

PROJECT DOCUMENT
[China]



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Project Title: Ecological Agriculture Development in China — Optimization and Demonstration of Beef Cattle Green Industry Chain

Project Number: 00108409 **Award ID:** 00108855

Implementing Partner: Ministry of Agriculture

Start Date: 1 March 2018 **End Date:** 31 December 2020 **PAC Meeting date:** 2 Feb 2018

Brief Description

Based on the latest development concept of international green economy and eco-agriculture, and the multi-functional characteristics of agro-ecosystem, the project aims to carry out optimization and demonstration of beef cattle green industry chain in areas with regional characteristics and sound foundation. It focuses on optimization of modern and efficient green agricultural industry chain to cope with challenges of resource shortage, environmental pollution, low agrarian efficiency and competitiveness faced by China's sustainable agricultural development. The project will carry out the optimization and demonstration of beef cattle green industry chain mainly in three provinces. By the five ideas of environment-friendly, eco-production, clean processing, green consumption, integration and sharing, there are five priorities regarding the solving the issues. They include i) selection and integration of key industrial techniques, and establishment of green production models, ii) promotion and optimization of industrial chain efficiency, and as the engagement project of the climate-smart grassland ecosystem management of the China-GEF Partnership for Sustainable Agricultural Development, the project will work to reduce the impact of livestock production on the climate, and iii) technical training, brand building, green consumption and green finance to i) develop a model for region's beef cattle green industry chain, ii) promote the ecological and economic benefits of agricultural development and industrial competitiveness, and iii) set a model of beef cattle green industry sustainable development for China and even for the world.

Contributing Outcome (UNDAF/CPD, RPD or GPD):
More people enjoy a cleaner, healthier environment as a result of improved environmental protection and sustainable green growth.

Indicative Output(s) with gender marker²:
China's actions on climate change mitigation, biodiversity and chemicals across sectors are scaled up, funded and implemented.
Gender Marker: GEN 1

Total resources required:	US\$420,000	
Total resources allocated:	UNDP TRAC:	
	Donor:	US\$420,000
	Government:	
	In-Kind:	
Unfunded:		

Agreed by (signatures)1:

UNDP	Implementing Partner
Print Name:	Print Name:
Date: 2018. 3. 22	Date: 2018. 4. 9

I. DEVELOPMENT CHALLENGE

Beef cattle is an important industry related to improving the dietary structure, the development of grass and animal husbandry, and people's livelihood in farming and pastoral areas. China is the third largest beef cattle producer in the world, and the production is 7,167,600 tons in 2016, accounting for 8.3% of the total meat production. The consumption reached 8 million tons. The market scale is as high as 360 billion yuan. With the socioeconomic development as well as people's living standards improvement, beef cattle production and per capita consumption have both continued to grow. Economic fluctuation and irregular market management have affected the Chinese beef cattle industry. The quality and safety issues of beef cattle have increasingly arisen. Meanwhile, with economic development and butchering technology improvement has deepened the contradiction between the small-scale production system and the modern slaughter and processing technology, especially since 2006 when the number of cows and beef cattle declined gradually. Therefore the development of beef cattle has been constrained by the shortage of beef cattle source. Focusing on the problems of production and management in the beef cattle industry in China, and carrying out the construction and demonstration of beef cattle green industry chain, according to green development concept and industry chain value-added development ideas, are crucial to solve the problems like beef cattle quality safety and environment protection, to transform beef cattle industry to a greener one, and ensure the effective supply of beef.

Nowadays, a lot of projects and initiatives have been conducted for the development of green beef industry, like green ecological beef cattle industry chain development class in Tongzi County, Guizhou province. The class assisted investment firms to start the project of green ecological beef cattle, and promoted the development of agricultural and rural economy; Yangxin County of Shandong province has formed a completely green recycling industry chain of forage planting - calves breeding - standardized breeding - slaughtering and processing - cold chain logistics and distribution - food - leather deep processing - bovine, bovine blood biotechnology research and development; Chongqing Cow Beef Source Food Co., Ltd. has realized the goal of industry chain among cultivation, processing and marketing from pasture to the table. In order to guide the sustainable development of national agriculture, the Ministry of Agriculture, the National Development and Reform Commission, the Ministry of Science and Technology, the Ministry of Finance, the Ministry of Land and Resources, the Ministry of Environmental Protection, the Ministry of Water Resources, and the State Forestry Administration had compiled "National Agricultural Sustainable Development Plan (2015-2030)" in 2015. For the sustainable development of agricultural, the plan has formulated the key tasks of optimizing and developing the layout, protecting cultivated land resources, saving and using water conservation efficiently, controlling environmental pollution and restoring ecological agriculture to solve the problems like lacking of resources aggravating increasingly, serious environment pollution, obvious ecosystem degradation and the incomplete mechanism.

i. Current situation of beef cattle industry development in China

Since reform and opening up, the beef cattle industry has already been under transformation. Beef cattle production moved from pastoral to rural areas, mainly in central plains, northeast, northwest, and southwest areas. And the beef cattle production has increased slowly since 2007, because of its long growth cycle, and difficulties in breeding and high input. It is hard to increase beef cattle production only through increasing the number of slaughter in a short time, and it is even harder to match people's growing demand for beef. The beef cattle industry in China is induced by the short-term benefits due to decreased comparative benefits of beef cattle breeding and the increasing beef cattle prices, which motivates the farmers kill the cows, and even calves are slaughtered before they get mature; furthermore, lack of good varieties, lag of farming technologies and imperfect of production facilities make our country in a situation of having a lot of beef cattle production, but in low qualities.

Table 1 the beef cattle production, raising, slaughter numbers in 1980-2014

Year	Raising number (ten thousand number)	slaughter numbers (ten thousand number)	Production (ten thousand tons)	Year	Raising number (ten thousand number)	slaughter numbers (ten thousand number)	Production (ten thousand tons)

1980	7167.6	332.2	26.9	2002	11567.8	4401.1	521.9
1981	7330.1	301.6	24.8	2003	11434.4	4703.0	542.5
1982	7607.3	309.6	26.6	2004	11235.5	5018.9	560.4
1983	7808.4	347.2	31.5	2005	10990.8	5287.6	568.1
1984	8212.8	386.9	37.3	2006	10465.1	5602.9	576.7
1985	8682.0	456.5	46.7	2007	10594.8	4359.5	613.4
1986	9166.7	555.0	58.9	2008	10576.0	4446.1	613.2
1987	9465.1	740.3	79.2	2009	10726.5	4602.2	635.5
1988	9794.8	858.0	95.8	2010	10626.4	4150.0	653.1
1989	10075.2	943.0	107.2	2011	10360.5	4671.0	647.5
1990	10288.4	1088.3	125.6	2012	10343.4	4760.9	662.3
1991	10459.2	1303.9	153.5	2013	10385.1	4828.2	673.2
1995	13206.0	3049.0	415.4	2014	10578.0	4929.2	689.2
2000	12353.2	3964.8	513.1	2015	----	----	700.1
2001	11809.2	4118.5	508.6	2016	----	----	717.0

Date source: 《China Animal Husbandry Yearbook》、《China Statistical Yearbook》 .

