yellow and Lancang rivers have an average annual runoff of 49.9 billion cubic meters, of which 18.4 billion cubic meters is from the Yangtze, 20.8 billion cubic meters is from the Yellow and 10.7 billion cubic meters is the Lancang River. In 2016, the Three-River Source NP Pilot was established, and relevant departments established the Three-River Source Ecological Monitoring Group. This group carried out ecological monitoring work in the park for two consecutive years. According to the remote sensing monitoring and ground monitoring data in the past two years, the surface water resources in the Three-River Source NP reached 9.654 billion m3, and the water quality condition was generally excellent.

There are many lakes in the Three-River Source NP, 167 of which are larger than 1 km2, including 120 in the Yangtze River Source Park, 36 in the Yellow River Source Park and 11 in the Lancang River Source Park, with freshwater and brackish water lakes predominating. The total area of snow-capped glaciers is 833.4 km2. The total area of rivers, lakes and wetlands is 29,842.8 km2.

The Three-River Source area has a vast area of glaciers, mainly distributed in the mountains above 5,000 meters above sea level in the Kunlun Mountains and 5,800 meters above sea level in the Tanggula Mountains. For example, in the Yangtze River source area, the Geladandong snow mountain peak area contains 181.5 km2 of glacier, its southeast and northwest four sides are also home to 85 glaciers, covering an area of 662 km2.

In addition, the Three-River Source area has the largest permafrost zone in the world at low and mid-latitudes and the largest "Multiyear Permafrost Zone" on the Qinghai-Tibet Plateau. Scientific research has found that the permafrost thickness in the Yangtze River source area is 100-120 meters north of the Tanggula Mountains and up to 175 meters near the Kunlun Mountains[[21]](#footnote-21).The presence of large areas of alpine permafrost is one of the basic conditions for the existence of plateau glaciers, plateau wetlands, alpine grasslands, and the formation of plateau ecology. The permafrost zone starts to thaw at the surface in May each year, and by August and September it can thaw to a degree of 1-4 meters, before freezing again in late September, and so on.

The Giant Panda NP has a well-developed water system and abundant water resources. The rivers belong to five water systems, including the Jialing, Min, Tuo and Han rivers in the Yangtze River basin and the Wei River in the Yellow River basin. These systems are characterized by short, straight rivers with many waterfalls and abundant rapids. With high mountains and steep slopes, the river has a large natural drop and is rich in hydro energy resources.

The Xianju NP is a valley landscape with the Yongan River running through the northern part of the park and the middle of Xianju County, with a total length of 141.3 km and a watershed area of 2,702 km2. The water quality of the reservoirs, ponds and streams in the Xianju NP is good, with most of the water quality being of national surface water category I-II standard.

## 4.5 Air Environment

The condition of the skies in the Three-River Source area are clear, with strong sunshine and excellent air quality. Ground pressure is lowest in January to February, with the highest occurring in August to September. The air is relatively thin and the oxygen content of the air is only equivalent to about 60% to 70% of sea level, with few floating particles in the air and good atmospheric transparency. The sun shines strongly, with 2,300 to 2,900 hours of sunshine per year. The total radiation and sunshine hours are the highest in the Kekexili area.

## 4.6 Existing Pressures on the Human and Natural Environment

The main threats to the natural environment and local people in the Three-River NP include pasture degradation, livestock-wildlife conflicts, road building, poaching, natural disasters and climate change. Climate warming has led to a reduction in snowfall and the drying up of rivers, affecting pasture growth and accelerating the sanding of pastures. In addition, warming accelerates the melting of the permafrost layer, affecting grassland ecosystems throughout the region. The occurrence of natural disasters such as snowstorms affects the normal livelihoods and lives of pastoralists, and in severe cases may lead to the death of livestock. Wild animals such as wolves, brown bears and snow leopards pose a threat to the safety of herders' lives and property.

The local government has adopted a series of policy measures to protect the personal safety and property of herders, such as purchasing insurance for livestock and personal insurance for herders. If livestock is killed by a wild animal attack, the insurance company will settle the claim according to the fixed damage. However, there is still a bias towards compensation after the fact, and an absolutely effective prevention and early warning mechanism for wildlife attacks has yet to be formed. The method of microchipping wild animals has been advocated in recent years, but after practice the method is not considered applicable because there are not sufficient signals and power sources in pastoral areas.

The ecological restoration and conservation infrastructure construction in the Giant Panda NP (which are not funded by C-PAR1 proponents, i.e. they are associated facilities) could potentially have a minor, short-term negative impact on the ecological environment (more information on the assessment of this potential impact is outlined in Section 5 of this ESIA report). Dust and emissions generated during the construction process could pollute the atmosphere. Noise may affect surrounding habitats, and improper disposal of sewage and waste could result in pollution to the surrounding soil, water bodies and atmosphere. It should be noted that the related infrastructure activities are being undertaken with government matched funds and falls outside of the scope of C-PAR1 activities. As of the date of this ESIA report, the construction of said infrastructure has not been undertaken.

The Xianju NP has a diverse and robust ecological environment and is rich in plant and animal species. However, there are still potential threats to the natural environment. These potential impacts will be further assessed in the following section (i.e., Section 5) of this ESIA report. The impact of human development and construction activities on the ecological environment, as a consequence of further development of the national park landscape (via the construction and operation of tourist facilities) could certainly affect the scenic environment of the NP a certain extent.

In the households’ survey/investigation, local stakeholders/residents were asked questions relating to their satisfaction with the availability of basic services and infrastructure in their local area (Figure 4-5). Of these, more than 70% of the respondents said they were relatively satisfied with the current transport and travel conditions, medical services, housing conditions and retirement protection, while some respondents still thought that the current infrastructure and living conditions needed to be improved. This indicated that there is currently some pressure on quality of life within the NP.

In terms of transportation, respondents in the Xianju NP were the most satisfied with the transportation conditions (95.43%), mainly because Xianju county is located on the eastern coast, where transportation is relatively developed. In terms of medical services and housing conditions, the difference in satisfaction between respondents in the three NPs was relatively small. In terms of retirement security, respondents in the Three-River NP were the most satisfied with retirement security (92%) and indicated that the happiness of family members had increased.

**Figure 4-5 Satisfaction with supply of basic services and infrastructure**

# 5. Social and Environmental Risks and Impacts

## 5.1 Assessment Methodology

The social and environmental risk and impact assessment used a combination of the following methods:

1. Community interviews to understand the environmental risks and social impacts faced by the community.
2. Questionnaires used to explore these impacts in greater depth through a participatory assessment methodology.
3. Stakeholder workshops with multi-sectoral leaders to validate findings, explore other key issues and make recommendations for action.

This chapter provides an assessment of potential environmental and social impacts from the proposed Project. In following UNDP requirements, the project underwent an initial Social and Environmental Screening Procedure (SESP) and a number of SES-related risks were identified. For this ESIA, the assessment of impacts has been informed by the project’s SESP checklist (Appendix 4). The scope of assessment covers all project components, outputs, outcomes, and activities.

An impact is essentially any change to a resource or receptor brought about by the presence of a Project component or by the execution of a Project-related activity.

For this ESIA report, the assessment of impacts will proceed through an iterative process considering three key elements:

1. Prediction of potential impacts and their magnitude (i.e., the consequences of the development on the natural and social environment);
2. Evaluation of the importance (or significance) of potential impacts taking the sensitivity of the environmental resources or human receptors into account; and,
3. Development of mitigation measures to avoid, reduce or manage the potential impacts or enhancement measures to increase positive impacts.

For the purpose of this ESIA, impacts will be defined as follows; (i) Nature of impact: positive or negative; (ii) Type of impact: direct, indirect, or cumulative; (iii) Duration of impact: temporary, short-term, national, international; (iv) Scale of impact: onsite, local, regional, national, international.

In adhering to international best practice, this ESIA will establish a ‘significance’ level for each identified risk/impact. Criteria for assessing the significance of impacts will stem from the following key elements:

* Status of **compliance** with relevant host country legislation (i.e. Peoples Republic of China), UNDP SES standards/requirements, as well as international best practice standards and guidelines;
* The **magnitude** (including nature, scale and duration) of the change to the natural or socio- economic environment, expressed, wherever practicable, in quantitative terms. The magnitude of all impacts is viewed from the perspective of those affected by considering the likely perceived importance as understood through stakeholder engagement;
* The nature and **sensitivity** of the impact receptor (physical, biological, or human). Where the receptor is physical, the assessment considers the quality, sensitivity to change and importance of the receptor. For a human receptor, the sensitivity of the household, community or wider societal group is considered along with their ability to adapt to and manage the effects of the impact; and
* The **likelihood** (probability) that the identified impact will occur. This is estimated based upon experience or evidence that such an outcome has previously occurred.

It is generally accepted that significance is a function of the magnitude of the impact and the likelihood of the impact occurring.

For this assessment, significance will be defined according to the following levels (as prescribed by UNDP’s SES). When probability and consequence of impacts are combined, it is possible to determine a significance value (low, moderate, or high) for each type of risk.

**Table 5-1 Rating of Probability/likelihood of Risk**

|  |  |
| --- | --- |
| **Score** | **Rating** |
| 5 | Expected |
| 4 | Highly Likely |
| 3 | Moderately likely |
| 2 | Not Likely |
| 1 | Slight |

**Table 5-2 Rating the Consequence/ ‘Impact’ of Risk**

|  |  |  |
| --- | --- | --- |
| **Score** | **Rating** | **Definition** |
| 5 | Critical | Significant adverse impacts on human populations and/or environment. Adverse impacts high in magnitude and/or spatial extent (e.g. large geographic area, large number of people, transboundary impacts, cumulative impacts) and duration (e.g. long-term, permanent and/or irreversible); areas impacted include areas of high value and sensitivity (e.g. valuable ecosystems, critical habitats); adverse impacts to rights, lands, resources and territories of indigenous peoples; involve significant displacement or resettlement; generates significant quantities of greenhouse gas emissions; impacts may give rise to significant social conflict |
| 4 | Severe | Adverse impacts on people and/or environment of medium to large magnitude, spatial extent and duration more limited than critical (e.g. predictable, mostly temporary, reversible). The potential risk impacts of projects that may affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples are to be considered at a minimum potentially severe. |
| 3 | Moderate | Impacts of low magnitude, limited in scale (site-specific) and duration (temporary),can be avoided, managed and/or mitigated with relatively uncomplicated accepted measures |
| 2 | Minor | Very limited impacts in terms of magnitude (e.g. small affected area, very low number of people affected) and duration (short), may be easily avoided, managed, mitigated |
| 1 | Negligible | Negligible or no adverse impacts on communities, individuals, and/or environment |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Consequence of Impact** | 5 |  | | | | |
| 4 |  | |  | | |
| 3 |  |  | | | |
| 2 |  | |  | | |
| 1 |  | | | | |
|  | 1 | 2 | 3 | 4 | 5 |
| **Probability** | | | | | |
| **Green = Low, Yellow = Moderate, Red = High** | | | | | | |

**Figure 5-1 Determining the ‘Significance’ of Risk Matrix**

## 5.2 Overview

Table 5-3 presents an overview of the risks identified in the initial screening undertaken in accordance with the UNDP’s SESP (see also Appendix 1 for complete SESP results). Subsequently, a more in-depth risk assessment was undertaken in the process of completing this ESIA and the accompanying ESMP, taking into consideration the risks identified during screening (see Table 5-3).

An overview of the results of the risk assessment undertaken in the process of completing the ESIA and accompanying ESMP can be seen in Table 5-4, with more detail provided in sections 5.3 and 5.4 below regarding Social and Environmental risks respectively.

**Table 5-3 SESP Risk Overview**

|  |  |  |
| --- | --- | --- |
| **Risk/Potential Impact** | **Impact and Probability** | **Significance Level** |
| **Risk 1:** Local communities (including ethnic minorities) living in key conservation zones of NP pilots could be gradually resettled. Voluntary resettlement is proposed in the zoning plan for Giant Panda NP pilot and in the draft master plan for Three Rivers Source NP pilot. | I = 4  P = 4 | **High** |
| **Risk 2:** Communities in the project area (including ethnic minorities) could face economic displacement, changes to land rights and/or restricted access to resources because of the expansion of the NP system and stronger/new NP regulations. These impacts could impact women differently than men. | I = 4  P = 3 | **High** |
| **Risk 3:** Expansion of the NP system has the potential to affect the rights, lands and livelihoods (e.g. potential economic displacement, reduced access to resources, resettlement) of ethnic minority populations within and adjacent to the NP pilots. | I = 4  P = 4 | **High** |
| **Risk 4:** Marginalized stakeholder groups, including women and ethnic minorities, could face barriers to full, meaningful participation in project activities (e.g. planned expansions) that could affect them negatively. | I = 3  P = 2 | **Moderate** |
| **Risk 5:** Project appointed duty-bearers could lack the capacity to implement the projectaccording to UNDP standards regarding human rights, public participation, gender mainstreaming and attention to social and environmental safeguards. | I = 3  P = 2 | **Moderate** |
| **Risk 6:** There are large disparities between men and women in the patriarchal culture of most Tibetan communities in and around the project sites that could potentially be reproduced by project activities, limiting engagement and involvement of women in project implementation. | I=3  P=2 | **Moderate** |
| **Risk 7:** Project activities will occur within/adjacent to environmentally sensitive areas, posing potential risk to sensitive habitats and species if not designed and undertaken appropriately. | I = 2  P = 1 | **Low** |
| **Risk 8:** Climate change has the potential to impact the NP system in China, e.g., through habitat loss because of prolonged droughts or from devastating floods. The impacts of climate change are highly uncertain yet could impact on project outcomes in the longer-term. | I = 2  P = 2 | **Low** |

**Table 5-4 ESIA/ESMP Risk Overview**

|  |  |
| --- | --- |
| **Risk/ Potential Impact** | **Significance Level** |
| 1. Increases in the occurrence of human -wildlife conflict | *Likelihood- Highly likely*  *Impact consequence level- Moderate*  Overall- **Moderate** |
| 1. Issues relating to land tenure systems and traditional use of land within the NP sites | *Likelihood- Slight*  *Impact/Consequence – Moderate*  Overall – **Low** |
| 1. Voluntary physical resettlement. Under the auspices of C-PAR1, any such resettlement/relocation will be voluntary, based on the principles of ‘willing buyer- willing seller’. Potential for legacy resettlement issues (i.e. particularly Three-River Source Phase 1 and 2 which were precursors to the C-PAR1 program) to arise. | *Likelihood- Moderately likely*  *Impact/consequence level- severe*  Overall- **High** |
| 1. Economic displacement and access restrictions could occur in certain core conservation areas of the relevant three NP sites (no new restrictions are being proposed based on C-PAR1’ s interventions, the restrictions pre-date the C-PAR1 project). Nonetheless this risk has been assessed in accordance with international best practice and assigned a significance of high based on the potential for legacy economic displacement issues (pre-dating C-PAR1) to arise. | *Likelihood- Moderately likely*  *Impact/consequence level- severe*  Overall- **High** |
| 1. Traditional livelihoods (animal husbandry and subsistence farming) may be impacted as project-affected peoples shift their livelihoods to meet the new opportunities presented by the establishment of the NPs. | The likelihood of impacts to livelihoods within the demonstration sites of C-PAR1 activities has been categorised as ‘*Highly likely’*, with the impact/consequence level being assessed as ‘*Moderate’*.  As a result, the overall significance of the potential impact is considered to be **moderate** |
| 1. With the further strengthening of controls on human activities and the conversion/uptake of herders/pastoralists to other occupations, traditional cultural heritage and practices may be weakened or even lost. | The likelihood of impacts to cultural heritage within the demonstration sites of C-PAR1 activities has been categorised as ‘*Highly likely’*, with the impact/consequence level being assessed as ‘*Moderate’*. As a result, the overall significance of the potential impact is considered to be **moderate**. |
| 1. Patriarchal traditional structure of decision -making processes within many ‘ethnic minority’ populations (i.e. within the scope of C-PAR1 demonstration sites) might result in the exclusion of women from decision making and benefit sharing opportunities within the project architecture | The potential for gender discrimination amongst project affected peoples is limited. Female residents have been actively engaged in alternative livelihood trainings/workshops previously. In addition, female respondents (via both consultations and through the household survey), indicated that gender discrimination was not an issue of concern. The overall consequence level of gender-discrimination related risks has been categorized as ‘**low’.** |
| 1. Several of the intervention sites for C-PAR1 project activities are in areas of critical habitat/high conservation value areas. Poorly designed or executed project activities, could unintentionally damage critical or sensitive habitats and ecosystems | The likelihood of this impact occurring has been assessed as ‘Not likely’, with the consequence level been categorized as ‘moderate’. The overall significance level of these impacts to biodiversity/critical habitats is therefore categorized as ‘**moderate.’** |
| 1. Climate change has the potential to impact the NP system in China, e.g., through habitat loss because of prolonged droughts or from floods | The likelihood of this impact occurring has been assessed as ‘Not likely’, with the consequence level been categorized as ‘moderate’. The overall significance level of these potential climate change related impacts is therefore categorized as ‘**moderate.’** |
| 1. The ecological restoration and conservation infrastructure construction activities in the relevant NPs (which are not directly funded by the UNDP/GEF C-PAR1 project but are nonetheless included within the scope of the ESIA as an associated facility) will have a minor, short-term negative impact on the ecological environment. Dust and emissions generated during the construction process will pollute the atmosphere, noise will affect the habitat of wildlife, and improper disposal of sewage and waste will pollute the surrounding soil, water bodies and atmosphere. | The overall risk/impact for pollution has been assessed as having a likelihood rating of ‘slight’, and a consequence level of moderate. As such, the overall impact/risk rating for pollution-related impacts has been assessed as **low** |

## 5.3 Social Risks

### 5.3.1 Affected Groups/Communities

The four counties involved in the Three-River Source NP have a total herder population of 128,000 and a poverty-stricken population of 39,000. Examining the populations within the scope/boundaries of the Three-River Source NP, there is a total of 64,000, with 24,000 living in poverty. The statistics on communities of the Three-River Source NP (Table 5-3) show that there are differences in the number of communities affected inside the NP and those surrounding. Overall, there are more administrative villages and a larger workforce inside the NP than surrounding the NP, whilst the number of households within the NP is less than the immediate surrounding areas.

**Table 5-5 Community statistics of the Three-River Source NP**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Qumalai County | | Maduo County | | Zhiduo County | | Zaduo County | | All | |
|  | Inside | outside | Inside | outside | Inside | outside | Inside | outside | Inside | outside |
| No. of administrative villages | 7 | 12 | 18 | 8 | 8 | 8 | 19 | 12 | 52 | 40 |
| No. of households | 3197 | 10924 | 2651 | 1511 | 4062 | 3592 | 7727 | 5066 | 17637 | 21093 |
| No. of population | 10417 | 36170 | 7523 | 4545 | 13021 | 11090 | 33305 | 23115 | 64266 | 74920 |
| No. of labor | 4106 | 9871 | 4487 | 2740 | 6511 | 5084 | 20172 | 15147 | 35276 | 32842 |
| No. of minorities | 8036 | 24548 | 9334 | 4778 | 13019 | 11090 | 33228 | 23192 | 63617 | 63608 |

The households’ survey research found that the most significant negative social impact on herders (as indicated by the local populations themselves) was human-animal conflict. This exhibited itself in instances where wolves, brown bears and other wild animals destroyed agricultural and forestry crops, attacked livestock and/or damaged houses (Figure 5-2). 91.3%, 87.96% and 58.29% of respondents in the Three-River Source NP, Giant Panda NP and Xianju NP respectively said that the number of wild animals has been increasing in the last five years. 86.96% and 82.5% of respondents in the Three-River Source NP and Giant Panda NP respectively said that wild animal incidents have been increasing in the last five years. Only 14.29% of respondents in the Xianju NP agreed, indicating that human-animal conflict in the Xianju NP is less of an issue for local residents then in the other two NP pilot sites).