The pursuit of high-protein and high-quality beef cattle is rising with the increasing income and dietary structure improvement, which is the urgent problem to solve. The consumption of beef cattle has been increasing since the early 1990s. In 2016 the total beef cattle consumption had reached 7,754,000 tons in China, and the per capita consumption was 5.61 kg, which showed an increasing trend as table 2. Although the total consumption of beef cattle has reached the third in the world, but the gap is still large comparing with developed countries. Chinese per-capita consumption of beef cattle is far behind the U.S. (44.1 kg / person) and Canada (39.2 kg / person) , and lower than the average level of the world (9.1 kg / person). The consumption requirement of beef cattle will reach more than 12 million tons if our per capita consumption reaches the current level of Japan, which means the beef cattle production has to double to meet the needs of China. At the same time, the regional and ethnic differences of beef cattle are weakening with economic development.

Table 2 China's beef cattle consumption in 2010-2016

Year	Beef cattle production (ten thousand tons)			Total consumption (ten thousand tons)	Total population (ten thousand person)	Per capita consumption (kg / person)
		Import (ten thousand tons)	Export (ten thousand tons)			
2010	653	2.37	2.22	657.69	134091	4.90
2011	648	2.01	2.20	651.71	134735	4.84
2012	662	6.14	1.23	669.67	135404	4.95
2013	673	29.42	0.60	703.22	136072	5.17
2014	689	29.79	0.66	719.65	136782	5.26
2015	700	47.38	0.49	747.97	137462	5.44
2016	717	57.98	0.42	775.40	138271	5.61

Date source: "China Statistical Yearbook" and China Customs comprehensive information network.

ii. The international competitiveness to Chinese beef cattle industry

As the beef production cannot fully meet the demand in China, the number of beef cattle imports increases rapidly. China is the most important beef producer and consumer country in the world. Prior to the 21st century, China had both the beef export and import businesses. Following the increasing demand, China has gradually become a net beef importer since 2009, and this trend has been intensified in 2012 as the table 3 shows. According to statistics, in 2016, total beef cattle imports was 579,800 tons in China, increasing 22.37% than 2015. Major exporters are Australia, Uruguay, New Zealand, Canada, Argentina, Costa Rica, etc. Breeding beef cattle sources are Australia, New Zealand and Uruguay. Imported bovine semen come from the U.S, Canada, Germany, France, Sweden, Romania, New Zealand, etc. Total beef exports was 4,200 tons in 2016, decreasing 14.29% than 2015, and the main

import areas were Asia, the Middle East and Africa, including Kyrgyzstan, North Korea, Malaysia and other regions. The free trade zone between China and other major beef producing countries can increase the beef imports, which may prevent the beef production in China, but in the long run, tariff reduction can encourage domestic producers to improve competition awareness and increase production capacity. Although the beef production has reached the third in the world, but the gap between technologies and management is still large comparing with developed countries.

Table 3 Chinese beef imports and exports in 2001-2016 (Unit: Ten thousand tons)

Years	2001	2002	2003	2004	2005	2006	2007	2008
Imports	0.39	1.10	0.81	0.34	0.11	0.12	0.369	0.42
Exports	2.16	1.21	0.89	1.57	1.91	2.75	2.83	2.29
Years	2009	2010	2011	2012	2013	2014	2015	2016
Imports	1.42	2.37	2.01	6.14	29.42	29.79	47.38	57.98
Exports	1.33	2.22	2.20	1.23	0.60	0.66	0.49	0.42

Data sources: China customs comprehensive information network. <http://www.haiguan.info>.

Beef trade has opened since 2017 between China and the U.S., which allowed American beef enter the Chinese market again. China has made a strict regulation for American beef entering Chinese market at the background of "China - America Cooperation Plan", and there will be 15.6 million tons beef from the U.S. entering China according to the calculation of beef cattle and yak industrial technology system. Firstly, the beef cattle entering the Chinese market must be able to trace back to the farm. Less than 10% fattening cattle slaughtered can be fully traced in the U.S. according to the survey from beef cattle and yak industry technology system in China. For example, there are 33 million beef cattle need to be slaughtered in the U.S., but only 3.3 million beef cattle meet the import demand of China. Secondly, the beef cattle using growth hormone cannot enter the Chinese market. The beef cattle without using growth hormone is 15% of the total in the U.S. (the date is from the website of United States Department of Agriculture), so the amount of beef cattle that can enter Chinese market is only 165,000 tons compared with 1.1 million tons beef cattle production in the U.S. Thirdly, only the fattening beef cattle under 30 months can enter the Chinese market. This can eliminate not only the hidden danger of BSE but also elder cows, who take about 0.8% of total fattening cattle. Thus, the beef cattle that can enter Chinese market is only 156,000 tons. Furthermore, the beef imports is 200,000 tons more than the exports in the U.S. The production capacity is limited in the U.S., especially after fulfilling the economic and trade agreements with other countries, so it is hard to export large amount of beef cattle to China in a short term. Therefore, importing the beef from the U.S. will has a gradual effect to us.

Importing American beef will force other countries to reduce the price further, enlarging the market share and hitting Chinese beef market, but on the other hand, this will speed up the elimination of old ideas, technologies and production methods. At the same time, it will permit a large number of new beef cattle breeding farms new technology and method to grow and eventually benefit consumers. The beef price abroad will lose its' advantages with the improvement of beef production and quality, system revising, technology improving and management model changing at the local level. The beef cattle imports from the U.S. and other countries will exist for a long time, which will promote the revolution from quantity to quality in Chinese beef cattle industry. The beef produced by China will occupy the Chinese market, but it will turn ordinary beef to middle and high-grade beef.

iii. Main problems in the development of beef cattle green industry chain

i) Lack of standardization and the evaluation criteria in the beef cattle green industry. At present, safety and high quality agricultural product certification system led by government includes "pollution-free agricultural products", "green products", "organic products" and "agricultural product geographical indications". However, the lack of government supervision, public education and industry leadership, the concept of "green", "organic" and "ecology" has been speculated and abused in some areas, general consumers cannot identify the authenticity of the product. The existing "three products and one standard" certification system considers more in product quality and safety, and pays less attention to the environment that may be affected by production process. Life cycle theory and method the total beef cattle green industry chain shall be evaluated. The "eco-label" of beef cattle green industry chain shall be established.

ii) Incomplete production mode. Although the commercial capital has penetrate to beef cattle industry chain but

the number of beef cattle is still declining due to the withdrawal of the small business owner.

iii) Low industrial efficiency. The impacts in the aspect of lower price of imported beef, higher production costs make the enterprises difficult to profit. The characteristics of beef cattle industry continue to be of high prices, high costs and low incomes.

vi) Waste treatment. With the rapid development of beef cattle industry, the waste treatment doesn't meet the pollution discharge requirements because of the lag waste disposal technologies and methods, as the disconnected industrial chain, and the insufficient reduction, harmless, recycling, comprehensive utilization of manure, as well as lack of effective measures, have made the prominent contradiction between industrial development and ecological benefits.. The waste is not fully utilized and can hardly meet the emission standards, which form a discrepancy in the development of industry and environment.

v) The lack of policy support. Lack of policy and subsidies to compensate the costs makes the industry hard to profit, and cow breeders are quite sluggish.

II. STRATEGY

Project concept

Beef cattle industry chain is an industry chain formed with multi-links or multi-sectors according to the technical and economic processes of beef production and process. Beef cattle green industry chain not only is related to agriculture, industry and the service industries but also involves a lot of environmental protection aspects and elements. The green industry chain of beef cattle includes many new concepts like environment-friendly, ecological production, clean processing, green consumption, integration and sharing on the basis of original beef cattle industry chain. Therefore, constructing beef cattle green industry chain needs to focus on following concepts:

i) Environment friendly: Promote comprehensive utilization of waste produced in the beef cattle breeding to form a new cultivation cycle for source reduction, process controlling and end using. The project will focus on large-scale farms, and set up pilot on providing alternative energy supply from waste treatment for rural households.

ii) Ecological production: Improve the technical support system in ecological planting and breeding. Firstly, develop the herbivorous animal husbandry in pastoral areas, southern grass mountain and slope. Secondly, carry out standardization demonstration of beef cattle breeding, support ecological farming in large-scale farms, pay attention to the balance among feeding, forage, and grass production. Thirdly, the project will try to combine planting and breeding to promote the transformation of production mode in husbandry, strengthen epidemic prevention system construction and control the veterinary antibiotics and additive effectively, improve feed conversion rate, as well as increase the popularization, training and application in the aspect of returning manure to land or making organic fertilizer.

iii) Clean process: Popularize the technologies of fine segmentation processing and tenderization of beef, and by-product processing, adjust and upgrade the industry chain aiming at high-end market through improving cattle species; strengthen the harmless treatment of fur, bone, blood, excrement and urine and ill or dead animals to ensure the cleanness, safety and health of products.

iv) Green Consumption: Establish the certification system for green beef cattle industry chain which is suitable for China's situation. Creates green consumption logo. Strengthen publication and guidance of green consumption's concept. Improve the market information services and Radio Frequency Identification (RFID) supervision system in the beef cattle industry. Implement branding strategy of green meat and beef, and create an environment for the consumer to pay higher price for green products. Strengthen the publicity in selling and guide the consumers to take accept ecological products. Identify the eco-value of green beef, and be willing to buy the eco-products.

v) Integration & sharing: Set up the internet thinking mode, promote the integrate production-study-research and market resources; support the sustainable development of industry; promote the innovation of beef cattle industry; promote the project model replication; promote the harmony and mutual benefit between beef cattle industry and environment according to the strategic direction of national ecological civilization.

Project target

According to the project concept, based on the investigation and grooming of the research result of existing beef cattle green development models and technologies, the project will choose typical areas for demonstration, construct the “modern and efficient beef cattle green industry chain”, emphasize industrial development and environmental friendly coordination strengthen technology standardization, improve relevant policy system, emphasize the modern and effective industry management. It promotes the green consumption and the high-value of the ecological product, and the synergy of ecological and economic development. Through the project implementation, guide the direction of beef cattle industry green development; cultivate the high-end brand of beef cattle green industry chain; guide the people's consumption direction and raise awareness of environmental protection.

Project task

According to project concept and objective, the project will set up the demonstration of the pilot of whole beef cattle green industry chains around the project area. Relevant concept and experiences that lead the development of industry will be summarized. As part of the climate-smart grassland ecosystem management of the China-GEF Partnership for Sustainable Agricultural Development, the project will work to reduce the impact of livestock production on the climate and improve the green industry chain of livestock products production, promote beef cattle industry chain products to the high-end market.

Task 1: Evaluation method: To solve problem i, define the evaluation methods and standards of the agricultural green industry. It is the basic precondition for the development of beef cattle green industry chain. Therefore, the project needs to study the evaluation method of products' eco-label based on the Life Cycle Assessment (LCA), and to analyze the impact on agriculture resources and environment in the beef cattle production and develops beef cattle green product eco-label gradually.

Task 2: Model technologies: To solve problem ii, select a suitable green development model and technical system to ensure the green products and the whole green industry system. Therefore, the project will focus on the investigation of regional beef cattle green model and the key technologies, optimize and demonstrate the beef cattle industry chain, and make the design of industrial chain being well-matched with the local resources advantages, decrease the production costs, and raise labor productivity.

Task 3: Capacity building: To solve problem iii, iv, carry out training to make sure that the development mode and the technology-applied area could be replicated and to encourage more entrepreneurs to participate the construction of beef cattle green industry chain in demonstration areas. Carry out entrepreneurial activities focusing on “production + processing + selling + consumption.” Explore the concept of sharing economic, through the Internet + new type of business of the development of beef cattle green industry chain. Cultivate and construct regional agricultural green brand. Guide to create a new environment for green health consumption. Promote the project achievement trough newspapers, TV and Internet.

Task 4: Policy recommendations: To solve problem v, set up the financing mechanism and various channels of social capital participating in the construction of beef cattle green industry chain, and come up with suggestion on green consumption policy according to the study of beef cattle green industry development.