There are 71.3% and 77.5% of respondents in the Three-River Source NP and Giant Panda NP respectively believe that wildlife incidents have had a serious negative impact on their families, while only 11.43% of respondents in the Xianju NP agreed, indicating that human-animal conflict is a more serious phenomenon in the Three-River Source NP and Giant Panda NP, and that exacerbated human-animal conflict is a serious potential impact as a result of the C-PAR1-related activities.

**Figure 5-2 The impact of wildlife on herders**

The most significant negative social impact on herders was identified as being HWC, mainly wolves, brown bears, wild boar and other wild animals destroying agricultural and forestry crops, attacking livestock and damaging houses. Before the establishment of NP, the HWCs have already been a recognisable issue. There is some risk that the occurrence of HWCs becomes more prominent as the establishment of NP has increased the number of wild animals.

The likelihood of this impact has been categorised as ‘*highly likely’*, with the impact/consequence level being assessed as ‘*moderate’*. While the geographic scope/size of area, and the duration of the potential impact are expected to be limited to certain areas in two of the NPs (i.e., the Three-River Source NP, and the Giant Panda NP), the overall significance of the potential impact is considered to be **moderate**.

### 5.3.2 Ethnic Minorities

Ethnic minorities inhabit large sections of the proposed NP pilot sites under C-PAR1 activities. As such, there is the potential that project activities may result in adverse impacts to these ethnic minority populations.

The difference in the number of affected ethnic minority populations inside and outside the Three-River Source NP is not significant (Table 5-5). The research revealed that the ethnic minorities inside and outside the Three-River Source NP are mainly Tibetans, with a very small number of Hui. There are significant differences between different counties, with significantly fewer ethnic minorities inside the Qumalai County NP than outside the NP. In contrast, there are more ethnic minorities inside than outside the NP in Maduo, Zhiduo and Zaduo counties. This is similar to the results of the community statistics (Table 4-1), where the vast majority of respondents were Tibetans. The main livelihood of ethnic minorities in the Three-River Source NP is animal husbandry. The implementation of livestock reduction policies (a pre-cursor government initiative, which is not included within the scope of C-PAR1 activities) in the Three-River Source NP has led to changes in the lifestyles of pastoralists and has had a negative impact on the incomes and traditional livelihoods of ethnic minorities.

The inhabitants of the Giant Panda NP are mainly the Han nationality, in addition to 19 other ethnic minorities, including Tibetans, Qiang, Yi, Hui, Mongolians, Tujia, Dong and Yao. Among them, Aba Tibetan and Qiang Autonomous Prefecture is the second largest Tibetan area and the main Qiang settlement in the Sichuan Province, and Beichuan Qiang Autonomous County is the only Qiang Autonomous County in China.

The vast majority of the inhabitants of the Xianju NP are the Han nationality, and there are no ethnic townships and no ethnic administrative villages. Thus, for Xianju NP, direct impacts on Ethnic minorities are not foreseen.

In the national park sites for C-PAR1 activities, certain new protection/restriction measures may need to be imposed on local communities/ethnic minorities to ensure ecological protection. During the scoping and inception phase of undertaking this ESIA, local consultants undertook robust consultation with affected communities throughout the three NP demonstration sites for C-PAR1. These consultations included the required elements of FPIC, with awareness raising amongst local communities about their rights to raise grievances and to withhold consent if directly impacted by an element of the project.

The local contingency of the research team for this ESIA asked ethnic minorities about their views on ecological migration through focus interviews and questionnaires with them. Respondents generally considered ecological migration to be a double-edged sword. On the positive side, ecological migration in groups may be beneficial in terms of ecological restoration and the formation of community cohesion, as well as the prospect of improvement in access to public services. On the negative side, respondents indicated that ecological migration and voluntary resettlement of pastoralists has, to some extent, led to fractures and gaps in cultural heritage. For example, in pastoral areas, pastoralists will worship the community's mountain gods together, and similar rituals are only meaningful in a fixed geographical area, thus ecological migration cuts off the carriers of religious rituals and their meaning.

Meaningful consultations and free, prior informed consent (FPIC) for indigenous peoples will be conducted for any project-activities that have the potential to impact ethnic minority peoples throughout this project.

In this project, the pilot villages of Tree-River Resource National Park and Giant Panda National Park involve ethnic minority residents. All activities of the project will put the participation of local ethnic minority residents at the core to ensure that they are aware of and participate in the whole decision-making process. The informed consent of local minority residents must be taken into account in any activity of the project that has the potential to impact them. Effective information should be obtained through sufficient opinion collection and public opinion survey in advance, and their opinions should be taken into account in the activity. In addition, China's law clearly stipulates that ethnic minorities have the freedom to use and develop their own languages, as well as the freedom to maintain or reform their own customs and habits. The project needs to use minority languages to ensure smooth information communication and respect minority customs.

Given the geographic scope of the project (i.e., its interventions in the three NP pilot sites), and the demographic make-up of the populations in the area, it is likely that any adverse social impacts that could occur would also impact ethnic minorities. The project has undertaken robust consultation with ethnic minority populations within the project area and has sought their input via several modalities of consultation (large focus groups, interviews, consultation workshops etc.). Consultations were undertaken in Tibetan for areas where language barriers were foreseen. Potential impacts relating to ethnic minorities also cut across other areas, most specifically, cultural heritage, land tenure/voluntary resettlement, and economic displacement (all of which are further assessed in the following sections). No intrinsic ethnic minority-related risk has been identified as part of this assessment (and thus an impact significance level has not been attributed). Rather, given the presence of ethnic minorities throughout the sites of CPAR1, any UNDP SES 6-related potential issues will be assessed further below, with considerations that those affected are likely to include ethnic minority peoples. In addition a free-standing project specific Indigenous Peoples Plan (IPP) will be developed to further manage any SES 6- related impacts.

### 5.3.3 Land Tenure System

The Three-River Source NP contains both state-owned and collective land, with collectively owned forest and grassland held for long-term use by local herders under contract. Many areas within the Three-River Source NP are remote, making it difficult for the government to exercise strong oversight of herders' land use and natural resource use. Therefore, effective management of national parks inevitably relies on the sustainable management of collective land and community co-management of state land.

Under Chinese statutory regulation, the owner of state-owned land is all Chinese citizens, with ownership being exercised by the People's Government on behalf of all Chinese citizens. The owner of collective land is the collective agricultural economic organization, and the collective organization generally exercises ownership on behalf of its members.

The right of use of state-owned land is divided into 2 types:

* One is for productive work/self-use, for the construction of office premises, public welfare facilities, etc.
* One is for other use, i.e. for economic development or social development through the granting or allocation of the right of use.

The right of use of collective land is divided into 2 types:

* Self-use is different from that of state-owned land, in that apart from production and work for self-use, it can also be used for living and business self-use, such as being allocated to members as a residential base, building collective housing, recreational facilities, business facilities, etc.
* Other use is similar to that of state-owned land, i.e. the right of use is transferred or leased out to obtain income.

The fact that the Three-River Source Nature Conserve overlaps with the forests and pastures used by the original villages in the area results in a serious conflict between traditional land use rights and the strict protection of nature reserves. Many species of wildlife move between lands inside and outside the NP and managing only community lands within the NP does not reduce the threats faced by many species of global conservation importance. Therefore, in terms of biodiversity conservation, it is important for communities to manage and monitor land outside the boundaries of protected areas, especially those around them.

The General Plan for the Establishment of the National Park System promulgated in September 2017 (which is not under the auspices of the C-PAR projects), states that residents in key conservation areas should consider gradually migrating to areas of lesser conservation value. Such migration will at all times be voluntary. Collective land will be transferred through leasing and replacement on the basis of full consultation with its owners and contractors.

According to data from the 2016 National Land Survey, there is 19,378 km2 of state-owned land within the Giant Panda NP, accounting for 71.41% of the total area; and 7,756 km2 of collective land, accounting for 28.59% of the total area. For the time being, there is no national policy on how to unify and control the use of collective land and its above-ground resources within the national park. Therefore, there is a need to further study innovative policy proposals for the management of land and its ancillary resources within national parks.

The land tenure of the Xianju NP and the peripheral conservation area is divided into state-owned land and collective land. State-owned land is mainly inland mudflats, river water, road land and hydraulic construction land. Collective land mainly consists of forested land, shrubland, paddy fields and dry land. The total area of state-owned land is 1.54 km2, accounting for 0.51% of the total area of the NP; the total area of state-owned land in the peripheral management and conservation area is 1.72 km2, accounting for 3.84% of the peripheral management and conservation area. The collective land of the Xianju NP is 297.32 km2, accounting for 99.49% of the total area of the NP; the peripheral conservation area of the National Park is 43.1 km2, accounting for 96.16% of the peripheral conservation area. There are ecological public welfare forests and commercial forests in the Xianju NP (and the peripheral management area), all of which are collectively owned. The ecological public welfare forests are mainly located at higher altitudes and farther away from residential areas, while the commercial forests are mainly located at lower altitudes in the area and can be easily managed by local residents.

Given the national land tenure systems in the Peoples Republic of China (i.e., land being either state or collectively owned land), it is unlikely that any land-tenure related risks are foreseen during the implementation of C-PAR1 activities. No individual land-owners will be required to forfeit or involuntary sell their own land for the establishment of any of the three NPs within the scope of C-PAR1.

The likelihood of this impact has been categorized as ‘*slight’*, (i.e. the lowest likelihood rating) with the impact/consequence level being assessed as ‘*moderate ‘*in the rare instance/circumstance that any land-tenure based impact could occur. The overall significance of the potential impact is considered to be **low**.

### 5.3.4 Physical Resettlement

Currently, there are no resettlement interventions within any of the three national park pilot villages associated with CPAR-1, and no related migration plans have been promulgated. Ecological migration in the Three-River Source NP was implemented during the Three-River Source Phase I and Phase II projects which were undertaken prior to, and independent of the C-PAR projects. However, it is mentioned in the national park's planning that ecological migration and relocation may be carried out in the future (which is outside of the direct UNDP/GEF supported project CPAR-1). Any such future ‘relocation’/migration will be voluntary and will meet the criteria ‘willing buyer, willing seller’ as provided for in the UNDP’s SES Standard 5 (as well as host country law). Any relocation will be ensured to result in no net loss to the livelihoods/quality of life of the individuals concerned.

The Master Plan for the Three-River Source NP states that the construction of the national park should not only enable the production and livelihood of the herding masses to meet the requirements of resource and environmental protection, but also meet the need to showcase nomadic culture and historical heritage. For herders who voluntarily remain in the grasslands to engage in grassland animal husbandry, C-PAR1 will assist in guiding them to protect the ecology.

The Giant Panda National Park Master Plan states that any relocation will be carried out using a combination of national and local policies and projects. Residents living in the core reserve may be gradually relocated in a fully voluntary manner. Any such voluntary resettlement will not be under the auspices of C-PAR1 but will nonetheless adhere to the principle of ‘willing buyer, willing seller’ under UNDP’s SES Standard 5. In resettlement areas, local governments will coordinate infrastructure construction, public service capacity building, ecological construction, comprehensive agricultural development and poverty alleviation, and properly settle ecological migrants.

In accordance with international best practice, the risks that have the potential to eventuate through activities supported solely by associated facilities (not directly related to C-PAR1) have been included in risk assessment undertaken during the completion of this ESIA. Therefore, it is important to note that while this risk has been assigned a significance level of ‘high’, *this is not a direct reflection of the probability and consequence/impact of this risk eventuating as a direct result of C-PAR1 (or GEF-funded) activities.*

The likelihood of this risk has been categorized as *‘moderately likely’*, with the impact/consequence level being assessed as *‘severe’*. The geographic scope/size of area, and the duration of the potential impact are expected to be limited to certain areas within the NPs. There has also not been any relocation/migration during the initial implementation of C-PAR1 activities. However, as a result of taking into account all associated facility activities, the overall significance of this potential impact is considered to be **high.**

### 5.3.5 Economic Displacement and Access Restriction

At present, no new restrictions have been implemented in the three national park pilot areas and the local residents continue to follow the restrictions on some activities set out in the national park master plan (i.e., none of the following restrictions have resulted from the implementation of C-PAR1 activities, rather they emanate from pre-existing restrictions/policies).

The Master Plan for the Three-River Source NP clearly states that in the core protected area of the Three-River Source NP, productive animal husbandry activities are completely prohibited, all new artificial facilities unrelated to ecological protection are prohibited, and commercial and business production activities are prohibited. At the same time, any resource use activities that affect the authenticity and integrity of the natural ecology, including mining, sand dredging, hunting, and fishing are prohibited. It is forbidden to leave discarded packaging within the National Park area. Construction of traffic and buildings is strictly controlled and managed. Scientific research and ecological experience activities may be carried out in moderation with permission.

The Giant Panda National Park Master Plan clearly states that human activities are prohibited in the core reserve. After approval, activities such as management and patrolling; scientific research; disaster prevention and control; returning farmland to forests and wetlands; ecological corridor construction; necessary scientific research and monitoring and protection facilities; and construction of major ecological protection and restoration projects can be carried out. For ethnic minority residents, necessary production activities such as planting, grazing and breeding are allowed, but the use of pesticides and chemical fertilizers is restricted. For the habitat of specific bee species, local residents are allowed to engage in normal/traditional production and other man-made activities in the core protected area, provided that the survival and reproduction of the main protected objects are not affected.

It is forbidden for residents to graze their livestock in the core conservation area or in areas where ecological restoration is being carried out (again, this restriction predates the C-PAR1 activities, as it relates to precursor initiatives undertaken under the auspices of the Giant Panda NP Master Plan). In the general control area, ethnic minority residents are allowed to repair production and living facilities and retain a small amount of cultivation, grazing, fishing, and farming activities necessary for their livelihood without expanding the scale of existing construction and arable land.

The Master Plan of the Xianju NP clearly states that in the strictly protected area, disturbance by human activities is strictly controlled and access by motorized equipment is generally prohibited. Residents are strictly prohibited from hunting wild animals, collecting bird eggs or digging for Chinese herbs.

In the ‘important protected areas’, a small amount of tourism and other human activities that have less impact on the natural ecological environment are allowed (i.e., mainly walking along designated paths and using observation deck facilities). In natural relic protection areas, human activities that damage the integrity and authenticity of geological relics are prohibited.

In the ‘restricted access areas’, ethnic minority people are allowed to engage in traditional farming, but the use of pesticides and chemical fertilizers that may have an impact on the environment is prohibited. It is strictly forbidden to play, bathe, wash things and dispense of waste into the river. Traditional farming methods must take appropriate environmental protection measures to ensure that the environment of the water source is not polluted.

Visitors are allowed moderate access and a moderate amount of visitor camping is permitted. Necessary transport facilities that do not conflict with the natural environment are built and access to environmentally friendly transport equipment is allowed. In the National Park Service areas, concentrated human activity is allowed and access to transport equipment is permitted.

In accordance with international best practice, risks that have the potential to eventuate through activities supported solely by associated facilities (not directly related to C-PAR1) have been included in risk assessment undertaken during the completion of this ESIA. Therefore, it is important to note that while this risk has been assigned a significance level of ‘high’, this is not a direct reflection of the probability and impact/consequence of this risk eventuating as a result of C-PAR1 (or GEF-funded) activities specifically.

As a direct result of C-PAR1 activities, no new access restrictions are foreseen for local residents within the three pilot NP sites. Any restrictions encountered by residents/local populations within the NPs is a result of prior NP ‘Master Plans’. As a consequence, the implementation of C-PAR1 related activities will not likely result in any new restrictions being imposed on local peoples. Nonetheless, the likelihood of this risk has been categorized as *‘moderately likely’*, with the impact/consequence level being assessed as *‘severe’* due to the fact that this assessment takes into account all associated facility activities. Therefore, the overall significance of this potential impact is considered to be **high.**

### 5.3.6 Livelihoods

The main source of livelihoods for pastoralists in the Three-River Source NP is animal husbandry, with all four of its counties being large livestock producers. In 2000, the Three-River Source Phase I and Phase II projects implemented a livestock reduction policy, which led to changes in the herders' way of life and had an impact on the income of local herders. At the same time, the state has implemented a number of compensation policies, mainly involving the creation of ‘ecological inspector positions’ and grassland ecological compensation. The ecological inspectors are one post per family for the whole NP, with each family having an ecological inspector, who is paid 1,800 Yuan per month (i.e., each family receives 21,600 Yuan per year). This has become an important source of income for herders. There are 16,621 herding households in the Three-River Source NP, and 16,621 posts will be set up to assist herding households with their livelihoods. An additional source of compensation/livelihood support that is provided to residents of the Three-River Source NP is the ‘Grassland ecological compensation’. Each family receives different compensation amounts, mainly because each family owns a different area of pasture. Compensation is quantified based on the total area of pasture under management (per household) and on the conservation value.

From 25-31 October 2020, C-PAR1 staff and training experts conducted an alternative livelihoods training on 'hand weaving' in Hongqi Village, one of the pilot villages in the Three-River Source NP. For this training, there were 30 participants, 100% of whom were female.

There are also some problems in the process of livelihood training. For example, most of the trainings are conducted by inviting non-local training experts to teach the herders. Some Tibetan herders only speak Tibetan and do not understand the language of the experts, and the content of the experts' lectures does not fit well with the local environment. With regard to environmental education, the same problems exist and there is a greater need to teach in the local language.

The livelihoods of the residents in the Giant Panda NP are based on traditional farming, including honeybee farming, pig farming, and herbal medicine cultivation/processing. The construction of the Giant Panda NP will actively support and guide the transformation and development of traditional natural resource utilization methods, provide community residents with public service jobs in ecological care and social services, and reduce the dependence of traditional industries on natural resources.

From September 21-25, 2020, C-PAR1 staff and training experts conducted the first sustainable alternative livelihood training in 5 pilot villages in the Giant Panda National Park, with 378 participants. The training content is related to the cultivation of rural cooperatives and the development of livelihoods. From 4-8 November 2020, C-PAR1 staff and training experts conducted the second sustainable alternative livelihoods training in the five pilot villages of the Giant Panda National Park. 288 people were trained, including 142 men (49.31%) and 146 women (50.69%). Through the two training activities, villagers' awareness of cooperation, brand awareness and financial management was raised, their professional capacity and self-confidence in future industrial development within the NP was improved.

The livelihood of the residents of the Xianju NP is mainly based on traditional farming. For the sustainable development of the National Park, the focus has been on providing alternative livelihoods that compliment the natural resources of the NP, and the traditional practices of its residents. For example, the government has established green and organic rice bases, developed the plum and peach industries, created the "Xianmei" and "Yonganxi peach" brands, and actively developed the native bee cultivation industry to create original native honey products. All of these initiatives have created new employment and market opportunities for local residents.

C-PAR1 staff have not conducted any villager livelihood training in the Xianju NP at the time of publication of this ESIA report. However, the Xianju NP Management Committee has previously conducted livelihood training for villagers in 2018 and 2019, one for rural tourism and the other for environmental education. Each training involved 200 people and there were four training sessions. Local townships also have corresponding training, such as township night schools.