III. RESULTS AND PARTNERSHIPS

Output 1: The evaluation method of beef cattle green products

Activity 1.1 Study on the evaluation method on beef cattle green products

According to the certification of pollution-free agricultural products, green products and organic products, study and determine the evaluation list and calculation methods of the ecological label (water label, carbon label and nitrogen label) of agricultural production based on Life Cycle Assessment (LCA), and identify the calculation method and model of carbon footprint, and nitrogen footprint per unit of products.

Activity 1.2 Verification of the evaluation method on beef cattle green products

Verify the evaluation methods of agricultural green products of beef. Assess their impacts on water resource, energy consumption, greenhouse gas emission and environmental pollution during the production process. Determine the eco-label of various products, such as carbon footprint and nitrogen footprint.

Output 2: Optimization and demonstration of beef cattle green industry chain in different regions

Activity 2.1 Optimization of beef cattle green development model in different regions

Focusing on existing research results and field investigations of beef cattle green industry chain for key industry types in project areas, summarize beef cattle green development models and key production technologies, which suit local nature resources and benefit the socio-economic development.

Activity 2.2 Technologies and models demonstration and publication of beef cattle green industry chain

Carry out the optimization and demonstration of beef cattle green industry chain in Inner Mongolia, Chong Qing, Jiang Xi (or Ning Xia, Hei longjiang) provinces (cities). Based on local resources and socio-economical development, form the comprehensive industry chain including beef cattle production, processing, logistics, supply chain design, brand marketing, etc.

For the project demonstration and application, efforts shall be made to enhance the radiation effect in demonstration areas with innovative project activities. Establish a platform for learning and communicating experiences among different regions through on-site meetings.

The demonstration areas are selected according to the local ecological types, typical products, local development foundation and local government's enthusiasm.

Activity 2.3 Establishment the report of technical, model and experience in the development of beef cattle green industry chain

Activity 2.4 Establishment the report of policy suggestion of green financing mechanism and approach for social-capital-participant

Study and set up the social-capital-participant (finance, insure or fund, etc.) green financing mechanism to solve the problem in the development of green agriculture (defection of long period and slow effect).

Output 3: Capacity building

Activity 3.1 Trainings

The project will provide training on practical techniques and services by experts, enterprises, cooperatives and so on. It aims to solve the technical problems the farmers may encounter in the development of beef cattle farming. We will also provide training to other stakeholders as well as the potential partners for this industry to build communication and cooperation platforms for all stakeholders. We will try to identify the scientific operation mode, encourage and guide the leading enterprises to play a role in promoting project achievement, help farmers to develop standardized production procedures, and share the benefit from the operation of beef cattle green industry chain with stakeholders. The person-time of participants in the training is more than 120.

Given that the people in the project areas are from many ethnic minorities such as Hui, Mongolian, Yugur, Tibetan etc., one of the targets in implementing the project is to support the development of ethnic minorities.

Active 3.2 Experience summary and international communication

Annual work report and communication will be carried out during the implementation process of the project, and a final development report on the construction of regional agricultural green industry chain will be formed finally. The international communication will be carried out, absorbing the advanced concepts and technological achievements, to improve the green construction in China, and exhibit China's achievement to the world.

3.2 Resources Required to Achieve the Expected Results

Staff from UNDP China will be involved in the project implementation and provide supervision on project implementation and financial management. They will be part of the project steering committee to keep the progress on the right track. They will also organize project reviews and approval of Annual Work Plan and budget revision, and monitor the progress of the project.

Regarding the funding source, the private sector will be responsible for the full funding of the project implementation. The due diligence of the donor for this project has been properly completed.

The Ministry of Agriculture (MOA) will be in charge of the day-to-day implementation, including a draft annual work plan, daily coordination, financial management and regular reporting of the project.

National consultants and contractual service companies will be recruited to help deliver the activity plans under outputs of the projects and help achieve the output results. Those consultants will be the Chief Technical Advisors to provide consultation to the overall project.

3.3 Partnerships

UNDP China will be responsible for: i) providing financial and audit services to the project; ii) overseeing financial expenditures regarding approved project budgets; iii) recruiting independent financial auditors and evaluators; and iv) ensuring that all activities including procurement and financial services are carried out in strict compliance with UNDP procedures.

The MOA will be responsible for all the implementation activities in management and coordination: i) preparing the work plan, archiving the files, drafting quarterly and annual progress reports; ii) coordinating, supervising and managing the project activities of consultants and stakeholders; iii) organizing the investigation, seminar, publicity, training and other activities; iv) establishing a rapport with local project personnel; v) organizing communication and cooperation activities.

Experts will be responsible for: i) the top-level design of the project, establishment of project implementation content, selection of target areas and implementation team; ii) exploring the “eco-label” evaluation method of beef cattle green industry chain; iii) innovating the method of agriculture green industry chain investment and financing; iv) summarizing the project outcomes, forming China's beef cattle green industry development model and experience; v) assisting the MOA for carrying out annual summary of projects, mid-term evaluation and terminal evaluation.

Local implementing agency (environmental protection stations, cooperatives, associations, enterprises etc.) will be responsible for: i) supervising and managing the environment during the process of the beef cattle green industry; ii) conducting trainings and publicity activities as the MOA required.

3.4 Risks and Assumptions

Table4 lists both the risks and mitigation strategies in terms of technology, market, economy and policy.

Table4 The risks and mitigation strategies

Types of risks	Risk description	Levels of the risk	Mitigation strategy
Technical risks	Technicians’ lack of the knowledge on advanced technology.	Low	1.Information exchange and knowledge sharing; 2. Trainings and capacity building.
Market and financing risks	1. Low public awareness of green agricultural products; 2. Delayed arrival of construction funds which makes it difficult to achieve expected planning criteria.	Low	1. Selecting places with relatively high market acceptance for demonstration and popularization; 2. Strengthening publicity, studying and applying financing mechanism, absorbing social capital in construction.
Policy and institutional risks	Government’s absence in policy-making and managing beef cattle green products.	Low	Strengthening communication and coordination with government departments, and actively offering advice and suggestions to government departments as a support.

The project will ensure equal employment opportunities and try to actively engage female participants/stakeholders into the project.

3.5 Stakeholder Engagement

Target Groups:

The intended beneficiaries of the project will be local governments, agriculture-related enterprises, agricultural cooperatives and farmers. The project will also promote the development of regional beef cattle green industry and improve China's ecological environment.

An efficient mechanism to organize, manage and coordinate throughout the project will be designed before inception: the project steering committee will be established and key stakeholders will be engaged through the quarterly-basis committee meeting. In addition, the key stakeholders will be engaged in the project activities including but not limited to the demonstration, policy and standard research, workshops, project dissemination and advocacy activities.