Based in the information ascertained from the household survey (Figure 5-3), 83.04%, 62.5% and 66.86% of respondents in the Three-River Source, Giant Panda and Xianju NP respectively said that they had received more ecological compensation since the implementation of the NP pilot scheme/C-PAR1 activities. At the same time, more than half of the respondents in the Three-River Source, Giant Panda and Xianju NP believe that there are more opportunities for families to participate in ecotourism. Some respondents felt that the local government is currently not formally advocating for ecotourism opportunities for local peoples, and that families lack opportunities to participate in ecotourism. In the Three-River Source, Giant Panda and Xianju NP, 79.34%, 67.96% and 49.14% of respondents respectively said that families have gained more opportunities to participate in ecological positions in recent years, and that they have been able to transform their livelihoods through ecological stewardship public service positions (as opposed to relying on subsistence level farming/agriculture).

**Figure 5-3 The livelihood changes of herders**

The income and traditional livelihood of local residents (including ethnic minorities) may be negatively affected by transitions in the use and economic opportunities associated with the NP sites, especially for those households who are not living inside the PAs before the establishment of NP. For those households who are used to living inside the PAs, the establishment of NP will not increase significantly increase current restrictions.

The likelihood of impacts to livelihoods within the demonstration sites of C-PAR1 activities has been categorized as *‘highly likely’*, with the impact/consequence level being assessed as *‘moderate’*. As a result, the overall significance of the potential impact is considered to be **moderate**. As opposed to a purely adverse impact to livelihoods, C-PAR1 related activities are likely to present opportunities for households to switch their main source of income/livelihoods (from primarily subsistence farming to more diversified options such as ecotourism).

### 5.3.7 Cultural Heritage

In the four counties where the Three-River Source NP is located, one cultural heritage item is on the National Intangible Cultural Heritage List (i.e. Guozhang dance), two people are the national representative inheritors[[22]](#footnote-22). Seven cultural heritages items are on the Provincial Intangible Cultural Heritage List[[23]](#footnote-23) and nine people are the provincial representative inheritors. There are a total of 78 immovable cultural relics in the four counties, of which one is a national key cultural relic protection unit and five are provincial cultural relic protection units. The government makes full use of the local cultural heritage and takes various forms such as supporting literary creation, publishing promotional atlases and producing film and television productions to explore, pass on and promote the concept of ecological conservation in traditional culture. The special ecological environment of the Qinghai-Tibet Plateau has cultivated a cultural heritage among local residents that is deeply intertwined with the ecological conditions and processes of the area. With the further strengthening of controls on human activities and the conversion of herders to other occupations, traditional cultural practices may be affected.

The Giant Panda NP involves the two World Natural Heritage Sites of Sichuan Giant Panda Habitat and Huanglong. The main giant panda habitats of the 2 World Natural Heritage Sites are now included in the Giant Panda NP. The cultural heritage of the Giant Panda NP is rich and varied, including the Guangyuan Daughter Festival, the China (Chengdu) Forest Culture Tourism Festival, Baima Tibetan culture, Baishi worship, Jixian ancient music, Zhouzhi gongs and drums, Houyizi mountain songs, Nanping Qu Qiang flute performance and production techniques, the dancing of the capital city, Qiang sheepskin drums, Mianzhu woodblock prints, the Chinese traditional village of Heping Tibetan Village, the Stony Moraine Tazi Festival, the Fuxing juggling gongs and drums, the Qing Qiang folklore of Waya Mountain, Qiang embroidery, Cao Gai dancing, Qiang New Year, Yubi Flower Drum Opera, Liujiaping Three Kingdoms Culture, etc. The Giant Panda NP is rich in cultural heritage, but in the face of the dual pressures of ecological conservation and economic development, cultural heritage continues to face pressures that may impact its longevity/continuation.

There are rich cultural heritage in the Xianju NP, including the site of a primitive village in Xiatang during the Neolithic period, ancient Yue script from Guangdu during the Spring and Autumn Period, rock paintings from Zhuxi during the Han Dynasty, stone pillar lanterns, a stone meditation temple dating from the first year of Xingping in the Eastern Han Dynasty, the world's largest surviving Jin Dynasty cliff carving of the word "Buddha" outside the temple, ancient inhabitants of Gaoqian and the site of a Song kiln, the "Tadpole Writing" in the Xianju NP.

Within the project demonstration sites for C-PAR1 (i.e., the three NPs) there is a need to carry out a base inventory of cultural heritage resources. This should be undertaken through cooperation with the competent cultural heritage authorities to carry out a comprehensive cultural heritage survey, register them in accordance with the law, and establish a cultural heritage archive and database. At the same time, the establishment of a list of intangible cultural heritage components, especially the endangered cultural heritage of ethnic minorities should be included in the protection list as soon as possible. In addition, there should be particular focus placed on the integration and sharing of information regarding cultural heritage protection, use, management, and research. Management of cultural heritage resources are planned to be integrated into the overall management information system for natural resource assets of the Giant Panda National Park.

In the household survey (Figure 5-4), it was found that 71.52%, 81.15% and 62.86% of respondents in the Three-River Source, Giant Panda and Xianju NP respectively believe that local traditional cultural practices are being preserved and passed on, indicating that cultural heritage is being conserved in the national parks. Interviews with the community also revealed that traditional activities such as pujas and horse races are currently being passed on to some extent, but some herders still have some concerns about the transmission of their cultural heritage. Through consultation, this concern was explained due to the fear/possibility of outbound migration in the future and the difficulty of sustaining the transmission or practice of traditional culture in migrant areas. Such cultural discontinuity could have far-reaching negative effects. Ecological migration (i.e., the movement of local populations away from their traditional pastures due to conserve certain protected areas) can lead to fractures and gaps in cultural transmission. For example, in pastoral areas, pastoralists will worship the community's mountain gods together, and similar rituals only have meaning within a fixed geographical area, which would be impacted if large sections of the population move away from their traditional.

Therefore, the national parks need to pay great attention to the inheritance, protection and development of traditional culture.

**Figure 5-4 The herders' perceptions of whether traditional cultural is being preserved/inherited**

The likelihood of impacts to cultural heritage within the demonstration sites of C-PAR1 activities has been categorized as *‘highly likely’*, with the impact/consequence level being assessed as *‘moderate’*. As a result, the overall significance of the potential impact is considered to be **moderate**. Cultural heritage may be impacted if pastoralists choose to leave their lands (voluntarily) to seek alternative livelihoods/economic opportunities, due to the intrinsic link between the land and the traditional practices and beliefs of the ethnic minorities within the three NPs.

### 5.3.8 Gender Discrimination

In the household survey/investigation (Figure 5-5), more than 90% of respondents said that their family members were not discriminated against by people around them in their daily lives. In the Three-River Source, Giant Panda and Xianju NPs, 79%, 92% and 88% of respondents respectively said that they were treated fairly during the distribution of resources in their villages. Over 90% of respondents felt that the social interpersonal relationships of their family members were harmonious, and that the relationships between family members and their village neighbors were also harmonious. Over 93% of respondents said that the relationships within their family members were very harmonious. However, it should be noted that most of the survey respondents are men (household heads). If women were more appropriately represented in the surveys there may have been differences in the results.

**Figure 5-5 The herders' perceptions of fairness**

This section of the impact/risk assessment further analyzes the female respondents, and only counts the responses of female respondents (Figure 5-6). The results show that 90.29%, 92.04% and 99.39% of female respondents in the Three-River Source, Giant Panda and Xianju NPs respectively said that they were not discriminated against by people around them in their daily lives. 76.29%, 91.61% and 88.48% of female respondents in Three-River Source, Giant Panda and Xianju NP respectively felt that they were treated fairly during the distribution of resources in their villages. This result is similar to that of all respondents, indicating that there is no significant difference between males and females in terms of access to resources in the three national parks. The results for female respondents did not differ significantly from those for all respondents in terms of social interpersonal relationships among family members, relationships between family members and village neighbors, and relationships within family members. This suggests that the relationships within villagers' households and between villagers and their neighbors are relatively harmonious in the Three-River Source, Giant Panda and Xianju NPs.

**Figure 5-6 The female respondents' perceptions of fairness**

While the ethnic minority groups within the C-PAR1 demonstration sites do have a patriarchal hierarchy, the potential for gender discrimination amongst project affected peoples is fairly limited. Female residents have been actively engaged in alternative livelihood trainings/workshops previously. In addition, female respondents (via both consultations and through the household survey), indicated that gender discrimination was not an issue of concern. The overall consequence level of gender-discrimination related risks has been categorized as ‘**low’.**

### 5.3.9 Community Health and Safety

During the conduct of the household survey and subsequent consultations, local residents were asked about issues pertaining to community health, safety and security. With regard to the personal and property safety of residents, 93% of respondents in all three national parks said that their family members could always feel protected by the government, over 95% said that no crime had occurred in the area where the family lived, and over 91% said that the personal and property safety of their family members was not threatened. This indicates that the Three-River Source, Giant Panda and Xianju NPs have made significant progress in recent years in the management of the personal and property safety of farmers, effectively protecting the rights and interests of residents.

In the Three-River Source NP, the work of ecological inspectors is more arduous than herding. Every day, they have to ride their motorbikes 30 to 40 km to patrol the park, and in some places where the terrain is complicated and dangerous, they cannot get in by motorbike, so they have to walk on foot, sometimes more than 10 km a day. In the Giant Panda NP and Xianju NP, there are ecological inspectors who also carry out ecological protection functions. In the event of a natural disaster, the ecological rangers collect information on damage to houses and infrastructure and report them to their township and village community in a timely manner. At the same time, they also actively promote knowledge about earthquake relief to raise awareness of disaster prevention and prevent secondary disasters. Through the C-PAR1 activities in the National Park, the ecological inspectors were able to receive professional training and education and improve their practical skills.

From 20-31 August 2020, C-PAR1 staff and training experts conducted environmental education for ecological inspectors in the four pilot villages of the Three-River Source NP. The training covered environmental education in the Three-River Source NP pilot areas as well as training on waste separation and treatment, conservation of ecological resources in the Three-River Source NP pilot areas, and environmental monitoring. The training involved 125 participants, of whom 34 were female, accounting for 27.2%.

From 22-26 September 2020, C-PAR1 staff and training experts conducted environmental education training in the five pilot villages of the Giant Panda National Park and organized group discussions, sharing and documentation of environmental education sites and natural resources among villagers. The total number of people trained was 344, of whom 158 were male (45.93%) and 186 were female (54.07%).

**Figure 5-7 The respondents' perceptions of community health and safety**

The primary risks/potential impacts relating to community health, safety and security are related to human-animal conflict (an issue which has been separately assessed earlier in Section 5.2), as well as the health and safety of ‘ecological inspectors’. Generally, the local communities’ perceptions (as identified through focus groups, consultation, and the household surveys) are that there are no imminent issues relating to community health and safety in the region. The likelihood rating for potential community health, safety and security related impacts has been assessed as ‘slight’, with a ’moderate’ level being attributed to the consequence. As such, the overall impact/risks rating for community, health, safety and security related issues has been assessed as **Low.**

### 5.3.10 Supply chains/overharvesting

The development of ecotourism projects in C-PAR1 has led to an increase in tourists, who have a higher demand for local specialties, which may bring some risks relating to demand for saffron and cordyceps in the Three-River Source area. Most of these specialties come from critical habitat areas. Whilst the potential for overharvesting may be an adverse indirect impact, it could also result in positive economic/livelihood impacts for local communities who would supply visiting tourists. Ecosystems/sustainable harvesting levels will be promulgated with the main suppliers/harvesters of saffron and cordyceps.

## 5.4 Environmental Risks

In the national park construction phase, some ecological restoration and conservation infrastructure construction activities in the relevant NPs may have a minor, short-term negative impact on the ecological environment. In the operation phase of NPs, tourists, vehicles and household garbage may also cause noise disturbance, and air and water pollution, on a small-scale.

### 5.4.1 Threats to Conservation of Biodiversity/Natural Habitats

The adverse environmental impacts mainly arise from the possible rapid development of ecotourism, such as the increased number of tourists and tourism infrastructure. Before the establishment of NP, ecotourism was already practiced in the area and was under strict control. The NP will further attract more visitors and may increase the scale of ecotourism. The C-PAR1 project is currently (i.e., at the time of publication of this ESIA report) conducting eco-experiences, concessions, environmental education activities, and livelihood training activities in the Three-River Source NP. As of mid-September 2020, the Yellow River Source and Lancang River Source Parks have hosted six eco-experience groups, receiving over 400 people for eco-experiences. Corporate participation was expanded through the use of tourism partnerships and concessions by signing contracts with Qinghai Yunheng Nature in the Yellow River Source and Chuan Yuan in the Lancang River.

With the rising interest from the public about the Three-River Source NP, it may cause a large flow of tourist crowds to enter. In the absence of strong control and guidance, new ecological damage and other negative impacts are highly likely to occur. The construction of the necessary ecological protection and control infrastructure in national parks has the potential to cause new landscape destruction, short-term environmental pollution and ecological damage. On the other hand, with the operation of the park, ecological experiences and other activities, there will be an increase in the flow of foreign people and vehicles, and this will result in increased pressure on the ecological environment. In the process, there is the potential for invasive alien species to be inadvertently spread to the pilot national park areas through out-of-town visitors or communities in contact, thus affecting local biodiversity.

Rodent infestation is a very serious problem in grassland areas and if not properly controlled, it can have a serious impact. Especially in the Three-River Source NP, with its vast natural grasslands, failure to prevent and control rodent infestation will not only lead to serious damage to the grassland ecology and biodiversity but will also affect the economic development to a large extent. In order to prevent and control the pests, Qinghai Province has promulgated various rules and regulations, such as the "Implementation Measures for Grassland Rat and Insect Disaster Prevention and Control in Qinghai Province" and "Implementation Measures for Grassland Rat and Insect Prediction and Reporting in Qinghai Province" to establish and improve grassland rat and insect pest investigation and research.

The C-PAR1 project is currently conducting biodiversity conservation training in the Giant Panda NP with 50 participants. Community co-management committees and patrol monitoring teams have been established in pilot villages to carry out patrol monitoring and ecological restoration activities, with a total of 100 participants. Two training events on sustainable alternative livelihoods were conducted with a total of 666 participants in the five pilot villages. Environmental education activities were conducted with 344 participants in the 4 pilot villages.

The biodiversity conservation training and ecological restoration, patrol and monitoring activities carried out in the Giant Panda NP can raise residents' awareness of environmental protection and understanding of the current state of biodiversity in the national park, which is conducive to biodiversity conservation. However, some engineering measures such as ecological conservation and infrastructure construction may have a slight, short-term negative impact on the ecological environment. Dust and waste generated during the implementation of the associated projects(such as the general NP Master plan which is outside of UNDP-GEF supported activities) will pollute the atmosphere, noise may affect the habitat of wildlife, and sewage and waste will pollute the surrounding soil, water bodies and atmosphere if not properly disposed of. Any infrastructure work shall follow the precautionary principle. With the construction of the Giant Panda NP, the number of visitors to the Giant Panda NP is expected to grow. Poorly controlled experiential activities may have a negative impact on the habitat and the surrounding receptor environment.

In 2020, the pandemic affected much of the C-PAR1 project's work in the Xianju NP, especially at the community level. At the date of publication for this ESIA report, a scientific survey of the spring flora and fauna in the Xianju Kuocangshan Provincial Nature Reserve was carried out, and a variety of newly recorded flora and fauna were found. There are 292 species of vertebrates in Xianju NP in 31 orders and 78 families, including 8 orders of mammals and 49 species in 20 families, 14 orders of birds and 138 species in 32 families, 3 orders of reptiles and 39 species in 7 families, 2 orders of amphibians and 17 species in 5 families, and 5 orders of fish and 49 species in 14 families. Birds are the dominant species in Xianju NP, accounting for 5.78% of the total number of vertebrates in the country, with nearly 300 species. Among the vertebrates are Panthera pardus, Neofelis nebulosa, Syrmaticus ellioti and Muntiacus crinifrons, all of which are Class I protected animals. In addition, all nature reserves in Xianju County were optimally integrated and an outline of a program for the integration and optimization of nature reserves in Xianju County was completed. However, the waste left behind by visitors may damage the natural environment of the Xianju NP. As the national park landscape is further developed, the construction and operation of visitor facilities will inevitably affect the national park environment to some extent.

**Table 5-6 Potential impacts of the project on biodiversity and mitigation measures**

|  |  |  |
| --- | --- | --- |
| **Project** | **Potential impact** | **Mitigation measures** |
| Ecotourism, eco-experience and other concessions | Causing new landscape damage, alien species introduction, habitat alteration/destruction, death of individual animals, spread of epidemics and disease, unnatural species composition and physical population conditions, creation of migration barriers (esp. for smaller animals), alteration of animal distribution (spatial and temporal displacement) and behavior | Include (the following list is further detailed in the project’s ESMP):   * Strengthening the management of human-wildlife conflict, * Controlling/monitoring the number of tourists to ensure sustainable practices * carrying out biodiversity conservation training with local communities, tourists and project stakeholders , * The conduct of scientific surveys on animals and plants to monitor population data and any instances of invasive alien species |
| Small-scale infrastructure construction for minor NP facilities | * Dust and emissions can pollute the atmosphere, * creation of migration barriers (esp. for smaller animals) * waste (non-hazardous from eco-tourists/visitors) can contaminate the surrounding soil, water and atmosphere if not properly disposed of. | Include (the following list is further detailed in the project’s ESMP):   * Strictly control the scale and implementation of project infrastructure (which is expected to small-scale, i.e. erecting fencing, signage etc) * carry out biodiversity conservation training with visitors and stakeholders * implement international best practice in terms of non-hazardous waste management that may occur as a result of increased tourism numbers |

Numerous flora and fauna in the National Parks belong to the species registered in the IUCN database. For example, the Chinese pangolin belongs to the CR level of the IUCN database. The horse musk deer, Chinese merganser, crested ibis, and otter all belong to the EN level of the IUCN database. Snow leopard, giant panda, wild yak, white-lipped deer, white-necked pheasant, takin, black Necked cranes, black muntjacs, etc. belong to the VU level of the IUCN database. Tibetan antelopes, leopards, etc. belong to the NT level of the IUCN database. Tibetan wild ass, white-tailed sea eagles, and golden eagles all belong to the LC level of the IUCN database.

In the household survey and associated consultations (Figure 5-8), it was found that 72.4%, 66.8% and 83.3% of respondents in the Three-River Source, Giant Panda and Xianju NPs respectively believed that the frequency of natural disasters had decreased in recent years and that the impact of natural disasters had slowed down. This reflects a close relationship between the enhanced ecological engineering in the national parks in recent years. Therefore, long-term monitoring of the effectiveness of ecological engineering is also needed.

**Figure 5-8 The respondents' perceptions of whether the frequency of natural disasters has reduced**

The project has key demonstration sites in critical habitats of high biodiversity/conservation value. Poorly designed or executed project activities could unintentionally damage critical or sensitive habitats and ecosystems, resulting from the implementation of protected land management malpractices. The likelihood of this impact occurring has been assessed as *‘not likely’*, with the consequence level been categorized as *‘moderate’*. The overall significance level of these impacts to biodiversity/critical habitats is therefore categorized as ‘**moderate.’**

### 5.4.2 Climate Change

The impact of global climate change and warming and drying trends may have an impact on crop production, grassland growth and livestock production in the pilot national parks, which in turn will affect the development of the plantation and livestock industries (impacting livelihoods of local peoples).