3.6 Other Potentially Affected Groups:

Potentially affected people are related enterprises who are participants in the industry of regional beef cattle green industry chain optimization, and benefit from it. The sustainability of the outcomes will promote the healthy development of China's beef cattle green industry chain.

South-South and Triangular Cooperation (SSC/TrC)

The knowledge and lessons learned during the project implementation process can be shared with other developing countries that are facing the same issues in beef cattle green development.

3.7 Knowledge

Publication of academic papers in the aspects of beef cattle green evaluation system, green financing mechanism, approach for social-capital-participant, etc.; formation of the media publicity materials and technical training materials in the aspects of regional agriculture green development models and the key technologies through project summary.

Project outcomes will be published through information sharing network platform and forums.

3.8 Sustainability and Scaling Up

China is at a crucial stage of ecological civilization construction and agricultural supply-side reform. The green development of agricultural industry not only satisfied to the development goal of modern agriculture with high yield, high quality, high efficiency, ecology and safety, but also by the development concept of agriculture mode changing and structure adjusting. The core of the project is putting ecological preservation in harmony with the economic development, creating high-quality, special, characteristic and advantageous agricultural product brand through the optimization of regional agricultural green industry chain, the establishment of ecological compensation mechanism and innovation of agricultural green industry investment and financing, to restore ecological and environmental management through green production, and finally to cultivate the new industries, new pattern and new models for China's agriculture and rural development.

Agricultural green industry chain is the ideal model for sustainable development of agriculture in the current stage. The successful implementation of the project will speed up the development of regional beef cattle green industry, and also provide experience-sharing and technical supporting for other areas in China and other developing countries faced with the same problems with the possibility of further scaling up.

IV. PROJECT MANAGEMENT

4.1 Cost Efficiency and Effectiveness

Operation benefits of beef cattle green chain's development depend on the common goal and

sincere cooperation of the stakeholders. However, due to the special characteristics in agricultural markets, most of our farmers operated separately, and sell the agricultural products to wholesalers or retailers with the competition. Farmers can not share the benefit from the separate operation of beef cattle industry chain. The project will use a portfolio management approach to promote the effective cooperation of stakeholders, and to create a competitive advantage. It will reduce market transaction costs and share the benefit of beef cattle industry chain through mutual pull effect and cluster effect among stakeholders.

Cooperate with domestic agricultural institution, local environmental protection stations, enterprises and so on. Study agricultural green evaluation standards. Monitor environment factors in production process. Discuss and form the beef cattle green financing mechanism. The lessons learned from the project will provide reference for the development of agricultural green industry chain in other regions of China.

4.2 Project Management

The Project Management Office (PMO) will be locally operationalized in Beijing. The team comprise 5 project management officer.

Under the leadership of MOA and UNDP, the project will carry out activities from four perspectives including evaluation methods, mode and technology, capacity building, policy suggestion. The project management office will be in charge of daily management and coordination.

For the mode, technology and evaluation methods section, through the combination of literature review and field visits, study the evaluation method with ecological labeling for beef cattle green industry chain agricultural products, and carry out verification in core areas of project sites; summarize the typical model and key technical system suitable for beef cattle green development;

For the capacity-building section, through trainings and workshops, brochures and multimedia share the experience, publicize the project knowledge, and enhance the awareness so that the technical model can be implemented down to earth and produce products that fit to beef cattle green certification UNDP approved. To drive the development of related cooperatives and enterprises through project implementation, it promotes a virtuous circle operation for region beef cattle green industry and the unification of ecological value and economic benefit.

For the policy suggestion section, study and explore the policy suggestions to promote the development of beef cattle green industry chain. Explore efficiency mechanisms and methods in the aspects of ecological compensation and investment and financing mechanisms of beef cattle green industry development, and pilot implementation in some areas.

The main activities of the project management including: drafting the work plan, and monitoring the project implementation, terminal evaluation, meetings, communication and sharing project outcomes. Organize national experts' team for the technical support of the project normal operation.

Details are as follows:

- Recruitment of PMO staff and national consultants;
- Auditing will be conducted annually according UNDP rules;
- Project Progress Reports, including QPR, APR and final reports will be finalized according to UNDP reports requirements;
- Project Final Workshop will be hold at the end of 2019;
- Publicity and popularization of project outcomes through meetings and field visit.

The project is consistent with the target of improving the ecological environment and sustainable development which is one of the three key areas identified in the UNDP "2016-2020 United Nations Assistance Frameworks for China". UNDP describe this in outcome 2 that the protection and improvement of ecological environment and the sustainable green growth make the people have a cleaner, healthier and safer environment. UNDP promised in the

framework that they will provide high support in the aspect of developing and improving the Chinese policy, legislation and supervision framework, supporting the innovation of ecological civilization construction system and exploring the mode to protect and improve eco-environment, and slow down the bad effect of climate change and natural disaster to people. Improve the community ability to resist risks. Advocate the sustainable environmental protection and resource utilization. Meanwhile, project audit will be conducted at the end.

V. RESULTS FRAMEWORK

Intended Outcome as stated in the UNDAF/Country [or Global/Regional] Programme Results and Resource Framework: Outcome 2, more people enjoy a cleaner, healthier environment as a result of improved environmental protection and sustainable green growth.												
Outcome indicators as stated in the Country Programme [or Global/Regional] Results and Resources Framework, including baseline and targets: Outcome 2, more people enjoy a cleaner, healthier environment as a result of improved environmental protection and sustainable green growth.												
Applicable Output(s) from the UNDP Strategic Plan: Output 1.3. Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste												
Project title and Atlas Project Number: Promoting the development of ecological agriculture in China—Optimization and demonstration of beef cattle green industry chain Atlas Project Number: 00108409												
EXPECTED OUTPUTS	OUTPUT INDICATORS ¹	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)						DATA COLLECTION METHODS & RISKS	
			Value	Year	Year 1	Year 2	Year 3	Year 4	Year ...	FINAL		
Output 1 <i>The evaluation method of beef cattle green products</i>	<i>1.1. Study on the evaluation method on beef cattle green products</i>	<i>experts</i>	0	2017	100%							
	<i>1.2 Verification of the evaluation method on beef cattle green products</i>	<i>experts</i>	0	2017	50%	100%						<i>Progress report</i>
Output 2 <i>Optimization and demonstration of beef cattle green industry chain in different regions</i>	<i>2.1 Optimization of beef cattle green development model in different regions</i>	<i>Local government , experts</i>	0	2017	100%							<i>Optimization proposal of technical and mode</i>
	<i>2.2 Technologies and models demonstration and publication of beef cattle green industry chain</i>	<i>Local government , experts</i>	0	2017	50%	100%						<i>Documentary records in popularizing areas</i>

	<i>2.3 Establishment the report of technical, model and experience in the development of beef cattle green industry chain</i>	<i>experts</i>	0	2017	50%	100%					<i>Progress report</i>
	<i>2.4 Establishment the report of policy suggestion of green financing mechanism and approach for social-capital-participant</i>	<i>experts</i>	0	2017	50%	100%					<i>Progress report</i>
<i>Output 3 Capacity building</i>	<i>3.1 Trainings</i>		0		60 Person -time	60 Person- time					<i>Training Courseware</i>
	<i>3.2 Experience summary and international communication</i>		0		10 Person -time	10 Person- time					<i>Visiting materials</i>

VI. MONITORING AND EVALUATION

Monitoring Plan

¹ It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.		
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.		
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.		
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk log with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)			
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the	Specify frequency	Any quality concerns or slower than expected progress should be discussed by		

	performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	(i.e., at least annually)	the project board and management actions agreed to address the issues identified.		
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Evaluation Plan²

Project monitoring and evaluation will follow the procedures established by the United Nations Development Program, which are implemented jointly by the project team and the Ministry of Agriculture together with UNDP office in China. The monitoring and evaluation program includes the following tools: a start-up report, quarterly and annual assessment report, and a final assessment. The following sections provide an overview of the main components of the monitoring and evaluation program and the estimated costs of the projects under the program. The monitoring and evaluation program of the project will be detailed and summarized in the project start-up report, which will also provide a set of well-developed evaluation indicators and approaches. Beyond, based on the results framework for the project staff to clarify monitoring and assessment responsibility definition.

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
Terminal Evaluation				Q4. 2019		

VII. MULTI-YEAR WORK PLAN ³⁴

² Optional, if needed

³ Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

⁴ Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1	Y2		Funding Source	Budget Description	Amount
Output 1 <u>The evaluation method of beef cattle green products</u>	<i>Activity 1.1 Study on the evaluation method on beef cattle green products</i>	15,000	15,000	MOA	Third Party	Expert	30,000
	<i>Activity 1.2 Verification of the evaluation method on beef cattle green products</i>						
	Travel fee	5,000	5,000	MOA	Third Party	Travel fee	10,000
	Sub-Total for Output 1						
Output 2 <u>Optimization and demonstration of beef cattle green industry chain in different regions</u>	<i>Activity 2.1 Optimization of beef cattle green development model in different regions</i>	39,000	39,000	MOA	Third Party	Sub-contract	78,000
	<i>Activity 2.2 Technologies and models demonstration and publication of beef cattle green industry chain</i>						
	<i>Activity 2.3 Establishment the report of technical, model and experience in the development of beef cattle green industry chain</i>						
	<i>Activity 2.4 Establishment the report of policy suggestion of green financing mechanism and approach for social-capital-participant</i>						
	Project Coordinator	35,000	35,000	MOA	Third Party	Expert	70,000
	Sub-Total for Output 2						

Output 3 <i>Capacity building</i>	3.1 Activity <i>Trainings</i>	25,000		MOA	Third Party	Sub-contract	25,000	
	3.2 Activity <i>Experience summary and international communication</i>	43,000	37,000	MOA	Third Party	Sub-contract	80,000	
	Travel fee	6,000	6,000	MOA	Third Party	Travel fee	12,000	
	Sub-Total for Output 3							117,000
Output 4 <i>Project management</i>	4.1 Activity <i>Project officer</i>		30,000	MOA	Third Party	Expert	30,000	
	4.2 Activity <i>Auditing</i>		2,000	MOA	Third Party	Sub-contract	2,000	
	4.3 Activity <i>Project Final Workshop</i>		30,000	MOA	Third Party	Sub-contract	30,000	
	4.4 Activity <i>Travel</i>	1,000	1,500	MOA	Third Party	Travel fee	2,500	
	Sub-Total for Output 4							64,500
Evaluation (as relevant)	<i>Terminal Evaluation</i>		2,500	UNDP	Third Party	Sub-contract	2,500	
General Management Support	GMS and DPC of UNDP	20,000	20,000	UNDP	Third Party	GMS	40,000	
	Others	4,000	4,000	MOA	Third Party	Miscellaneous (office supplies, etc.)	8,000	
TOTAL								420,000

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Following duty and responsibility shall be revised in accordance with the NEX manual and relevant rules

UNDP China will be responsible for: (i) Providing financial and audit services to the project; (ii) Overseeing financial expenditures against project budgets approved; (iii) Appointing independent financial auditors and evaluators; and (iv) Ensuring that all activities including procurement and financial services are carried out in strict compliance with UNDP procedures.

MOA will appoint a national director responsible for the work plan, coordination, management and financial affairs, as well as the completion status of project target, project reports which including annual work plan and financial report. The MOA will set up a special project management office (PMO) for the monitoring and management of the project implementation, which is comprised of 1 project officer and additional support staff. The main activities of the project including: drafting the work plan, the project implementation management, and terminal evaluation, meetings, communicating and sharing project outcomes. The overall management and detailed coordination should conform to UNDP NEX manual and the relevant rules. The PMO is responsible for all the implementation activities in the aspect of management and coordination: i) Preparing for the work plan and file archiving, drafting quarterly and annual progress reports; ii) Coordination, supervision and management the project activities of consultants and stakeholders; iii) Organizing the investigation, seminar, publicity, training and other activities; iv) Establishment good links with local project personnel; v) Organization of communication and cooperation activities.

IX. LEGAL CONTEXT

Option c. For Global and Regional Projects

This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the “Project Document” instrument referred to in: (i) the respective signed SBAA for the specific countries; or (ii) in the Supplemental Provisions to the Project Document attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by Ministry of Agriculture (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. RISK MANAGEMENT

Option b. UNDP (DIM)

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds][7] [UNDP funds received pursuant to the Project Document][8] are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
5. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
6. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:
 - a. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of

each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:

- i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.

b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.

c. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

d. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

e. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.

f. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

g. Choose one of the three following options:

Option 1: UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

Option 2: Each responsible party, subcontractor or sub-recipient agrees that, where applicable, donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities which are the subject of the Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Option 3: UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the

Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term “Project Document” as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

h. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.

i. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

j. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled “Risk Management” are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled “Risk Management Standard Clauses” are adequately reflected, mutatis mutandis, in all its sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

1. Project Quality Assurance Report

2. **Social and Environmental Screening Template** [English][French][Spanish], including additional Social and Environmental Assessments or Management Plans as relevant. (NOTE: The SES Screening is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences, preparation of communication materials, strengthening capacities of partners to participate in international negotiations and conferences, partnership coordination and management of networks, or global/regional projects with no country level activities).