Firstly, climate change may lead to changes in crop fertility and planting structure, a shift of planting areas northwards and more serious pests and diseases. The warmer climate has led to earlier planting of spring crops and later planting of autumn crops, accelerating crop growth and reducing winter crop mortality. Fertility periods for crops with a defined growth habit, such as wheat and maize are shortened, while those for crops with an undefined growth habit such as cotton and potatoes, are lengthened.

Secondly, the damaging consequences of climate change on the imbalance between grass and livestock has increased in recent years. Grassland degradation trends have also increased. Both the quantity and quality of grass has declined. With overgrazing, the proportion of poor-quality grasses, weeds and poisonous grasses has increased in highland pastures. Since the 1980s, about 50-60% of the grasslands in the Three-River Source area have been degraded to varying degrees[[24]](#footnote-24). Yields have decreased by 30-50% and toxic grasses[[25]](#footnote-25) have increased by 20-30% in the 1990s compared to the 1950s. The vegetation cover, grass height and productivity of high-altitude alpine grasslands have declined significantly. About 90% of the grassland in Gansu Province is degraded at a rate of 10,000 km2 per year, with 88% of the total area of degraded grassland. The warming climate has led to an earlier return to green and later dieback of highland forage grasses and an extension of the entire reproductive period. The duration of growth has been extended by 3-5 days in most areas.

Thirdly, climate change has led to longer natural grazing periods. In highland grazing areas, warmer temperatures and reduced snowfall helped young animals to overwinter. Mortality losses of Gannan yaks and sheep have declined at a rate of 0.99% and 2.74% per decade, respectively. The survival rate of Tibetan sheep lambs has increased at a rate of 7.19% per decade since the mid-1980s.

The Xianju NP have a variety of complex microclimates due to the longitudinal mountain ranges and complex terrain. The seasonal distribution of precipitation is uneven and spatially distributed, with more south-western than north-eastern regions and more mountains than river valleys and increases with altitude. This mountainous climate may affect the sustainable use of the National Park's resources and community development.

The government should attach great importance to addressing climate change, actively participate in the formulation of countermeasures and policies related to responding and adapting to global climate change, and carry out research on the relationship between climate change and ecosystem succession. It should further strengthen the construction of a climate change monitoring system, improve its forecasting and early warning capabilities, carry out evaluation of the results of artificial weather impact, and improve artificial weather impact methods and facilities.

Climate change has the potential to impact the NP system in China, e.g., through habitat loss because of prolonged droughts or from devastating floods. The impacts of climate change are highly uncertain yet could impact project outcomes in the longer-term. The likelihood of this impact occurring has been assessed as *‘not likely’*, with the consequence level been categorized as *‘moderate’*. The overall significance level of these potential climate change related impacts is therefore categorized as ‘**moderate**’.

### 5.4.3 Water Flows

The average surface water resources in the Three-River Source area in recent years are 49.8 billion m³, including 15.86 billion m³ in the Yellow River source area, 21.81 billion m³ in the Yangtze River source area and 12.23 billion m³ in the Lancang River source area. Compared to the period before the year 2000, surface water in the entire Three-River Source area increased by 6.82 billion m³. The ecological protection and treatment measures implemented in the Three-River Source area for more than ten years, such as the return of grazing to grass, the treatment of black soil banks and the relocation of herders, have played a positive role in water conservation and water quality improvement. Herders’ relocation associated with these ecological protection measures were mainly implemented in the Three-River Source Phase I and II projects. No new migration or resettlement has been implemented in the C-PAR1 activities. However, changes in water resources are also related to changes in climate, glaciers and permafrost. At present, no systematic survey of aquatic biological resources has been carried out in the Three-River Source area, and research on the basic theories of biology and water chemistry of rare and endangered aquatic organisms, the adaptability of aquatic organisms to changes in water ecology, and research on countermeasures and measures for species protection are currently under-researched.

The Master Plan for the Three-River Source NP states that it will strictly implement the Water Law of the People's Republic of China, the Flood Control Law of the People's Republic of China, the Regulations of the People's Republic of China on River Management and other laws and regulations, and dovetail with the comprehensive planning and flood control planning of the Yangtze, Yellow and Lancang Rivers to effectively protect and conserve water resources. In conjunction with the second phase of the Three-River Source Ecological Protection Project, it will continue to implement soil and water conservation projects, increase efforts to control soil erosion and improve the ability to contain water. In addition, the hydrology, water quality and water ecology monitoring in the Three-River Source area are interlinked with the river basin management agencies to build a benign mechanism combining river basin management and regional management.

In the household survey/investigation (Figure 5-9), it was found that 85.65%, 87.68% and 95.43% of the respondents in the Three-River Source, Giant Panda and Xianju NPs respectively believed that the water quality condition of the rivers had improved in recent years, indicating that a series of management measures for the water quality of the rivers in the National Park had achieved positive results.

**Figure 5-9 The respondents' perceptions of whether the stream quality has improved**

Any water quality related impacts that may result as a consequence of the activities of C-PAR1 will be positive due to increased environmental protection and monitoring within the three NP sites. There is a slight potential that, in the short-term, water quality may be affected by the establishment/construction of NP infrastructure. However, this risk has been categorized as having an overall significance level of **low**. This is due to the temporal scope, reversibility, and unlikely nature of any water quality related impacts occurring.

### 5.4.4 Pollution and Discharges of Waste

The national parks related to C-PAR1 may result in new landscape damage, short-term environmental pollution, and ecological damage in the absence of strict construction management. Eco-tourism, if not strictly controlled, can also lead to environmental pollution and waste discharge. It is mainly domestic waste such as plastic, paper products, cans, fruit peelings, brick and ceramic, sludge, etc. Basically, no hazardous waste is expected to be generated.

The ecological restoration and infrastructure construction in the Giant Panda NP may have a minor, short-term negative impact on the ecological environment. Dust and emissions generated during the construction process may pollute the atmosphere, noise may affect wildlife habitats, and improper disposal of sewage and waste may pollute the surrounding soil and water bodies. Risks relate mainly to domestic waste such as plastic, paper products, cans, fruit peelings, brick and ceramic, sludge, etc.

Projects such as ecotourism in the Xianju NP generate glass, plastic, paper products, cans and other household waste that may pollute the ecological environment of the water source. At the time of this report, no hazardous waste is foreseen to be emitted/generated. However, all project activities must nonetheless adhere to national standards/regulations on introduction of hazardous waste.

The use of low toxicity and low residue pesticides and biological pesticides in agricultural production is permitted in the three national parks, and the use of counterfeit and substandard pesticides, national banned pesticides and highly toxic pesticides is prohibited. The C-PAR1 project will not directly support the procurement, use, or management of pesticides/herbicides.

To solve the problem of pollution and waste discharge, public toilets and rubbish and sewage treatment facilities have been built in the National Parks and environmental protection facilities such as rubbish bins and rubbish trucks have been purchased. In addition, the government has formulated the Waste Management Plan, which provides a comprehensive institutional and technical design for waste collection and classification, and clearly states that it is forbidden to leave waste packaging within the national park. As shown in Figure 5-5, 92%, 91% and 83% of respondents in Three-River Source, Giant Panda and Xianju NPs respectively said that the level of cleanliness of village living environment has improved.

The Three-River Source, Giant Panda and Xianju NPs state in their plans on eco-experience and environmental education that they design eco-experience sites and experience routes, interpretation systems, etc., and develop more specific and strict control requirements and specific task plans for environmental education. As national parks are still new in China, education on general knowledge of national parks needs to be strengthened, focusing on the characteristics of the NPs as well as the production and living habits of the ethnic minority people and the protection of the ecological environment that should be observed when entering the national park. In addition, education on ecological protection laws and regulations, policies related to the construction of national parks, and the code of conduct for visitors should be carried out to build a standardized, orderly, and sustainable national park.

Noise, air quality and water quality are negative impacts that may be generated by small-scale infrastructure works (that would be conducted under co-financing/associated facilities). These works are to be limited in scale and scope[[26]](#footnote-26).

The overall risk/impact for pollution has been assessed as having a likelihood rating of ‘slight’, and a consequence level of moderate. As such, the overall impact/risk rating for pollution-related impacts has been assessed as **low.**

# 6. Analysis of Alternatives

In consideration of potential negative environmental and social impacts, alternatives may be identified for proposed activities supported by the fund as well as the proposed way to manage and use the funds under C-PAR1.

## 6.1 Pilot Site Selection

During the project design, alternative sites for pilot projects have been screened based on multi-criteria, including location (e.g., proximity to priority areas and/or PAs), threats (e.g., facing significant and/or increasing threats), preparedness (e.g., existing community groups, local NGOs, etc.), socioeconomic circumstances (e.g., higher priority to low income communities), gender opportunities (e.g., activities where women have equal or more opportunities to participate in decision making), minority communities (e.g., higher priority to disadvantaged ethnic communities), logistical considerations (e.g., travel costs, accessibility), stakeholder advocacy (e.g., promoted by governmental and/or non-governmental stakeholders), readiness (e.g., previous international project experience), advocacy (e.g., local champions who are actively involved and advocating for engagement with activities associated with the protected area), and willingness and enthusiasm (e.g., based on feedback from community meetings and subsequent communications).

14 villages were proposed for pilot sites, 10 of which were selected as pilot sites finally, based on full consideration of the above-mentioned criteria.

## 6.2 Making Use of Existing Buildings and Infrastructure

In order to develop tourism and provide office space for new jobs created, new venues will need to be constructed (including the science popularization and education center, conservation and management houses, the tourist center etc.). This infrastructure construction could be a source of adverse social and environmental impacts.

One alternative for this is to make use of existing buildings like the houses that local residents move out of. With only some repair and update needed, the impact during the construction process will be limited to the extent that is much more moderate than building new ones. However, an issue with this alternative could be encountered if the existing buildings do not meet the new demand very well, especially for those activities with specialized requirements/equipment.

## 6.3 Establishing Invisible Boundary Pillars

The effective management of NP requires the construction of boundary pillars, to define the boundary of NP physically and clearly. However, negative environmental impacts may occur during the construction of boundary pillars, and the wildlife may also be affected if the pillars are established in an inappropriate manner.

One alternative for this is to construct “invisible” boundary pillars, which is frequent patrolling and monitoring.

## 6.4 Developing Eco-Tourism Development

The development of eco-tourism has been proposed as a promising industry in NP, which could enhance the income of local residents. As mentioned above, increases in the number of tourists visiting the NPs has the potential to bring about adverse environmental impacts.

An alternative may be the delayed development of eco-tourism, allowing tourists to visit after the completion of ecological restoration and the stabilization of the environment. Nonetheless, this may also postpone the formation of a stable alternative income source for local residents.

## 6.5 Empowering the NP Management Agency in the Use of Co-Financing

The recipient of co-financing as grant is the local government of each province, who manages the grant and uses it to carry out the relevant activities. As some of the activities require inter-agency and even inter-provincial cooperation, the insufficient coordination or systematic friction could lead to the ineffectiveness in the use of funds.

One alternative is that the NP management agency, as an independent department, takes charge of the management and use of the funds, to avoid additional inter-agency and inter-provincial friction. Nevertheless, contradiction is likely to occur between the goals of NP and local government, thus causing other unexpected frictions.

# 7. Mitigation and Management Measures

A full detailed list of environmental and social mitigation and management measures is presented in the project’s ESMP. The ESMP summary table has been included in this document in section 5.2. The following section serves as a ‘high-level’ summary of potential mitigation and management measures that shall be considered by the C-PAR1 project.

## 7.1 Mitigation

On the basis of the potential adverse effects identified in section 5 of this ESIA report, different mitigation measures are proposed in relation to social and environmental risks respectively.

### 7.1.1 Social Mitigation and Management Measures

**Mitigation Measure 1: Strengthen the management of Human-Wildlife Conflict**

The protection of endangered species, especially those in the IUCN register, should be emphasized in the construction and management of NPs. In order to alleviate the risk of HWC, the Three-River Source region explored the establishment of a mechanism to prevent and compensate the conflict between human and animal. For example, a pilot project to deal with the conflict between human and animal was launched in Moqu Village, Suojia Township, Zhiduo County, Qinghai Province, and protective measures were taken against the threat of herdsmen being harmed by bears.

In 2012, Qinghai Forestry Department began to implement compensation measures for personal and property losses of farmers and herdsmen caused by key terrestrial wild animals. In 2013, the pilot work was carried out with the support of the State Forestry Administration. After-the-fact economic compensation will help to reduce the economic losses caused by wild animals, but other supporting work is needed to alleviate the conflicts between man and animals, such as strengthening grazing management, publicity and education and wildlife management.

In addition, wildlife damage insurance can be taken to alleviate human-animal conflict. For example, the Three-river Source NP has taken the wildlife damage insurance to mitigate the effects caused by conflicts. After the establishment of NP, all employees have been provided with insurance and almost all the livestock is under insurance. The herdsmen will be compensated if their livestock is killed by wild animals.

However, there are also some potential problems in the practice of wildlife damage insurance. For example, wild animals are likely to eat the whole body of livestock or drag it away, while the picture of the label on the nail in the ear of the livestock as well as the pictures taken from four parts of the body are needed when the herdsman apply for the insurance compensation, which may lead to a failure in insurance claim. Such extreme situations have to be considered in the design of wildlife damage insurance. The C-PAR1 project team shall continue to support efforts to assist local peoples in insuring their herds and property against HWC-instances.

**Mitigation Measure 2: Improve livelihoods of local project-affected peoples**

Native residents are the main participants in the construction and management of PAs or national parks and their interests are often affected by protection measures. The interests of the original residents include obtaining economic sources to improve the income level, obtaining public environment and public services, and continuing the traditional ethnic culture. Among them, the core needs to pay attention to is the livelihood issue. Community herdsmen in China's PAs have two main sources of livelihood: animal husbandry and state subsidies. However, with the implementation of policies such as reducing the number of livestock raising, national subsidies have become the main source of income for herdsmen, including income of ecological protection personnel of NPs and grassland compensation. Three-river source NP has established a livelihood program by supporting each household in the area with one post of ecological rangers, each of whom receives a monthly subsidy of 1,800 yuan. There are three kinds of ecological rangers in Xianju NP, whose wages are 3,000 yuan/month, 2,000 yuan/month, and 100 yuan/day respectively.

Concerning alternative livelihoods, the C-PAR1 project must try to maintain the long-term effectiveness of the grassland compensation program, as well as undertaking livelihood training for community residents, (i.e., such as vocational skills training and language training). Projects should attract external investment, strengthen internal cooperation and other ways to develop new and characteristic projects that can stimulate the participation of original residents. Training related to future livelihoods, such as vocational skills training and language training, is critical. In doing so, the C-PAR1 project will seek to avoid the high dependence of community residents on state subsidies and strengthen their ability to cope with future risks through providing access to alternative incomes streams that build off their unique skillsets and knowledge of the NP sites. For example, three-river source NP has carried out "hand-weaving" alternative livelihood training in Hongqi Village, with 30 participants, 100% of whom were women. Xianju NP has conducted farmhouse tourism training, environmental education training and evening school training. The Nature Reserve Administration and the local governments should provide systematic livelihood training based on the person's own interests and strengths (as well as the advantages and opportunities of the economic development of that location). Livelihood support activities such as skills training, employment guidance, and labor law training should be provided. In addition, livelihood training should meet local needs, with content catered to the context of the area that is being targeted, and with teaching provided in a locally accessible language/dialect.

Native residents should play an important role in the construction and management decisions of PAs and national parks. The management of national parks should fully recognize the roles and functions of native residents. Local stakeholders and community members should be consulted throughout the implementation and monitoring of the project to ensure that stakeholders are kept informed of the project, progress and any changes, as well as problems identified. When necessary, the relevant rights and interests of the original residents shall be protected by legislation.

**Mitigation Measure 3: Strengthen the Protection and Conservation of Cultural Heritage**

In order to strengthen the protection and conservation of cultural heritage, it is necessary to carry out a base inventory of cultural heritage resources. Through cooperation with competent cultural heritage authorities, the C-PAR1 Project should seek to carry out a comprehensive cultural heritage survey and establish a cultural heritage archive and database. At the same time, the establishment of a list of intangible cultural heritage characteristics/practices, especially the endangered cultural heritage of ethnic minorities should be included in the protection list as soon as possible.

**Mitigation Measure 4: Enhance Gender Mainstreaming**

Improving gender mainstreaming needs to follow the following principles:

(1) Ask men and women equally about the needs and requirements of project intervention.

(2) Gender-sensitive complaint and grievance mechanisms are put in place and proactively managed

(3) Advocate equal participation of men and women in project activities.

(4) When formulating strategies and plans, every effort should be made to consult the same proportion of men and women.

(5) Organize gender equality training.

(6) Ensure equal pay for men and women.

(7) Half of the direct beneficiaries of the project should be women.

Gender equality and mainstreaming should be cross-cutting throughout C-PAR1. As such, the promotion of equal participation and benefit sharing of men and women in the community, management of PAs, policymaking and other levels is crucial.

### 7.1.2 Environmental Mitigation and Management Measures

**Mitigation Measure 5: Control the scale of ecotourism**

NPs need to design ecotourism and ecological experience routes according to the concept of environmental sustainability, the precautionary principle, circular economy and low carbon. NPs also need to reasonably determine the number of visitors to ensure minimal environmental impact from visitors. Relying on the supporting service area outside the park, the eco-tourism and eco-experience reception areas will be built. In addition, it is necessary to strengthen the respect for local customs and environmental protection measures that should be observed when entering NPs. The NP management teams should carry out publicity and awareness raising campaigns on ecological protection laws and regulations, NP construction policies, and visitor behavior norms so that local residents and visitors can understand the relevant requirements.

**Mitigation Measure 6: Systematically Include Climate Change Impact Planning in Decision-Making**

The government should attach great importance to addressing climate change impacts within the scope of C-PAR1 activities. It should actively participate in the formulation of countermeasures and policies related to responding and adapting to global climate change. In addition, NP management should: (i) further strengthen the construction of a climate change monitoring system, and (ii) improve forecasting and early warning capabilities.

**Mitigation Measure 7: Management of Air Quality, Noise and Vibration and Traffic-Related Issues Associated with NP Infrastructure Development**

In the NPs construction phase, some ecological restoration and conservation infrastructure construction activities (which are not directly funded by the UNDP/GEF C-PAR1 project but are nonetheless included within the scope of the national parks as an associated facility) may have a minor, short-term negative impact on the ecological environment. Especially the dust and emissions generated during the construction process could pollute the atmosphere, noise could affect wildlife habitats, and improper disposal of sewage and waste could pollute the surrounding soil, water bodies and atmosphere. In the NPs operation phase, tourists, vehicles and production and household garbage may also cause noise disturbance and air and water pollution.

The following performance criteria are set for the construction elements of the associated facilities within the three NP sites:

1. Release of dust/particle matter must not cause an environmental nuisance;
2. Measures to assist in minimising the air quality impacts associated with construction and operation activities must be undertaken at all times;
3. undertake measures at all times to assist in minimizing the noise associated with construction activities;
4. No damage must be caused to off-site property by vibration from construction and operation activities;
5. The goal is that no complaints are received regarding construction traffic;
6. Corrective action to respond to complaints and/or grievances is to occur within 48 hours.

# 8. Stakeholders

## 8.1 Introduction

Stakeholders are persons, groups, or institutions with an interest in the project or the ability to influence the project outcomes, either positively or negatively. Stakeholders may be directly or indirectly affected by the project. The potential impacts of this project are mainly related to the residents in and around the national park’s area. Section 8.4 will describe in detail the composition of stakeholders of the project.