Project Information	
1. Project Title	Promoting the development of ecological agriculture in China—Optimization and demonstration of beef cattle green industry chain
2. Project Number	00108409
3. Location (Global/Region/Country)	China

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

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?
<i>Briefly describe in the space below how the Project mainstreams the human-rights based approach</i>
The project will produce more, safer and more environmentally friendly agricultural green products to human beings.
<i>Briefly describe in the space below how the Project is likely to improve gender equality and women’s empowerment</i>
We will pay more attention to the equal participation of men and women in agricultural green development.
<i>Briefly describe in the space below how the Project mainstreams environmental sustainability</i>
Agricultural green development is for regional ecology and environmental improvement, and food quality improvement.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? <i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses). If no risks have been identified in Attachment 1 then note “No Risks Identified” and skip to Question 4 and Select “Low Risk”. Questions 5 and 6 not required for Low Risk Projects.</i>		QUESTION 3: What is the level of significance of the potential social and environmental risks? <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 6</i>		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: Lack of national, provincial and local level support for the agricultural green production and sustainable development, and pay more attention to the product quality ,but ignore the environmental safety.	I = 2 P =2	Low	In order to ensure the effective circulation of contaminants in beef cattle farming, and has zero emission to the environment, the project will strictly supervision the environmental factors in the farming process.	The project plans to propose the basic standard method of beef cattle green production evaluation, through the green eco-certification label system to assure farming process with no pollution.
Risk 2: Climate change may increase the occurrence of natural disasters or climatic change that effect the operation of the industrial chain at demonstration sites indirectly.	I = 1 P = 2	Low		The project will adopt an adaptive management approach. This will enable assessment and adjustment to changing conditions, including climatic conditions, as required.
QUESTION 4: What is the overall Project risk categorization?				

	Select one (see <u>SESP</u> for guidance)		Comments
	<i>Low Risk</i>	<input checked="" type="checkbox"/>	Two risks are rated “low”
	<i>Moderate Risk</i>	<input type="checkbox"/>	
	<i>High Risk</i>	<input type="checkbox"/>	
	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?		
	Check all that apply		Comments
	<i>Principle 1: Human Rights</i>	<input type="checkbox"/>	
	<i>Principle 2: Gender Equality and Women’s Empowerment</i>	<input type="checkbox"/>	
	<i>1. Biodiversity Conservation and Natural Resource Management</i>	<input type="checkbox"/>	
	<i>2. Climate Change Mitigation and Adaptation</i>	<input type="checkbox"/>	
	<i>3. Community Health, Safety and Working Conditions</i>	<input type="checkbox"/>	
	<i>4. Cultural Heritage</i>	<input type="checkbox"/>	
	<i>5. Displacement and Resettlement</i>	<input type="checkbox"/>	
	<i>6. Indigenous Peoples</i>	<input type="checkbox"/>	
	<i>7. Pollution Prevention and Resource Efficiency</i>	<input checked="" type="checkbox"/>	Risk 1 relates to pollution prevention and resource efficiency

Final Sign Off

<i>Signature</i>	<i>Date</i>	<i>Description</i>
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA

		Approver cannot also be the QA Assessor. Final signature confirms they have “cleared” the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

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? ⁵	No
3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No

⁵ 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.

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?	No
5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6. Is there a risk that rights-holders do not have the capacity to claim their rights?	No
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?	No
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? <i>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</i>	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below	
Standard 1: Biodiversity Conservation and Sustainable Natural 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? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	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?	No
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? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	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 trans-boundary 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	No

with other known existing or planned activities in the area? <i>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.</i>	
Standard 2: Climate Change Mitigation and Adaptation	
2.1 Will the proposed Project result in significant ⁶ 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 now or in the future (also known as maladaptive practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	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, and 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?	No
5.2 Would the Project possibly result in economic displacement (e.g. loss of assets or access to	No

⁶ 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.]

resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	
5.3 Is there a risk that the Project would lead to forced evictions? ⁷	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?	No
Standard 6: Indigenous Peoples	
6.1 Are indigenous peoples present in the Project area (including Project area of influence)?	No
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)? <i>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.</i>	No
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?	No
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?	No
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 trans-boundary impacts?	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? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i>	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

⁷ 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.

3. Risk Analysis. Use the standard Risk Log template. Please refer to the Deliverable Description of the Risk Log for instructions

Table4 lists both the risks and mitigation strategy in terms of technical, market, economic, and policy perspectives.

Table4.The risks and mitigation strategies

Types of risks	Risk description	Levels of the risk	Mitigation strategy
Technical risks	Technician lack the knowledge of advanced technology.	Low	1.Information exchange and knowledge sharing; 2.Trainings and capacity building.
Market and financing risks	1. Publicity awareness to green industry agricultural products is low; 2.The capital is late, so there is a gap in construction funds and which make it difficult to achieve expected planning criteria.	Low	1. Selecting the places for demonstration and popularization in where market acceptance is higher; 2.Strengthen publicity, studying and application of financing mechanism, absorb social capital to participation in construction.
Policy and institutional risks	Government absence in the aspect of making ecological compensation policy and management of agricultural green products.	Low	Strengthen communication and coordination with government departments, and actively offer advice and suggestions to government department's support.

The project will ensure equal employment opportunities and try to actively engage female participants/stakeholders into the project.

4. Capacity Assessment: Results of capacity assessments of Implementing Partner (including HACT Micro Assessment)

5. Project Board Terms of Reference and TORs of key management positions

TORs below are “skeleton” style, consisting mainly of required tasks, deliverables, and required qualifications. During implementation, more TORs will be expanded if required.

Chief Technical Advisor (4 working month/year):

Required Tasks

- Provide leadership in project design, implementation and publication;
- Assist the PMO to prepare the project annual work plan;
- Technical supporting, review related reports;
- proposing the design of agricultural green evaluation system and eco-label;
- Other tasks required by project;
- Providing assistance to PMO for terminal evaluation.