The implementation of this project must consider all relevant stakeholders in order to appropriately minimize and compensate for any adverse impacts that may derive from the project activities. Producing and implementing a Stakeholder Engagement Plan, conducting full consultation and exchange, and making information accessible to the public are all important measures to ensure full stakeholder participation.

Livelihood shifts (moving away from traditional animal husbandry and subsistence farming) have the potential to exacerbate local poverty and inequality. Potential changes in lifestyle may affect the cultural heritage of ethnic minorities, such as nomadic culture and minority languages.

As a result of ecological improvement, wolves, brown bears, snow leopards and other animals may interact with human settlements more frequently, attacking livestock, destroying houses, and attacking human beings.

In addition, national park management agencies at all levels, local governments and project organizations are also important stakeholders. These risks are outlined in further detail in the Chapter 5 of this ESIA.

This chapter (Chapter 8) is supplemented by the Stakeholder Engagement information provided in the ESMP for this project.

## 8.2 Regulations, Requirements, and Compliance

This section outlines legislation, regulations, and standards relevant to stakeholder engagement and information disclosure to which this project must adhere.

### 8.2.1 China's Domestic Laws and Regulations

Many laws, administrative regulations, departmental rules and planning outlines in China require public participation and information disclosure Chapter 5 of **the Environmental Protection Law of the people's Republic of China** (revised in 2015) specifically stipulates “information disclosure and public participation”, endows “citizens, legal persons and other organizations with the right to obtain environmental information, participate in and supervise environmental protection according to law”, and requires that “…environmental information should be made public in accordance with the law, and public participation procedures should be improved to facilitate citizens, legal persons and other organizations to participate in and supervise environmental protection.”

Article 5 of **the Environmental Impact Assessment Law** (revised in 2018) stipulates that "the State encourages relevant units, experts and the public to participate in environmental impact assessment in an appropriate way". The measures for public participation in environmental impact assessment were deliberated and adopted at the ministerial meeting of the Ministry of ecological environment on April 16, 2018 and will be implemented as of January 1, 2019. "The measures are applicable to industries, agriculture, animal husbandry, forestry, energy, water conservancy, transportation, urban construction, tourism, tourism and other industries that may cause adverse environmental impacts and directly involve public environmental rights and interests Public participation in environmental impact assessment of special plans related to natural resources development, and public participation in environmental impact assessment of construction projects that should prepare environmental impact reports according to law".

Article 10 of **the law of the people's Republic of China on regional ethnic autonomy** (revised in 2001) stipulates that "the organs of self-government in ethnic autonomous areas guarantee that all ethnic groups in the area have the freedom to use and develop their own spoken and written languages, and the freedom to maintain or reform their own customs and habits”. Article 27 stipulates that "the organs of self-government of national autonomous areas shall, in accordance with the provisions of the law, determine the ownership and use right of grasslands and forests in their respective areas. The organs of self-government of national autonomous areas protect and build grasslands and forests, organize and encourage tree and grass planting. Destruction of grasslands and forests by any organization or individual by any means is prohibited. It is strictly forbidden to destroy grassland and forest to reclaim cultivated land, Article 48 stipulates that "the organs of self-government of national autonomous areas guarantee that all ethnic groups in the area enjoy equal rights".

The State Council implemented several provisions of **the law of the people's Republic of China on regional ethnic autonomy (2005)**, which required "to speed up the establishment of ecological compensation mechanism. According to the principle of developer's payment, beneficiary's compensation and saboteur's compensation, from the national, regional and industrial levels, through financial transfer payment, project support and other measures, Reasonable compensation shall be given to the ethnic autonomous areas that have made contributions to the protection of the ecological environment, such as the protection of wild animals and plants and the construction of nature reserves. ".

**The regulations of the people's Republic of China on the disclosure of government information** (revised in 2019) clearly stipulates that "people's governments at all levels shall strengthen the organization and leadership of the work of government information disclosure" and "administrative organs shall disclose government information timely and accurately. If an administrative organ finds any false or incomplete information that affects or may affect social stability or disrupt social and economic management order, it shall issue accurate government information to clarify it. "For government information that involves the adjustment of public interests, needs to be widely known by the public or needs public participation in decision-making, the administrative organ shall take the initiative to make it public".

Article 6 of **the Interim Regulations on major administrative decision-making procedures**, which came into effect on September 1, 2019, stipulates that "major administrative decisions shall be made in accordance with the principle of democratic decision-making, fully listen to the opinions of all parties, and ensure the people's participation in decision-making through various channels and forms".

### 8.2.2 International Treaties signed by China

There are also relevant provisions in the international treaties signed by China. The Convention for the protection of the world cultural and natural heritage of 1972 "Article 27: (1) states parties to this Convention shall, through all appropriate means, especially education and publicity programs, strive to enhance the appreciation and respect of their people for the cultural and natural heritage as defined in Articles 1 and 2 of this Convention; (2) States parties shall make the public widely aware of the dangers posed to such heritage and the activities undertaken to implement this Convention. Article 28: States parties receiving international assistance in accordance with this Convention shall take appropriate measures to make people aware of the importance of the property receiving assistance and the role played by international assistance. ".

Article 13 of the 1992 Convention on biological diversity provides for public education and awareness, "States parties shall: (a) promote and encourage understanding of the importance of the protection of biodiversity and the measures required, and promote and include these topics in educational curricula through mass communication tools; (b) develop, as appropriate, educational and public awareness programmes on the protection and sustainable use of biodiversity in cooperation with other countries and international organizations. ". Article 17 provides for information exchange: "1. States parties shall facilitate the exchange of information available to the public on the protection and sustainable use of biodiversity, taking into account the special needs of developing countries. 2. Such exchange of information shall include the exchange of technology, scientific and socio-economic research results, as well as information, expertise, local and traditional knowledge of training and investigation programmes, and, together with the technology referred to in Article 16, paragraph 1. The return of information should also be included where feasible. "

The Beijing Declaration (1995) is committed to protecting the rights of women and children, "ensuring the full implementation of the human rights of women and girls as an inalienable, indispensable and indivisible part of all human rights and fundamental freedoms", "empowering women and their full participation in all areas of society on an equal basis, including participation in decision-making processes and access to power, it is the foundation of equality, development and peace. ".

The United Nations Declaration on the rights of indigenous people (2007) states that indigenous people have equal rights:

Article 3: indigenous people have the right to self-determination. Based on this right, they can freely determine their political status and freely pursue their own economic, social and cultural development.

Article 4: in exercising their right to self-determination, indigenous peoples enjoy autonomy or autonomy in matters relating to their internal and local affairs, as well as in how to raise funds to exercise their functions of autonomy.

Article 5: indigenous people have the right to maintain and strengthen their unique political, legal, economic, social and cultural institutions, while maintaining the right to participate fully in the political, economic, social and cultural life of the country, in accordance with their will.

Article 23 of the Cartagena Protocol on Biosafety to the Convention on biological diversity, which was not ratified in 2000, provides for public awareness and participation:

“1. Parties shall: (a) promote and facilitate public awareness and educational activities and participation in the safe transfer, handling and use of living modified organisms, taking into account the risks to human health, In order to facilitate the protection and sustainable use of biodiversity. Parties shall cooperate with other national and international institutions, as appropriate, in this regard; (b) Strive to ensure that public awareness and education activities include access to information on possible imports of living modified organisms identified in accordance with this protocol. 2. Each party shall, in accordance with its own laws and regulations, consult the public in the decision-making process on living modified organisms and, subject to Article 21 on confidential information, inform the public of the results of such decisions. 3. Each Contracting Party shall strive to make the public aware of the means by which information and information of the biosafety clearing house may be made publicly available.”

### 8.2.3 UNDP’s Social and Environmental Standards (SES)

UNDP’s Social and Environmental Standards (SES) are applied to all UNDP projects. Further detail regarding the UNDP’s SES are outlined in Section 2.3 of this ESIA.

**Table 8-1 Key Elements of UNDP’s SES**

|  |  |  |
| --- | --- | --- |
| Overarching Policy | Project-Level Standards | Policy Delivery Process & Accountability |
| Principle 1: Human Rights  Principle 2: Gender Equality and Women’s Empowerment  Principle 3: Environmental Sustainability | Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management  Standard 2: Climate Change Mitigation and Adaptation  Standard 3: Community Health, Safety and Working Conditions  Standard 4: Cultural Heritage  Standard 5: Displacement and Resettlement  Standard 6: Indigenous Peoples  Standard 7: Pollution Prevention and Resource Efficiency | Quality Assurance  Screening and Categorization  Assessment and Management  Stakeholder Engagement and Response Mechanism  Access to information  Monitoring, Reporting, and Compliance Review |

UNDP puts forward detailed and comprehensive requirements for stakeholder participation and engagement. The project must ensure that stakeholders fully express their opinions and demands and participate in the various processes of the project. Key SES stakeholder engagement requirements are as follows:

1. Ensure meaningful, effective, informed participation of stakeholders in the formulation and implementation of UNDP programs and projects, providing stakeholders opportunities to express their views at all points in the project decision-making process on matters that affect them (SES, Part C, paras. 18, 20).

2. Conduct stakeholder analysis and engagement in a gender-responsive, culturally sensitive, non-discriminatory, and inclusive manner, identifying potentially affected vulnerable and marginalized groups and providing them opportunities to participate (SES, Part C, para. 18).

3. Develop appropriately scaled Stakeholder Engagement Plans, with level and frequency of engagement reflecting the nature of the activity, magnitude of potential risks and adverse impacts, and concerns raised by affected communities (SES, Part C, para. 21).

4. Meaningful, effective and informed consultation processes need to be free of charge and meet specified criteria, including: being free of intimidation and external manipulation; initiated early and iterative; inclusive; gender and age responsive; culturally appropriate and tailored to language preferences; and based on timely disclosure of relevant and accessible information regarding the project and its social and environmental risks and impacts (SES, Part C, para. 20).

5. Include differentiated measures to allow effective participation of disadvantaged or vulnerable groups, including persons with disabilities (SES, Part C, para. 20).

6. Undertake measures to ensure effective stakeholder engagement occurs where conditions for inclusive participation are unfavorable (SES, Part C, para. 18)

7. Document consultations and report them in accessible form to participants and the public (SES, Part C, paras. 20, 28).

8. Ensure early and iterative meaningful stakeholder engagement throughout the assessment and management of potential social and environmental risks and impacts (SES, Part C, para. 16).

9. Ensure that stakeholders who may be adversely affected by the project can communicate concerns and grievances through various entry points, including an effective project-level grievance mechanism, and also UNDP’s Stakeholder Response Mechanism and Social and Environmental Compliance Unit (SES, Part C, paras. 23-26, 37).

10. For projects that affect rights, lands, territories, resources, and traditional livelihoods of indigenous peoples, ensure meaningful consultations and free, prior informed consent (FPIC) (SES, Part C, para. 22; SES, Standard 6, para. 10).

11. For projects that may involve physical or economic displacement, ensure activities are planned and implemented collaboratively with meaningful and informed participation of those affected (SES, Standard 5).

12. Provide ongoing reporting to affected communities and individuals for projects with significant adverse social and environmental impacts (SES, Part C, para. 34).

13. Seek to identify, reduce, and address the risk of retaliation and reprisals against people who may seek information on and participation in project activities, express concerns and/or access project-level grievance redress processes/mechanisms or UNDP’s Stakeholder Response Mechanism or Social and Environmental Compliance Unit (SES, Part C, para. 27).

### 8.2.4 Compliance with regulations and requirements

The project needs to meet the requirements of all the above laws and regulations for stakeholder participation, including information disclosure, publicity and education, skill training, establishment of supervision and complaint mechanism, and protection of the rights of women, children, and ethnic minorities. In addition to the description of stakeholder engagement activities in Section 8.3 of this ESIA, the project has developed a Stakeholder Engagement Plan in accordance with UNDP’s stakeholder engagement requirements. This Stakeholder Engagement Plan can be found in the ESMP produced as an ancillary document to this ESIA.

Information disclosure and exchange are the basis for stakeholder participation. The project has and will continue to promote the exchange, transmission and sharing of information between the project organizer and all stakeholders through various forms such as questionnaire surveys, household interviews, forums, expert consultations and collective training. The project will also incorporate the views of stakeholders in the whole process as far as possible.

Gender equality is an important goal of the project. The project will promote gender mainstreaming through various channels. This project will analyze the impact of various project activities on gender, actively take measures to eliminate gender barriers, and promote equal participation and benefit of men and women. In community decision-making, it is necessary to ensure that women can express their opinions and demands. More specific considerations for women are described in the Stakeholder Engagement Plan in the ESMP.

Meaningful consultations and free, prior informed consent (FPIC) for ethnic minority peoples are considered in throughout the project-cycle. Affected ethnic minorities are able to withhold consent and raise grievances through a project-level GRM which is accessible and cultural appropriate to them.

In this project, the pilot villages of Tree-River Resource National Park and Giant Panda National Park involve ethnic minority residents. All activities of the project will put the participation of local ethnic minority residents at the core to ensure that they are aware of and participate in the whole decision-making process. Effective information should be obtained through public opinion survey in advance. In addition, China's law clearly stipulates that ethnic minorities have the freedom to use and develop their own languages, as well as the freedom to maintain or reform their own customs and habits. The project needs to use minority languages to ensure smooth information communication and respect minority customs. This is taken seriously in all stakeholder activities of the project.

In order to ensure the effective supervision, feedback and appeal of stakeholders, the project will institute a project-level of Grievance Redress mechanism (provided in section 8.8 of this ESIA). The GRM aims to solve problems conveniently, cooperatively, quickly, and effectively through dialogue, joint fact finding, negotiation and problem solving.

## 8.3 Summary of Stakeholder Engagement Activities

### 8.3.1 Stakeholder Involvement in the Risk Assessment

The project has taken a variety of approaches to inform stakeholders and will continue to involve them during project implementation. Opinions and information from stakeholders (mainly residents of pilot villages) are crucial for project evaluation. Stakeholders' experiences with the project activities will provide key information for the further improvement of the project.

The local focal point in charge of the project and the local villagers' committee are responsible for informing the local residents of the specific project-related information. Consultation seminars, questionnaire surveys and household interviews are the main methods to collect the opinions of stakeholders.

**(1) Questionnaire survey**

This project has carried out questionnaire surveys and household interviews in three pilot villages of National Parks. In addition to the basic questions, the questionnaire also sought project-affected peoples’ views of the National Park, the degree of affect to livelihoods, human animal conflict and other issues. The specific data analysis and results are presented in the ESIA report for C-PAR1.

**(2) Interview**

The project has conducted interviews with families and individuals in each of the three pilot villages of Three-River-Resource National Park. The local project focal point visited the families of the pilot villages and randomly selected villagers for in-depth interviews and exchanges. Through the interview, the local focal point can have a long-term in-depth exchange with the villagers to obtain the villagers' views on the construction of the National Park, the implementation of the project activities, and any impacts that local peoples are encountering (either direct or indirect) as a result of the project’s intervention.

### 8.3.2 National level

The public participation and information disclosure actions carried out by the National Park Authority are as follows:

(1) Provide telephone, e-mail and correspondence address on the official website of the National Park Administration to solicit opinions for the formulation of the master plan of the National Park, such as the notice on soliciting opinions for the master plan of the northeast tiger and leopard National Park (Draft) from March 09, 2018 to March 22, and the notice on soliciting public opinions on the master plan of Qilian Mountain National Park (Draft) 2018. Considering the stakeholders who do not use the Internet and telephone, the planning team went to the local areas to hold a forum to collect opinions. During the planning process, the planning team went deep into the National Park to carry out field investigations, conduct in-depth exchanges with the local government and herdsmen, and understand the opinions and demands of stakeholders. Taking the overall planning of Qilian Mountain National Park as an example, during the planning period, the planning team held more than 30 seminars at different levels. The language of communication and planning texts is mainly Chinese, and minority languages are used for communication and consultation in areas with ethnic minorities.

(2) Holding National Park Logo award-winning collection activities: in order to better display the brand connotation of Qilian Mountain National Park, Qilian Mountain National Park Administration has carried out the national Qilian Mountain National Park Logo system award-winning collection activities since November 19, 2018. As of December 31, 2018, a total of 213 pieces (sets) of works have been received from the whole country, including 204 pieces (sets) of online contributions, 9 pieces (sets) were submitted by mail.

(3) On February 10, 2021, the interactive activity of "Choose the National Park in your heart" was held and publicized through the official website of National Park Administration and people's website.

(4) The official website has set up three sections: "interactive message", "online interview" and "online live broadcast", which are used to publicize and disclose the construction of the National Park so as to facilitate the public to express their opinions, obtain information, and knowledge.

Through the "interactive message", the staff of the National Park Service can understand the information needs of visitors, answer their questions through the online message, and provide the information they need. According to the records of the website, five messages about the National Park have been answered in time.

The "live online" section provides visitors with a network entrance to the press conference. For example, at the regular press conference of the fourth quarter of 2019 held on October 10, 2019, the responsible administrative parties of the three national park system pilot areas introduced the relevant situation, the logo of Qilian Mountain National Park was released on October 17, 2019, and the press conference for the opening of the logo of northeast tiger and leopard National Park was held on July 11, 2018.

(5) According to the annual report of the State Forestry and grassland administration on government information disclosure in 2020, 55,553 pieces of government information will be released, including 85 official documents, 273 replies to proposals, and 3,960 administrative licensing results. 14 press conferences were held and broadcasted simultaneously; 91 applications for information disclosure from the public were received, of which 21 were e-mail applications, 84 were completed on time, and 7 were carried forward to the next year according to regulations, covering wildlife protection, nature reserve management, national park construction management, etc.

### 8.3.3 Pilot site level

**(1) Three-river Source National Park**

The following stakeholder participation activities have been carried out in the four pilot villages of GEF Three-River Source National Park project:

**Alternative sustainable livelihoods training**

From October 25 to 31, 2020, the project has carried out "hand weaving" alternative livelihood training in Hongqi village, with 30 participants, 100% of whom were women.

**Environmental education and training**

Three-river Source National Park Administration has entrusted Siyuan education vocational training school of Haixi prefecture to organize environmental education training in Niandu village of Zaduo County, Masai village of Zhiduo County, Hongqi village of Qumalai county and Chaze village of Maduo County in Three-River Source National Park pilot area from August 20 to 31, 2020.

* Time: August 20-31, 2020, 12 days in total
* Venue: Chaze village, management committee of Yellow River Source Park, Niandu village, management committee of Mekong River Source Park, Masai village, Zhiduo Management Office of Yangtze River Source Park, Hongqi village, Qumalai Management Office of Yangtze River Source Park.
* Training contents: environmental education, garbage sorting, ecological resource protection, and environmental monitoring in the pilot area of Three-River Source National Park.
* Training personnel: ecological management and protection personnel (herdsmen) in four demonstration villages (about 100 people), and relevant park management personnel and technical personnel (24 people), a total of 124 people.
* Training methods and schedule: the expert group trained in the pilot villages, each pilot village training for three days (including the distance), a total of 12 days.
* Training expert member: One National Park ecological protection expert; one national park environmental education expert.
* Training requirements: (1) all relevant units should actively organize the ecological management and protection personnel of pilot villages to participate in the training, and all the pilot mobilizers should participate in the whole process; and (2) the training institution is required to carefully prepare the training plan, carry out the training in accordance with the contract, strictly implement the daily attendance system, carefully fill in the training evaluation form after the training, and bind all training materials into volumes, submitting them to the Administration for filing.

**Franchising with participation of enterprises (source area of Mekong River)**

Due to the situation of pandemic prevention and control, the Mekong River Source Management Committee decided to divide the franchise of the pilot area of Niandu village, Angsai Township, Mekong River Source Park in 2020 into two projects, which will be implemented at the end of the year.

**Ecological experience demonstration skills training project in Niandu village, Angsai Township**

The Management Committee of Mekong River Source Park has entrusted Beijing Haidian District Shanshui nature conservation center to be responsible for the training project of ecological experience demonstration skills in Niandu village, Angsai Township, which is a pilot project of UNDP-GEF Three-river Source National Park. The training personnel include 60 ecological public welfare administrators and 21 families of public welfare administrators.

Through this training, herdsmen are more aware of the importance of ecological protection and local residents' sense of responsibility and consciousness of ecological protection is enhanced.

**Ecological experience reception supporting facilities procurement project**

On January 26, 2021, the pilot project of UNDP-GEF Three-river Source National Park purchased ecological experience reception facilities. After the equipment is put into place, it will play an important role in publicizing the concept of National Park protection.

**Study on human animal conflict management**

From mid-October to mid-November 2020, three expert groups completed the study of construction pilot projects in the national park. These groups are: the research group of School of economics and management, Beijing Forestry University; the research group of ecological environmental impact and countermeasures of hydropower and mines in national nature reserves (which is comprised of Chengdu University of science and technology and General Institute of water resources and hydropower); and the by Ziyangtianxia (Beijing) Consulting Co., Ltd.

The staff of GEF project supported the research work and assisted them to complete the research work successfully.

**(2) The Giant Panda National Park**

**Environmental education and training**

In September 2020, the project carried out a questionnaire survey on environmental education and training in the pilot villages of giant panda National Park. A total of 176 people participated in the survey. From September 22 to September 26, 2020, the project trained the villagers in the pilot villages, and organized the villagers to discuss, share and record the environmental education sites and natural resources in groups. The total number of trainees was 344, including 158 males, accounting for 45.93%, and 186 females, accounting for the remaining 54.07%. The project encourages villagers to sign up to join the volunteer teams in environmental education and training. As of December 2020, 155 people from five villages have joined the volunteer guard team. Based on the previous research work, the project compiled environmental education introductory manuals for the pilot villages of Giant Panda National Park. Each village has a corresponding version of the environmental education manual. The total printing volume is 1,500 copies, and each pilot village will print 300 copies for distribution.

**Alternative sustainable livelihoods training**

The project team assessed the livelihood status of the pilot villages through questionnaires and household interviews. In doing so, they were able to collect information for alternative livelihood training content and development strategy planning. The project team also collected data and files from local management units, village branch committees and forestry management departments. The first training ran from September 21 to September 25, 2020. 378 people from five administrative villages were trained. The training team focused on the village resource analysis, community resource map, cooperative cultivation (law, product, market, Finance) and seasonal tourism design.

From November 4 to 8, 2020, the project carried out the second training on sustainable alternative livelihoods in the pilot villages, and the number of direct beneficiaries of this training reached 288. There were 142 males and 146 females. Women accounted for more than half of the participants, which reflected the ability and conditions of women's participation in village governance and ensured women's right to participate.

### 8.3.4 Other Planned Participation Activities

In 2021, the planned stakeholder activities in Niandu village, Angsai Township, Mekong River Source Park pilot area (i.e., of UNDP-GEF Three-river Source National Park) are as follows:

1. Organize the ecological experience households of Niandu village in Angsai township to visit other pilot areas and exchange and study.
2. Organize and carry out training on human animal conflict and other insurance claims, to ensure that local communities understand the procedures, scope and system of insurance claims settlement to reduce their own losses.
3. Publication of a micro documentary on biodiversity which tells the story of species occurring in different ecosystems and shows the rich biodiversity of the ecosystem and the relationship between human and nature.

## 8.4 Stakeholder Mapping

The person in charge of the project execution department and the local focal point employed by the project shall undertake stakeholder analysis, and shall constantly update the content according to the available information. There is no specific work schedule for this element, but the local person in charge of the project should always pay attention to the participation of stakeholders throughout project implementation.

A key objective at this stage is to begin to identify stakeholders who may have a strong interest in or ability to influence what is being planned, including potential groups who may benefit from the project, those who may also be adversely impacted, and groups potentially opposed to the planned interventions. Initial analysis would thus focus on identifying and consulting with representatives of likely stakeholder groups, such as regional or national associations, unions, ethnic minority people networks, local and national NGOs, etc.

Key stakeholders in the ESIA process for C-PAR1 include the National Park Administration, the Three-River Source National Park Management Agency, the Giant Panda National Park Management Agency, the Xianju National Park Management Agency, local governments, communities (many of which are comprised of ethnic minorities), and NGOs. Stakeholders are divided below into classifications as governmental and non-governmental. Each of these classifications is analyzed independently with a brief consideration of possible baseline perspectives of each of the listed stakeholder groups.

### 8.4.1 Governmental Stakeholders

**(1) National Park** **Administration (NPA)**

In March 2018, the central government provided for the formation of the National Forestry and Grassland Administration, with the addition of the National Parks Administration. The NPA is responsible for the unified management of national parks and provides top-level design for the management of national parks while a national park management agency is set up for each national park to carry out specific management.

In terms of project roles, as the owner of natural resource assets, the NPA is not only the formulator of national park policies, but also plays a central role in leading and coordinating among national park stakeholders.

The main concerns of NPA stem from the difficulty of reconciling interests with local government. The purpose of establishing National Parks is to protect the authenticity and integrity of natural resources. Therefore, the establishment of National Parks will inevitably restrict the development of certain local resource-consuming industries, thereby limiting local socio-economic development to some degree. As a result, local governments are often not very motivated to participate.

**(2) Local governments of three provincial pilot demonstrations**

The NPs will be established through consolidating existing nature reserves and placing previously non‐protected areas under protection. The subnational government agencies in these jurisdictions will be responsible for administering the establishment of the NPs.

In terms of roles in the project, the provincial, county, township and village government units will be key partners during project implementation. Representative subnational officials from the three NP pilots are proposed to be members of the project steering committee. Project activities will be closely coordinated with local government units.

The National Park pilot areas are vast. Taking the Giant Panda National Park as an example, nearly 120,000 people were included in the pilot area. The main concerns of local governments stem from two aspects: firstly, the establishment of national parks will restrict the development of local mining, quarrying and other traditional industries, and restrict the construction of roads and other infrastructure; secondly, the development and economic rights of communities may be damaged.

**(3) Local National Park Management Agency (LNPMA)**

Local National Park Management Agency (LNPMA) including the Three-River Source National Park Management Agency, Sichuan Forestry Department, and Xianju National Park Management Committee.

**(4) Three-River Source National Park Management Agency**

In terms of mandates, the Three-River Source National Park (TRS NP) Management Agency has been established under the Qinghai Provincial Government as the agency responsible for management of the Three-River Source NP.

In terms of roles in this project, The TRS NP Management Agency will be a member of the Project Steering Committee. Through a contractual arrangement with FECO, the TRS NP Management Agency will be responsible for implementation of project activities under Component 2 designed for the TRS NP.

**(5) Sichuan Forestry Department**

The Sichuan Forestry Department (SFD) is mandated to implement State principles, policies, laws, and rules concerning the improvement of forest resources of Sichuan Province. The SFD also drafts forestry regulations and is responsible for enforcement. The SFD is responsible for establishing and managing nature reserves, forest parks and wetland parks for protection of forest and wetland ecosystems. As more than 80% of the Giant Panda National Park is situated within Sichuan Province, the SFD is the leading provincial agency with respect to design and management of the NP.

In terms of roles in this project, the Sichuan Forestry Department will be a member of the Project Steering Committee. Through a contractual arrangement with FECO, the Sichuan Forestry Department will be responsible for implementation of project activities under Component 2 designed for the Giant Panda NP. The Sichuan Forestry Department will also be responsible for facilitating coordination with the Gansu and Shaanxi provincial forestry departments for inter‐provincial project activities.

**(6) Xianju National Park Management Committee**

The Xianju National Park Management Committee has been established under the Xianju County Government as the body responsible for management of the Xianju NP.

In terms of roles in this project, the Xianju Management Committee will be a member of the Project Steering Committee. Through a contractual arrangement with FECO, the Xianju Management Committee will be responsible for implementation of project activities under Component 2 designed for the Xianju NP.

The main concerns of LNPMA stem from the lack of clarity in the management system for the construction of national parks, which has led to a slow process of piloting the construction of NP and an inability to effectively coordinate the (at times conflicting) interests of conservation and regional development respectively. The current NP management system cannot effectively mobilize the enthusiasm of local participation, and the unclear management system also limits the efficiency of local governments coordinated protection and development. In addition, LNPMA will also face the pressure of local economic development. On the one hand, the strictest protection of NP will restrict local economic development and cause conflicts between local governments and LNPMA. On the other hand, the dependence of local extensive economic development methods on resources and the demand for infrastructure construction are constantly increasing, and pollution emissions from economic development may increase.

### 8.4.2 Non-Government stakeholders

**(1) Local communities**

The local communities within the NPs are concerned with improving their own economic standard of living, but also with maintaining their social and cultural well-being. Their lifestyles and cultures are already integrated with the physical geography, they have a deep understanding of the natural conditions within the NP and are closely connected to it. As a result, local community residents are also key participants in the management of the NP.

Specifically, the local residents can be divided into two categories, one is the surrounding residents within the scope of the National Park pilot construction, the other is the villagers of the pilot villages selected by the GEF project. The project selected three national park construction pilot projects in China, namely: Three-river Source National Park, giant panda National Park and Xianju National Park. The pilot projects of these three national parks have been introduced in detail earlier in this report and will not be repeated here. The residents in and around the three national parks are particularly important stakeholders. In the GEF project, four pilot villages around the National Park have been selected as the objects of activities and evaluation. The villagers of the four pilot villages are also very important stakeholders, including Chaze village of the Management Committee of Yellow River Source Park, Niandu village of the Management Committee of Mekong River Source Park, Masai village of Zhiduo Management Office of Yangtze River Source Park, and Hongqi village of Qumalai Management Office of Yangtze River Source Park.

In terms of mandates, the local communities where project interventions are planned are among the key beneficiaries of the project as well as playing a central role in attracting participation of local people and promoting local economic and sector development. The opinions of local communities are vital in developing appropriate alternative livelihoods for local people and thus are potential partners for demonstration.

In terms of roles in this project, the local communities will participate in collaborative PA management arrangements, receive specific training, be involved in sustainable alternative demonstrations, and encouraged to be actively involved in the NP.

The social impact of NP and C-PAR1 activities on the community is differentiated across the local population. The establishment of NPs may have a negative impact on the livelihoods of farmers at lower income levels, as reflected in the increased intensity of protection and restrictions on community access to natural resources, including grazing, medicine digging and wild plant collection, which is also a main source of livelihood for poor farmers.

For communities within and around the NPs, the main social impacts caused by the establishment of national parks are also differentiated depending on their own circumstances. The internal communities bear the main negative social impact, as the establishment of national parks can potentially impose restrictions on the use of resources in the area, while the negative impact is not as significant for the surrounding communities. The main tourism infrastructure of the NP has been built in the surrounding communities, thus the impact of the NP establishment on the surrounding communities has been mostly positive from a socioeconomic standpoint.

In the project, special attention should be paid to the vulnerable groups in the local community, such as women, the elderly, children, the disabled, etc. Women, the elderly, children, the disabled and other vulnerable groups may lack production skills and have more difficulty to adapt to changes in their socioeconomic situation.

According to the feedback from the local focal point of the project, there are 5,771 villagers in the four villages of Three-River Resource National Park, all of whom are Tibetan, and the common language is Tibetan. In the four villages of the giant panda National Park, ethnic minorities account for only 5%, about 120 people, including Tibetan, Qiang, Yi, Hui and other nationalities. Both villages in Xianju National Park are predominantly Han villagers. According to the preliminary investigation report, the villagers of Giant Panda National Park and Xianju National Park can speak Mandarin, and there is no significant language barrier in information exchange. But there are more than 5000 Tibetan villagers living in Three-River Resource National Park. They generally cannot proficiently speak Mandarin. Therefore, the implementation of the project must pay attention to the language of the stakeholders. Tibetan should be the main language for activities in Three-River Resource National Park. In addition, the elderly are also stakeholders that need to be focused on. According to the environmental education report of the Giant Panda National Park, the average age of the villagers in the pilot villages (or potential pilot villages) in the Giant Panda National Park area is between 49 and 60 years old, and less than 10% of the villagers are under 30 years old and over 20 years old.

**(2) GEF Agency and UNDP**

The UNDP has had a resident office in China for many years, providing a broad spectrum of development assistance, including sustainable management of natural resources, governance, gender equality, and the rule of law.

In terms of roles in this project, the UNDP is the GEF Agency for the project and the C‐PAR Program Coordination Agency. UNDP will be the Senior Supplier on the Project and Program Steering Committees. The UNDP Country Office will provide administrative and strategic guidance to the project, and support procurement processes, including for international sourced goods and services. The UNDP‐GEF Regional Technical Advisor based at the Regional Hub for Asia and the Pacific will provide strategic technical assistance and project assurance. UNDP is also one of the co-financing partners on the project.

The main concerns of GEF stem from the possible negative environmental impacts of project activities, including infrastructure activities brought about by supporting funds that will have negative impacts on the environment. In addition, concerns exist that the main project activities cannot significantly improve community livelihoods and reduce dependence on resources.

## 8.5 Stakeholder Engagement Plan (See ESMP)

The Stakeholder Engagement Plan provides a roadmap for stakeholders and project implementers as to when, how and with whom consultations and exchanges should be undertaken throughout the life of the project. The Stakeholder Engagement Plan can help the decision-makers of national park construction projects to achieve the goal of ecological protection while ensuring that the rights of stakeholders are not infringed.

The goal is to enable all stakeholders to participate in the whole process of decision-making, and ultimately reach an agreed decision-making result and through multi-channel information disclosure, full and effective consultation, full expression of public opinion and other participation activities.

A detailed Stakeholder Engagement Plan is provided in Chapter 7 of the ESMP produced as an ancillary document to this ESIA.

## 8.6 Timetable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Time** | **Activity** | **Place** | **Stakeholder** | **Remarks** |
| 2021.06-2021.07 | Organize and carry out environmental education and animal conflict insurance claims related training | Niandu village, Angsai Township | All the villagers | Two training sessions, once a month. |
| 2021.07-2021.08 | Organize the ecological experience households of Niandu village in Angsai township to visit and exchange with other pilot areas | Other pilot areas | Ecological experience households in Niandu village of Angsai Township and farmers in other pilot areas | - |
| 2021.09-2021.10 | Purchase technical equipment and carry out technical training | Pilot villages | All the villagers | Two training sessions, once a month |
| 2021.08-2021.12 | Development of "human animal conflict" Guide | - | Project leader, relevant scholars and research team, villagers of pilot villages | - |
| 2022.02-2022.06 | Carry out the distribution and education of the guide to "human animal conflict" | Pilot villages | Local propagandists, villagers | The combination of small-scale centralized publicity and household publicity is adopted. |
| 2021.10-2021.12  2022.05-2022.07 | Make a micro documentary on biodiversity and broadcast it on local TV station | National Park pilot area | Residents of National Park pilot areas | The period is six months, divided into two periods. |
| 2022.08-2022.12 | Public opinion survey and interview | Pilot villages | Ecological researcher, villager | Complete a survey and interview of pilot villages every month, the sample size is not less than 20%. |
| 2023.01-2023.06 | Establish tourism partnership with related enterprises and sign franchise contract | National Park pilot area | Local enterprises, local national park management agencies, GEF project agencies | - |
| 2023.07-2023.12 | Training activities on sustainable alternative livelihoods | Pilot villages | All the villagers | A total of three training activities, once a month, focus on the participation of women and the elderly. |
| 2024.01-2024.06 | Environmental education and publicity in local schools | Primary and secondary schools in pilot areas | Local students | A total of three activities, once a month. |
| 2024.07-2024.12 | Carry out ecotourism publicity activities | Pilot villages | Villager | There are four publicity activities, one in each village. |

## 8.8 Grievance Mechanism

The appeal mechanism is divided into direct and indirect appeals. An overview of the process can be seen in Table 8.

### 8.8.1 Methods of Receiving Feedback and Maintaining Communication

It is necessary to establish a channel to receive feedback from stakeholders for the implementation of policies and projects. Generally, after the relevant stakeholders participate in the activities, the experience and feelings of the participants can be recorded on the spot, as well as encouraging participants to put forward suggestions for future improvements.

Establishing a daily and continuous communication mechanism will play an important role. The official websites of National Park Administration and pilot national parks have set up an interactive message platform. The website also provides the telephone number, mailing address and email address of the organization.

Taking the giant panda National Park as an example, a "director's mailbox" is set up on its website. The public can feed back their opinions to the leaders of the Giant Panda National Park Administration by submitting information and letters, and the staff will also reply in a centralized way. At the same time, the website also provides a report telephone to accept the reports of violations related to Giant Panda National Park. These channels can play a certain role, but the residents of the pilot villages in remote areas rarely visit the National Park website due to limitations on internet accessibility. Therefore, it is necessary to establish feedback channels suitable for local farmers and herdsmen. The feasible methods are as follows:

* Set up a special line for residents' feedback to receive their opinions at any time;
* Set up a message box in the local management organization to receive anonymous feedback from residents;
* Set up a communication coordinator in the village to collect villagers' opinions and feed back to the National Park Management Agency and GEF project agency.

### 8.8.2 Direct Appeal Process

Local community residents can reflect their dissatisfaction and demands to the local management organization by dialing the complaint telephone number, writing complaint letters, and making direct in person complaints. The staff of the organization will directly accept the complaints and submit them to the leaders of the organization. The management of the institution will discuss and determine the appropriate person in charge and alternative solutions through internal meetings, and then the person in charge will communicate with the complainants and convey the proposed solutions. If the complainants choose to accept the proposed solution, the complaint will be solved. If the complainants choose to refuse the proposed solution, the agency will report the complaint to the higher authorities.

### 8.8.3 Indirect Appeal Process

The complainants can express their dissatisfaction and appeal to the community coordinator. After receiving a complaint, the community coordinator should first consider resolving the complaint through communication and consultation at the community level. If the community coordinator finds that the complaint cannot be solved through the communication within the community, he needs to inform the local government agencies of the complaint in a timely manner. Finally, the community coordinator acts as the intermediary, the government agencies and the complainants solve the complaints with the help of the community coordinator and meet or compensate the reasonable demands of the complainants.

**Table 8 Grievance Redress Mechanism Overview**

|  |  |  |  |
| --- | --- | --- | --- |
| Mechanism for filing complaints by communities in and around protected areas | Goal | Main responsible organizations | Time |
| Step 1: provide contact information of the protected areas and a description of how to file a complaint to communities that are affected by the project | Enable affected communities to access project information and resolve any complaints as soon as possible | Project implementation unit | Immediately effective after the meeting |
| Step 2: The affected stakeholder submits a complaint to the PA administration. Complaints can be made by phone and recorded by the telephone operator. Complaints can be made in minority language and a community liaison officer will translate the content into Mandarin. | Give every stakeholder, regardless of gender, ethnicity, literacy (or lack thereof), a fair chance to appeal | Project implementation unit | Any time during project implementation |
| Step 3: the PA administration responds to the complainant and forwards the response to the project office | Guarantee the complainant's right for consideration | Project implementation unit | Complaints received within 15 business days |
| Step 4: if the complainant is not satisfied with the response from the PA administration, they can submit a second appeal to the project office |  | Project office | Response received within 7 business days |
| Step 5: project office responds to the complainant and forwards the response to the PA administration and UNDP | Guarantee the complainant's right for reconsideration | Project office | Complaints received within 15 business days |
| Step 6: if the complainant is not satisfied with the response from the project office, then they can submit a third appeal to UNDP for another reconsideration |  | UNDP | Response received within 7 business days |
| Step 7: UNDP gives a final response to the complainant and forwards the response to the project office and the reserve administration |  | UNDP | Received reconsideration within 7 business days |

## 8.9 Monitoring and Reporting

Details regarding the required monitoring and reporting of E&S mitigation/,management measures for this project are included in the ESMP document.

# 9.Conclusion and Discussion

The CPAR1 project aims to establish a national park system, strengthen the provincial-level national park/protected area system and realize program coordination and knowledge management. For C-PAR1, the screenings conducted during project development indicate that three of the nine social and environmental principles and standards have been triggered due to ‘high’ risks. In accordance with UNDP’s SES policy, High Risk projects require comprehensive forms of assessment.

The C-PAR1 ESIA report first outlines national legislation, policies and regulations, international agreements and treaties and UNDP’s social and environmental standards that are relevant to the project. Several gaps still do exist within the national regulatory framework, including lack of comprehensive and specific law for PAs, outdated legislative concepts, low level of legislation authority, contradiction of laws and under-consideration of ecological principles.

Baseline data has been collected and collated relating to the ecological environment, species, and habitat quality from Local Government Environmental Protection Bureau and the National Park Service and conducted community surveys and stakeholder engagement interviews on the potential social impacts. Social risks are assessed from the aspects of affected groups/communities, ethnic minorities, land tenure system, economic displacement and access restriction, livelihoods, cultural heritage, gender discrimination, community health and safety and supply chains. Environmental risks are assessed from the aspects of threats to conservation of biodiversity/natural habitats, climate change, water flows, pollution and discharges of waste. In general, high risks arise from the potential for economic displacement and access restriction in certain core conservation areas of the relevant three NP sites. Moderate risks arise from the increases in the occurrence of human-wildlife conflict, the shift from traditional livelihoods (animal husbandry and subsistence farming), the loss of traditional cultural heritage and practices, unintentional of damage critical or sensitive habitats and ecosystems and climate change.

In order to avoid or mitigate the potential negative environmental and social impacts, recommendations are as follows. Firstly, alternatives may be identified for proposed activities including pilot site selection, making use of existing buildings and infrastructure, establishing invisible boundary pillars, and developing eco-tourism. Secondly, social mitigation and management measures include strengthening the management of Human-Wildlife Conflict, strengthen the protection and conservation of cultural heritage, and enhancing gender mainstreaming. Environmental mitigation and management measures include controlling the scale of ecotourism, systematically including climate change impact planning in decision-making, management of air quality, noise and vibration and traffic-related issues associated with NP infrastructure development. Finally, this report makes detailed Stakeholder Engagement and Monitoring/Reporting Plans. the regulations and standards require the relevant stakeholders’ active participation, and a grievance redress mechanism.

# Appendices

## Appendix 1: UNDP SES Compliance Commitment



## Appendix 2: Stakeholder Engagement Methodology

1. **Stakeholder engagement methodology**

The main methods used for stakeholder participation are participatory seminars, interviews and questionnaire surveys.

Participatory interviews are carried out at the community level, of which participants include a member of local government, a member of the NP management agency, a village cadre, three villagers, a project expert and a project coordinator. The main issues concerned are 1) the local residents' understanding of GEF projects and NP construction, channels to obtain information as well as their attitudes and main concerns towards NP; 2) Whether they will be affected by the project and the establishment of NP, and, if so, what are the possible effects and the potential impacts on their well-being (positive, negative, no impact or unclear); 3) What management methods or measures can be taken to reduce or eliminate possible negative social impacts; 4) Possible policy demands, including eco-compensation, management of animal human conflicts, ecological migration, returning farmland to forests, industrial development, etc.

A questionnaire survey on community residents is carried out in the target villages. The questions include residents’ attitudes towards protection, utilization of natural resources, the relationship between protection and development, the impacts on well-being and policy demands to mitigate negative social impacts.

**2. List of stakeholders consulted**

* Administrative staff member of NP (one member in each NP):
  + Li Dongliang (Three-River Source National Park Pilot Office) Wechat
  + Liu Can (Xianju National Park Management Committee) Wechat
  + Liu Yuan (Giant Panda National Park, Sichuan Project Office) Wechat
* NGO representative, Exiang Awang
* Village cadre and villager representatives:
  + Fu Zhengquan, Committee Member of Disciplinary Inspection in Yanfeng Village, Sichuan Province, 13540322800
  + Yi Daqing, Accountant in Lianhe Village, Sichuan Province, 13547945292
  + Yang Ping, Secretary in Caojia Village, Sichuan Province, 18188451150
* Scientific research institution
  + Zheng Weichao (Sichuan Giant Panda Academy) Wechat
* Community members come from the villages for project interventions, face to face interview

**3. List of documents consulted**

1. Master Plan of Three-River Source National Park (Pilot Site)
2. Community Development and Infrastructure Construction Plan of Three-River Source National Park
3. Special Plan for Ecological Experience and Environmental Education for Three-River Source National Park
4. Management Plan for Three-River Source National Park
5. Master Plan for Giant Panda National Park (Pilot Site)
6. Management Plan for Giant Panda National Park
7. Master Plan for Xianju National Park

## Appendix 3: C-PAR1 SESP

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| ***Project Information*** |  |
| 1. Project Title | China’s Protected Area Reform (C-PAR) for Conserving Globally Significant Biodiversity  (China’s Protected Areas System Reform – Child Project #1 (CPAR1)) |
| 1. Project Number | PIMS 5688 |
| 1. Location (Global/Region/Country) | People’s Republic of China |

**Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability**

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| **QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?** |
| ***Briefly describe in the space below how the Project mainstreams the human-rights based approach*** |
| A human rights based approach is about empowering people to know and claim their rights and increasing the ability and accountability of individuals and institutions who are responsible for respecting, protecting and fulfilling rights. The project will achieve integration of human-rights based approaches through its main objective: “*Establish an effective National Park System through protected area reform and institutional innovation, increasing coverage of protected areas and improving effectiveness of PA management for conservation of globally significant biodiversity*”. Conservation of biodiversity for current and future generations by its nature secures fundamental human rights.  Component 1 will support the Government reform process of the national protected area (PA) system, particularly the national park (NP) system, which is envisaged by the central government to act as the cornerstone for the national PA system. The project will provide support to the process by establishing effective governance and legal frameworks for the national PA system, harmonized an effective national system for selecting, designing, managing and monitoring various types of PAs. Human-rights based approaches will be mainstreamed by ensuring transparent selection, planning and monitoring procedure for different types of PAs under the new framework, as well as ensuring a legal framework that provides for various forms of collaborative management of PAs and natural resources.  Component 2 will bring about expansion of the national PA system by 2 million ha, an increase in environmental sensitive areas (ESA) and capacity building for biodiversity mainstreaming in development and sector planning. Human-rights approaches will be mainstreamed by establishing clear safeguards for project operation to ensure protected area expansion or ESA designation of an area do not infringe on human rights of both men and women and of different ethnicity. Local community consent and participation will be assured for PA or ESA planning, designation and management.  Under Component 3 the requisite enabling conditions for sustaining the project results will be strengthened through targeted knowledge management, monitoring & evaluation, and gender mainstreaming and social inclusion. The project is also designed to strengthen the environmental management capacities of the provincial level conservation agencies, other provincial sectors, local governments, the civil society, and community groups  Inclusive consultations during the project preparation phase with local communities, local governments, civil society, and provincial agencies have socialized the key stakeholders to the proposed interventions.  The overall implementation plan for the national park (NP) system that was released in September 2017 indicates that local communities situated with key conservation zones will be gradually resettled and collectively held land normatively transferred through leasing, land exchange, and other approaches. The CPAR1 project, which is also serving as the platform for coordination of the C-PAR program, is well positioned to assist the governmental partners in implementing these envisaged actions according to human rights related standards and practices according to national and international laws, through participatory community consultations, demonstration of collaborative management arrangements that involve local communities in the management of the protected areas, and development of sustainable alternative livelihood opportunities.  The CPAR1 project will have a grievance redress mechanism which will enable project-affected people to raise concerns or grievances, consistent with the accountability and rule of law human rights principle. This will be detailed in the ESMP. |
| ***Briefly describe in the space below how the Project is likely to improve gender equality and women’s empowerment*** |
| At the project level, a gender mainstreaming plan has been developed to guide the gender mainstreaming process during project implementation. Specific gender roles have been integrated into the project and programme level implementation arrangements, including but not limited to the following:   1. The Project Manager will appoint a gender focal point in the PMO who will implement and monitor the project level gender mainstreaming plan and support project focal points at PA Administration and site levels to mainstream gender into all project activities. 2. The three NP project pilot sites will each designate a staff member as a gender focal point who will assist in the implementation of the gender mainstreaming plan and support the project-recruited gender experts. 3. Project-recruited gender experts will support the project with gender training, monitoring & evaluation of site activities, and consultations with local communities. 4. The gender mainstreaming objectives for the project will be championed and monitored by the project-recruited gender experts and the project gender focal points, with back-up from the UNDP country office gender experts.   During the project preparation phase, consultations were made with local communities, as well as representatives provincial government agencies and civil society organizations. The project results framework contains measurable indicators related to gender equality and women’s empowerment; an ATLAS gender marker of 2 has been applied to the project. For example, a target of 40% women representation among direct project beneficiaries has been applied in the project design, e.g., local collaborative management committees should have at least 40% women members. Sustainable alternative livelihoods will be developed that facilitate equitable participation by women. Gender and social inclusion training will be mandatory for project implementation staff and service providers, and resources have been allocated to monitor and evaluate socioeconomic benefits as part of the ESMP, which will be developed during project inception after the ESIA is complete. Gender aspects will also be included in the ESIA and the gender action plan will be updated accordingly. Moreover, knowledge products will be developed and disseminated according to the literacy and cultural circumstances of the local project communities, to ensure equitable gender and social inclusion. |
| ***Briefly describe in the space below how the Project mainstreams environmental sustainability*** |
| Environmental sustainability is inherent in this project objective and outcomes. Under Component 1, the project will endeavor to ensure sustainability of the project outcomes through supporting the national PA reform process backed by reform laws, regulations, and guidelines, and through expanding coverage of Key Biodiversity Areas (KBAs) and increasing connectivity within the national PA system. Under Component 2, the establishment of the NP system will be enhanced through pilot development, largely focusing on strengthening community participation in natural resource management, with the goal of achieving mutually beneficial conservation and socioeconomic outcomes, along the poverty-environment nexus and consistent with the precautionary principle in biodiversity conservation and natural resource management, i.e., respecting priorities of both conservation and sustainable development. The project will support NP pilot development for 3 of the NP pilots, including the Three Rivers Source NP, the Giant Panda NP, and the Xianju Provincial Park. The Three Rivers Source NP covers a vast area, covering 120,000 km2 in Qinghai Province, and is situated within the headwaters of three of the major rivers in China (and Asia): Yangtze River, Yellow River, and Mekong River. The proposed Giant Panda NP will consolidate more than 70 individual nature reserves in three provinces (Sichuan, Gansu, and Shaanxi), and will cover more than 27,000 km2, with more than 20,000 km2 in Sichuan province. Through establishment of the Giant Panda NP, approximately 85% of giant panda habitat will be protected. The Xianju Provincial Park covers approximately 302 km2 in the southeast part of Zhejiang County, and consolidates four unique protected areas, specifically the Xianju National Resort, Xianju National Forest Park, the Kuocang Mountain Provincial Nature Reserve, and the Shenxianju Provincial Geologic Park.  Under Component 3 the requisite enabling conditions for sustaining the project results will be strengthened through targeted knowledge management, monitoring & evaluation, and gender mainstreaming and social inclusion. The project is also designed to strengthen the environmental management capacities of the provincial level conservation agencies, other provincial sectors, local governments, the civil society, and community groups.  Consistent with the overarching C-PAR program, this project is closely aligned with the ecological conservation objectives outlined in the 13th Five-Year Plan for Economic and Social Development of the People’s Republic of China (2016-2020), which further mainstreams the principle of eco-civilization into the socioeconomic development priorities for the country; the National Biodiversity Strategy and Action Plan (NBSAP) for 2011-2030; the Aichi targets under the UN Convention on Biological Diversity; and the UN Development Assistance Framework (UNDAF) for China, specifically Priority Area No. 2: “*Improved and Sustainable Environment*”, Outcome 2: “*More people enjoy a cleaner, healthier and safer environment as a result of improved environmental protection and sustainable green growth*”. The project also contributes towards achievement of the UN Sustainable Development Goals for China, specifically Goal 15: “*Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*”. |

**Part B. Identifying and Managing Social and Environmental Risks**

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| **QUESTION 2: What are the Potential Social and Environmental Risks?** | **QUESTION 3: What is the level of significance of the potential social and environmental risks?**  *Note: Respond to Questions 4 and 5 below before proceeding to Question 6* | | | | **QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?** |
| ***Risk Description*** | ***Impact and Probability (1-5)*** | ***Significance***  ***(Low, Moderate, High)*** | ***Comments*** | | ***Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.*** |
| **Risk 1: Local communities (including ethnic minorities) living in key conservation zones of NP pilots could be gradually resettled. Voluntary resettlement is proposed in the zoning plan for Giant Panda NP pilot and in the draft master plan for Three Rivers Source NP pilot.**  *Standard 5: Displacement and Resettlement:*  *5.1. Would the potential outcomes of the Project potentially involve temporary or permanent and full or partial physical displacement?*  *5.4. Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?*  *Standard 6: Indigenous Peoples:*  *6.6. Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?* | I = 4  P = 4 | **High** | The implementation plan issued by the government of China in September 2017 for the national park (NP) system indicates that “in key conservation zones, local communities should be gradually resettled and collectively held land should be normatively transferred through leasing, land exchange, and other approaches based on full solicitation with owners and users”. For this project there are two demonstration sites where resettlement could occur: Giant Panda NP pilot and Three River Source NP Pilot. As the NP system remains in pilot phase, there is a level of uncertainty on how this will be achieved and over what timeframes. Current estimates are:  Giant Panda NP: Based on information gathered during the PPG phase, there are approximately 170,000 people living in the Sichuan section of the proposed NP, but most of these are within a zone referred to as “traditional use”, where resettlement is not planned. There are about 6,000 people living in the delineated core zone and, of which, 200 households have been identified for voluntary resettlement by 2020. Many of the households in the core conservation zone are comprised of ethnic minorities. The Gansu section of the NP covers about 567 km2, and according to a draft zoning plan, some 2309 people are likely to be affected, with voluntary resettlement proposed for those in the core zone, with the option of remaining and undertaking compatible livelihood activities.  Three River Source NP: According to the draft master plan (29 November 2017) for the Three Rivers Source NP, there are an estimated 64,600 people living in the core conservation zone, and most of these residents are of Tibetan ethnic minority. As outlined in the draft master plan, this population will be gradually decreased by 2020 and further by 2025 through voluntary migration and is expected to reach a stable level by 2035. The remaining inhabitants are expected to be largely local herders who will be involved in NP management through collaborative arrangements.  Resettlement could impact on ethnic minorities living in the core zones (see Risk 3). | | Based on initial assessments, an environmental and social management framework (ESMF) has been prepared during the PPG phase to put in place measures for the management of the project’s social and environmental risks.  In accordance with the ESMF, an environmental and social impact assessment (ESIA) will be carried out at project inception to assess this and all other environmental and social risks, followed by a subsequent environmental and social management plan (ESMP). Free and Prior Informed Consent (FPIC) must be applied throughout the ESIA/ESMP; no relocation will take place without FPIC. Further information regarding the approved national park, including the master plan, are expected to be available at project inception. The ESIA process will draw upon this information to assess the associated impacts, and to inform the specific management measures outlined in the ensuing ESMP and standalone Resettlement Action Plan(s) if required.  Indicative community level activities for the three NP pilot sites are designed to enhance the inherent linkages between the local communities and conservation objectives.  Involuntary resettlement is not planned under the ongoing establishment of the NP system in China and will not be supported by this project.  Resettlement is associated with government co-financing. GEF funds will not be used to support resettlement. |
| **Risk 2: Communities in the project area (including ethnic minorities) could face economic displacement, changes to land rights and/or restricted access to resources because of the expansion of the NP system and stronger/new NP regulations. These impacts could impact women differently than men.**  *Principle 1: Human Rights. question 3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?*  *Principle 2: Gender Equality and Women’s Empowerment. question 4: Would the Project potentially limit women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?*  *Standard 5: Displacement and Resettlement*  *5.2. Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation?*  *5.4. Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?*  *Standard 6: Indigenous Peoples:*  *6.6. Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?* | I = 4  P = 3 | **High** | Communities in the project area could face economic displacement because of the expansion of the NP system, e.g., through the loss of land use rights. Certain land use activities would likely be prohibited as part of the process of transferring collectively held land to the state, but the residents might be allowed to continue to live in their dwellings. These risks may apply to ethnic minorities (see Risk 3).  Local communities are widely socialized to living and working inside and near conservation areas in the provinces where the three NP project pilots are situated; including Gansu, Qinghai, Shaanxi, Sichuan, and Zhejiang provinces. The increasing integration of conservation and socioeconomic development priorities, both at the national and provincial level, has further reinforced the value of the protected area system in helping to secure long-term sustainability of the ecosystem goods and services that local communities are reliant upon. Awareness has been further bolstered through the widely publicized NP system being established. | | During the project preparation phase consultations with local communities, local government units, provincial government agencies, and civil society representatives have contributed to the design of project activities for the three NP pilot sites. Project activities are designed to increase awareness and capacities of local communities, to better enable them to adapt to possible economic displacement associated with the establishment of the NP system. For example, collaborative stewardship and PA management arrangements will be piloted, and alternative sustainable livelihood opportunities assessed and demonstrated.  Moreover, an environmental and social management framework (ESMF) has been prepared during the PPG phase as a guideline to the environmental and social impact assessment (ESIA) that will be carried out at project inception.  The ESIA process will further assess the possible socioeconomic impacts associated with the national park establishment, and management measures integrated into the project interventions, to ensure that local communities are duly informed and participate in key decisions. Free and Prior Informed Consent (FPIC) must be applied in line with the UNDP SES Guidance Note on Indigenous Peoples. The need for a stand-alone Livelihood Action Plan will be explored during the ESIA and addressed, as determined appropriate, in the ESMP.  There will also be a grievance redress mechanism put in place for project-affected communities to raise any grievances and for implementation partners to respond to accordingly. |
| **Risk 3: Expansion of the NP system has the potential to affect the rights, lands and livelihoods (e.g. potential economic displacement, reduced access to resources, resettlement) of ethnic minority populations within and adjacent to the NP pilots.**  *Standard 6: Indigenous Peoples, 6.1. Are indigenous peoples present in the Project area (including Project area of influence)?*  *6.3. Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?*  *6.6. Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?* | I = 4  P = 4 | **High** | The risks outlined above on resettlement and economic displacement linked to the establishment of the NP pilots could impact on ethnic minorities, as follows:  Three Rivers Source NP: According to the draft master plan (29 November 2017) for the Three Rivers Source NP, there are an estimated 64,600 people living in the core conservation zone, and most of these residents are of Tibetan ethnic minority. As outlined in the draft master plan, this population will be gradually decreased by 2020 and further by 2025 through voluntary migration, and is expected to reach a stable level by 2035. The remaining inhabitants are expected to be largely local herders who will be involved in NP management through collaborative arrangements.  Giant Panda NP: Based on information gathered during the PPG phase, there are approximately 170,000 people living in the Sichuan section of the proposed NP, but most of these are within a zone referred to as “traditional use”, where resettlement is not planned. There are about 6,000 people living in the delineated core zone and, of which, 200 households have been identified for voluntary resettlement by 2020. Many of the households in the core conservation zone are comprised of the ethnic minorities. The Gansu section of the NP covers about 567 km2, and according to a draft zoning plan, some 2309 people are likely to be affected, with voluntary resettlement proposed for those in the core zone, with the option of remaining and undertaking compatible livelihood activities. | | During the project preparation phase consultations were made with local communities, local government officials, the conservation agencies, other provincial government agencies, and the civil society representatives.  Additional consultations will be made as part of the ESIA, during which Free and Prior Informed Consent (FPIC) will be applied as necessary. Then management measures will be developed to ensure effective participation by local Tibetan and other ethnic minority communities. For example, facilitators that speak the local languages will support community engagement, key documents will be prepared in local languages, and communication and knowledge management techniques will be designed consistent with cultural norms and literacy circumstances.  These and all other necessary management measures will be detailed in the ESMP and stand-alone management plans for livelihoods, resettlement and/or indigenous peoples as required. |
| **Risk 4: Marginalized stakeholder groups, including women and ethnic minorities, could face barriers to full, meaningful participation in project activities (e.g. planned expansions) that could affect them negatively.**  *Principle 1: Human Rights, question 4. Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?*  *question 6. Is there a risk that rights-holders do not have the capacity to claim their rights?*  *Principle 2: Gender Equality and Women’s Empowerment, 2.2: Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?*  *Standard 6: Indigenous Peoples*  *6.1. Are indigenous peoples present in the Project area (including Project area of influence)?*  *6.4. Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?* | I = 3  P = 2 | **Moderate** | There are Tibetan and other ethnic minority communities living inside and near the proposed Three Rivers Source NP and the Giant Panda NP. The generally low literacy rates and gender disparities among ethnic minority communities do pose a risk that rights-holders do not have the capacity to claim their rights or that the project may exclude potentially affected stakeholders from fully participating in decisions that may affect them.  Literacy rates among Tibetan and other ethnic minority communities are considerably lower than average rates in the province. Also, there are large disparities between men and women in the patriarchal culture of most Tibetan communities. | | Consultations during the PPG phase have been supported by local experts and some interviews were held only with women. Tibetan (and other local language) speaking facilitators are also planned to support activities during project implementation. Knowledge products will be developed according to the literacy and cultural circumstances of the local project communities.  A gender analysis was undertaken and a Gender Action Plan developed, which will be implemented for the duration of the project. Gender and social inclusion training will be mandatory for project implementation staff and service providers, and resources have been allocated to monitor and evaluate socioeconomic benefits as part of the ESMP, which will be developed during project inception after the ESIA is completed.  Further community consultations will be required during project inception, as part of the ESIA, to ensure that ethnic minority communities are fully consulted and involved in development of all project interventions and plans at the target sites (with application of FPIC throughout). The ESMP will provide specific protocols for managing this continued involvement during project implementation, as well as monitoring, evaluation, and reporting, and project budget has been allocated for these purposes. |
| **Risk 5: Project appointed duty-bearers could lack the capacity to implement the project according to UNDP standards regarding human rights, public participation, gender mainstreaming and attention to social and environmental safeguards.**  *Principle 1: Human Rights, 1.5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?* | I = 3  P = 2 | **Moderate** | Provincial level duty-bearers generally have higher capacities than representatives at the county and township levels. Furthermore, there is a relatively high level of uncertainty regarding the regulatory and management arrangements of the national park system, compared to the current arrangements associated with nature reserves. | | Capacity needs assessments of the Three Rivers Source NP Administration, Sichuan Forestry Department (Giant Panda NP), and the Xianju Provincial Park Management Committee were undertaken during the project preparation phase, and trainings are planned during the implementation phase to enhance duty-bearers’ capacities.  Capacities will be further assessed as part of the ESIA, and specific management measures designed in the ESMP for ensuring that duty-bearers are capacitated to facilitate implementation of the project activities and to ensure that project results are sustained after GEF funding ceases. |
| **Risk 6: There are large disparities between men and women in the patriarchal culture of most Tibetan communities in and around the project sites that could potentially be reproduced by project activities, limiting engagement and involvement of women in project implementation.**  *Principle 2: Gender Equality and Women’s Empowerment, question 2: Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?*  *Question 4: Would the Project potentially limit women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?* | I=3  P=2 | **Moderate** | There are large disparities between men and women in the patriarchal culture of most Tibetan communities, and income generating potential within rural communities in China in general is lower for women than for men.  Women may be impacted differently than men by reduced access to resources in NP pilots (see Risk 2). | | A gender analysis and action plan was completed during the PPG phase and will guide proactive women’s empowerment efforts during implementation. Please see this plan for further detail of specific project gender mainstreaming actions and targets.  The ESIA completed in accordance with the ESMF will also look at gender angles, including how gender intersects with the multiple risks in this SESP. The gender mainstreaming plan will be updated as required after the completion of the ESIA. Gender mainstreaming actions will also be incorporated into the ESMP and the Gender Action Plan updated as required. |
| **Risk 7: Project activities will occur within/adjacent to environmentally sensitive areas, posing potential risk to sensitive habitats and species if not designed and undertaken appropriately.**  *Standard 1: Biodiversity Conservation and Natural Resource Management, 1.2. Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?* | I = 2  P = 1 | **Low** | The objective of the project is to provide incremental support towards protected area reform in China, and interventions are planned at 3 of the NP pilot sites in the country. The activities at the pilot sites are proposed within and adjacent to the critical habitats and environmentally sensitive areas. The project activities are designed to support better protection and management of protected areas and critical habitats of endangered species.  This biodiversity project was developed with specialist expertise and the risk of damage/disruption to sensitive habitats is considered low. | |  |
| **Risk 8: Climate change has the potential to impact the NP system in China, e.g., through habitat loss because of prolonged droughts or from devastating floods. The impacts of climate change are highly uncertain, yet could impact on project outcomes in the longer-term.**  *Standard 2: Climate Change Mitigation and Adaptation, 2.2. Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?* | I = 2  P = 2 | **Low** | The establishment of the NP system in China is focusing on consolidating certain nature reserves, reducing fragmented coverage of critical habitats and environmental sensitive areas. Potential impacts of climate change will be most likely to emerge over the longer term and the risk of impacts over the project term is much lower. Further, one of the co-benefits of the project activities will be improved resilience to the effects of climate change, e.g., through improved protection of climate refugia. Project resources are allocated for supporting the conservation agencies in design and zonation of the three NP pilots, and development and implementation of climate-responsive biodiversity monitoring protocols. | |  |
|  | **QUESTION 4: What is the overall Project risk categorization?** | | | | |
| **Select one (see** [**SESP**](http://www.undp.org/content/undp/en/home/librarypage/operations1/undp-social-and-environmental-screening-procedure.html) **for guidance)** | | | | **Comments** |
| ***Low Risk*** | | | **☐** |  |
| ***Moderate Risk (high end)*** | | | **☐** |  |
| ***High Risk*** | | | **X** | A total of 8 risks have been identified, of which their overall impact and probability have been assessed as High (3 risks), Moderate (3 risks) and Low (2 risks). The risks with High rating relate to the voluntary resettlement (Risk 2) and economic displacement (Risk 1) of communities from project sites – both risks could apply to ethnic minorities (Risk 3). The overall risk categorization is High.  In line with UNDP’s SES, an environmental and social management framework (ESMF) has been developed during the project preparation phase. Resources have been allocated in the project budget for implementation of the ESMF via carrying out an environmental and social impact assessment (ESIA), with an ESIA report – developing specific management measures that will be incorporated into an environmental and social management plan (ESMP).  Consistent with the overall C-PAR program, the project will implement other relevant management plans, which may be updated in the course of the ESIA/ESMP, including but not limited to the following:   * Implementation of the project gender strategy and action plan in capacity building, livelihoods, and other activities to ensure gender equity and women’s empowerment. * Implementation of a stakeholder engagement plan that identifies the roles and responsibilities of implementing partners, beneficiaries, enabling stakeholders, and others. * Implementation of a grievance redress mechanism that will allow local communities and other stakeholders to raise concerns and grievances, and facilitate follow-up corrective action responses (the GRM will be detailed in the ESMP).   Standard M&E and adaptive management procedures will be applied during project implementation. A C-PAR program M&E/Safeguards Officer will support the project team to oversee coordination and implementation of risk management measures. And, the independent Midterm Review and Terminal Evaluation assess whether appropriate risk mitigation measures have been taken, and how the ESMP has been implemented. |
|  | **QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?** | | | |  |
| Check all that apply | | | | **Comments** |
| ***Principle 1: Human Rights*** | | | **X** | See Risks 2, 4, 5 |
| ***Principle 2: Gender Equality and Women’s Empowerment*** | | | **X** | See Risks 2, 4, 6 |
| ***1. Biodiversity Conservation and Natural Resource Management*** | | | **X** |  |
| ***2. Climate Change Mitigation and Adaptation*** | | | **X** |  |
| ***3. Community Health, Safety and Working Conditions*** | | | **☐** |  |
| ***4. Cultural Heritage*** | | | **☐** |  |
| ***5. Displacement and Resettlement*** | | | **X** | See Risks 1, 2 |
| ***6. Indigenous Peoples*** | | | **X** | See Risks 1, 2, 3, 4 |
| ***7. Pollution Prevention and Resource Efficiency*** | | | **☐** |  |

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## Appendix 4: SESP Attachment 1. Social and Environmental Risk Screening Checklist

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| **Checklist Potential Social and Environmental Risks** |  |
| **Principles 1: Human Rights** | **Answer  (Yes/No)** |
| 1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups? | No |
| 2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? [[27]](#footnote-27) | No |
| 3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups? | **Yes** |
| 4. Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them? | **Yes** |
| 5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project? | **Yes** |
| 6. Is there a risk that rights-holders do not have the capacity to claim their rights? | **Yes** |
| 7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process? | No |
| 8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals? | No |
| **Principle 2: Gender Equality and Women’s Empowerment** |  |
| 1. Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls? | No |
| 2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits? | **Yes** |
| 3. Have women’s groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment? | No |
| 4. Would the Project potentially limit women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?  *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being* | **Yes** |
| **Principle 3: Environmental Sustainability:** Screeningquestions regarding environmental risks are encompassed by the specific Standard-related questions below |  |
|  |  |
| **Standard 1: Biodiversity Conservation and Sustainable** [**Natural**](#SustNatResManGlossary) **Resource Management** |  |
| 1.1 Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes* | **No** |
| 1.2 Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities? | **Yes** |
| 1.3 Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5) | No |
| 1.4 Would Project activities pose risks to endangered species? | No |
| 1.5 Would the Project pose a risk of introducing invasive alien species? | No |
| 1.6 Does the Project involve harvesting of natural forests, plantation development, or reforestation? | No |
| 1.7 Does the Project involve the production and/or harvesting of fish populations or other aquatic species? | No |
| 1.8 Does the Project involve significant extraction, diversion or containment of surface or ground water?  *For example, construction of dams, reservoirs, river basin developments, groundwater extraction* | No |
| 1.9 Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development) | No |
| 1.10 Would the Project generate potential adverse transboundary or global environmental concerns? | No |
| 1.11 Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?  *For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.* | No |
| **Standard 2: Climate Change Mitigation and Adaptation** |  |
| 2.1 Will the proposed Project result in significant[[28]](#footnote-28) greenhouse gas emissions or may exacerbate climate change? | No |
| 2.2 Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change? | **Yes** |
| 2.3 Is the proposed Project likely to directly or indirectly increase social and environmental [vulnerability to climate change](#CCVulnerabilityGlossary) now or in the future (also known as maladaptive practices)?  *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population’s vulnerability to climate change, specifically flooding* | No |
| **Standard 3: Community Health, Safety and Working Conditions** |  |
| 3.1 Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities? | No |
| 3.2 Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)? | No |
| 3.3 Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)? | No |
| 3.4 Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure) | No |
| 3.5 Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions? | No |
| 3.6 Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)? | No |
| 3.7 Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning? | No |
| 3.8 Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)? | No |
| 3.9 Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)? | No |
| **Standard 4: Cultural Heritage** |  |
| 4.1 Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts) | No |
| 4.2 Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes? | No |
| **Standard 5: Displacement and Resettlement** |  |
| 5.1 Would the Project potentially involve temporary or permanent and full or partial physical displacement? | **Yes** |
| 5.2 Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)? | **Yes** |
| 5.3 Is there a risk that the Project would lead to forced evictions?[[29]](#footnote-29) | No |
| 5.4 Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources? | **Yes** |
| **Standard 6: Indigenous Peoples** |  |
| 6.1 Are indigenous peoples present in the Project area (including Project area of influence)? | **Yes** |
| 6.2 Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples? | No |
| 6.3 Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?  *If the answer to the screening question 6.3 is “yes” the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.* | **Yes** |
| 6.4 Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned? | **Yes** |
| 6.5 Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? | No |
| 6.6 Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? | **Yes** |
| 6.7 Would the Project adversely affect the development priorities of indigenous peoples as defined by them? | No |
| 6.8 Would the Project potentially affect the physical and cultural survival of indigenous peoples? | No |
| 6.9 Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? | No |
| **Standard 7: Pollution Prevention and Resource Efficiency** |  |
| 7.1 Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or [transboundary impacts](#TransboundaryImpactsGlossary)? | No |
| 7.2 Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)? | No |
| 7.3 Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?  *For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol* | No |
| 7.4 Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health? | No |
| 7.5 Does the Project include activities that require significant consumption of raw materials, energy, and/or water? | No |

1. Guidelines for Provision of Job Retraining and Social Insurance for Farmers that Lose Land [↑](#footnote-ref-1)
2. Ecological migration is refers to landowners or households being resettled/displaced from their lands due to biological conservation. [↑](#footnote-ref-2)
3. In CPAR1 Project, households living inside the national park all fall under this category. [↑](#footnote-ref-3)
4. In the project pilot villages, ethnic minorities include Tibetan, Qiang, Hui and Yi. [↑](#footnote-ref-4)
5. Any instances in which voluntary resettlement does take place must meet the requirements of the UNDP’s Standard 5 on displacement and resettlement. [↑](#footnote-ref-5)
6. The National Park System in this project refers to a modern system of protected areas with a set of defined protected area categories which conform with international standards, with a clear set of standards for effective management, quality assurance mechanism, and mainstreamed within national and local development and sector planning. [↑](#footnote-ref-6)
7. Sanjiangyuan national system innovates and implements the "one household, one post" system for ecological management and protection posts, covering all herdsmen in the park area. As can be seen from http://sjy.qinghai.gov.cn/article/detail/13473. [↑](#footnote-ref-7)
8. Data source: Master plan of Giant Panda National Park. http://www.forestry.gov.cn/main/4461/20191017/112323484463713.html. [↑](#footnote-ref-8)
9. Data source: Master plan of Giant Panda National Park. http://www.forestry.gov.cn/main/4461/20191017/112323484463713.html. [↑](#footnote-ref-9)
10. Data source: Population numbers were determined by collecting secondary data. [↑](#footnote-ref-10)
11. Data source: Xianju National Park Master Plan [↑](#footnote-ref-11)
12. [↑](#footnote-ref-12)
13. Data source: Population numbers were determined by collecting information from various secondary data sources, primarily local census information. [↑](#footnote-ref-13)
14. Those below the New Stage Rural Poverty Standard line are considered poverty-stricken, for example, the New Stage Rural Poverty Standards for 2010-2016 are RMB2,300, RMB2,536, RMB2,625, RMB2,736, RMB2,800, RMB2,855 and RMB2,952 respectively. Data from Qinghai Provincial Statistical Yearbook. [↑](#footnote-ref-14)
15. These counties are: Beichuan, Pingwu, Qingchuan, Wenchuan, Li County, Mao County, Songpan, Jiuzhaigou, Zhouzhi, Taibai, Yang County, Liuba, Foping, Ningxia, Wen County and Wudu [↑](#footnote-ref-15)
16. Namely Chaze, Niandu, Hongqi and Masai villages respectively [↑](#footnote-ref-16)
17. Namely Lianhe, Yanfeng, Caojia and Heping villages respectively [↑](#footnote-ref-17)
18. National representative inheritors need to meet the following requirements: (1) master and inherit a particular national-level intangible cultural heritage; (2) be recognised as representative and influential in a certain region or field; and (3) actively carry out inheritance activities and nurture successors. Those who meet the requirements will be declared, examined and assessed in accordance with the *Measures for the Recognition and Management of Representative Inheritors of National Intangible Cultural Heritage*. [↑](#footnote-ref-18)
19. Khambalai, Gegisa Sanza, the legend of Gesar's horse race to claim the throne, the legend of Senjang-Dzum's hometown, the legend of Zaling Lake and Ealing Lake, Gegisri Monastery's quiet manganese drama of the cycle of life and death, traditional Tibetan hand-knotting techniques. [↑](#footnote-ref-19)
20. Notable heritage practices include: the Guangyuan Daughter Festival, the China (Chengdu) Forest Culture Tourism Festival, Baima Tibetan culture, Baishi worship, Jixian ancient music, Zhouzhi gongs and drums, Houyizi mountain songs, Nanping Qu Qiang flute performance and production techniques, the dancing of the capital city, Qiang sheepskin drums, Mianzhu woodblock prints, the Chinese traditional village of Heping Tibetan Village, the Stony Moraine Tazi Festival, the Fuxing juggling gongs and drums, the Qing Qiang folklore of Waya Mountain, Qiang embroidery, Cao Gai dancing, Qiang New Year, Yubi Flower Drum Opera, Liujiaping Three Kingdoms Culture, etc. [↑](#footnote-ref-20)
21. ZHAO Lin, SHENG Yu. Permafrost and its changes in the Qinghai-Tibet Plateau[M]. Science Press, 2019. [↑](#footnote-ref-21)
22. National representative inheritors need to meet the following requirements: (1) master and inherit a particular national-level intangible cultural heritage; (2) be recognised as representative and influential in a certain region or field; and (3) actively carry out inheritance activities and nurture successors. Those who meet the requirements will be declared, examined and assessed in accordance with the *Measures for the Recognition and Management of Representative Inheritors of National Intangible Cultural Heritage*. [↑](#footnote-ref-22)
23. Khambalai, Gegisa Sanza, the legend of Gesar's horse race to claim the throne, the legend of Senjang-Dzum's hometown, the legend of Zaling Lake and Ealing Lake, Gegisri Monastery's quiet manganese drama of the cycle of life and death, traditional Tibetan hand-knotting techniques. [↑](#footnote-ref-23)
24. Data source: The Master Plan for Three-River Source NP [↑](#footnote-ref-24)
25. Toxic grasses, which naturally grow in grasslands and have an impact on human health, are prone to physiological abnormalities or dysfunctional poisoning after human contact. There are about 200 species of toxic grasses distributed in the natural grasslands of northern China. [↑](#footnote-ref-25)
26. No infrastructure works have been designed nor implemented at the time of this report. In the future, if these projects are developed, they will have to follow the domestic Environmental Impact Assessment procedure to avoid these negative impacts. [↑](#footnote-ref-26)
27. Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to “women and men” or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals. [↑](#footnote-ref-27)
28. In regards to CO2, ‘significant emissions’ corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.] [↑](#footnote-ref-28)
29. Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections. [↑](#footnote-ref-29)