Deliverables

- Project text of promoting Chinese agricultural green industry development;
- Annual work plan;
- Design eco-label for green industry chain products;
- Finish other technical reports required.

Required Qualifications

- Have academic background in resources and environment, agro-ecology, recycling agriculture, work more than 10 years in related fields;

- More than 5 years experiences in consulting and management in agriculture related fields is preferred;
- Strong communication skills;
- Very strong writing skills;
- Good working attitude.

Ecological circulation agriculture consultant (4 working month/year)

Required Tasks

- Participate in designing project text;
- Participate in scheme making for demonstration areas;
- Provide technical support for local;
- Review the progress reports and monitoring and evaluation reports;
- Other tasks required by project.

Deliverables

- Implementation plan;
- Provide related outcomes of consultation service required by owner.

Required Qualifications

- Have academic background in recycling agriculture, farmland ecological health, macro agriculture development strategy, and work more than 10 years in related fields;
- More than 5 years experiences in consulting and management in agriculture related fields is preferred;
- Strong communication skills;
- Very strong writing skills;
- Good working attitude.

Design & Appraisal Stage Quality Assurance Report

Overall Project Rating: Exemplary

Decision: Approve: The project is of sufficient quality to continue as planned.
Any management actions must be addressed in a timely manner.

Project Number: 00098795

Project Title: The project approach and underlying activities will provide results which, in a cost effective and target manner, have removed the project related barriers and facilitates adaptation of Ecological Farming.

Project Date: 01-Sep-2016

Strategic Quality Rating: Exemplary

1. Does the project's Theory of Change specify how it will contribute to higher level change?
(Select the option from 1-3 that best reflects the project)

- 3: The project has a theory of change with explicit assumptions and clear change pathway describing how the project will contribute to outcome level change as specified in the programme/CPD, backed by credible evidence of what works effectively in this context. The project document clearly describes why the project's strategy is the best approach at this point in time.
- 2: The project has a theory of change. It has an explicit change pathway that explains how the project intends to contribute to outcome-level change and why the project strategy is the best approach at this point in time, but is backed by limited evidence.
- 1: The project does not have a theory of change, but the project document may describe in generic terms how the project will contribute to development results, without specifying the key assumptions. It does not make an explicit link to the programme/CPD's theory of change.

Evidence

The project has very clear strategy on how the project will contribute to outcome level change:the project will choose typical areas for demonstration, construct the "modern and efficient beef cattle green industry chain", emphasize industrial development and environmental friendly coordination strengthen technology standardization, improve relevant policy system, emphasize the modern and effective industry management, promote the green consumption and the high-

Management Response

value of the ecological product, promote the synergy development of ecological and economic.

2. Is the project aligned with the thematic focus of the UNDP Strategic Plan? (select the option from 1-3 that best reflects the project)

3: The project responds to one of the three areas of development work as specified in the Strategic Plan; it addresses at least one of the proposed new and emerging areas; an issues-based analysis has been incorporated into the project design; and the project's RRF includes all the relevant SP output indicators. (all must be true to select this option)

2: The project responds to one of the three areas of development work as specified in the Strategic Plan. The project's RRF includes at least one SP output indicator, if relevant. (both must be true to select this option)

1: While the project may respond to one of the three areas of development work as specified in the Strategic Plan, it is based on a sectoral approach without addressing the complexity of the development issue. None of the relevant SP indicators are included in the RRF. This answer is also selected if the project does not respond to any of the three areas of development work in the Strategic Plan.

Evidence

The project responds to Strategic Plan No.1 Sustainable Development Pathway; it addresses environment protection with the improvement of livelihood.

Relevant

Quality Rating: Exemplary

3. Does the project have strategies to effectively identify, engage and ensure the meaningful participation of targeted groups/geographic areas with a priority focus on the excluded and marginalized? (select the option from 1-3 that best reflects this project)

3: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. Beneficiaries will be identified through a rigorous process based on evidence (if applicable.)The project has an explicit strategy to identify, engage and ensure the meaningful participation of specified target groups/geographic areas throughout the project, including through monitoring and decision-making (such as representation on the project board) (all must be true to select this option)

2: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. The project document states how beneficiaries will be identified, engaged and how meaningful participation will be ensured throughout the project. (both must be true to select this option)

1: The target groups/geographic areas are not specified, or do not prioritize excluded and/or marginalised populations. The project does not have a written strategy to identify or engage or ensure the meaningful participation of the target groups/geographic areas throughout the project.

Not Applicable

Evidence

Management Response

The project will provide technical training on practical techniques and services by experts, enterprises, cooperatives and so on, to solve the technical problems encountered in the development of beef cattle farming the farmers may encounter.

4. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? (select the option from 1-3 that best reflects this project)

3: Knowledge and lessons learned (gained e.g. through peer assist sessions) backed by credible evidence from evaluation, corporate policies/strategies, and monitoring have been explicitly used, with appropriate referencing, to develop the project's theory of change and justify the approach used by the project over alternatives.

2: The project design mentions knowledge and lessons learned backed by evidence/sources, which inform the project's theory of change but have not been used/are not sufficient to justify the approach selected over alternatives.

1: There is only scant or no mention of knowledge and lessons learned informing the project design. Any references that are made are not backed by evidence.

Evidence

Management Response

The project will be in line with the "beautiful countryside construction" and "international projects related to ecological and resource environment conservation" implemented by the Chinese government. So the mutual understanding and the experience will be shared. And the lessons and the good experiences from previous UNDP project e.g. CWRC project will be included in the project design.

5. Does the project use gender analysis in the project design and does the project respond to

this gender analysis with concrete measures to address gender inequities and empower women?
(select the option from 1-3 that best reflects this project)

3: A participatory gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men, and it is fully integrated into the project document. The project establishes concrete priorities to address gender inequalities in its strategy. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)

2: A gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men. Gender concerns are integrated in the development challenge and strategy sections of the project document. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)

1: The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the constraints have not been clearly identified and interventions have not been considered.

Evidence

Management Response

The amount of people that are trained was more than 300 person-times, improve the livelihood of poor families and living conditions for women.

6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national partners, other development partners, and other actors? (select the option from 1-3 that best reflects this project)

3: An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project. It is clear how results achieved by relevant partners will contribute to outcome level change complementing the project's intended results. If relevant, options for south-south and triangular cooperation have been considered, as appropriate. (all must be true to select this option)

2: Some analysis has been conducted on the role of other partners where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project. Options for south-south and triangular cooperation may not have not been fully developed during project design, even if relevant opportunities have been identified.

- 1: No clear analysis has been conducted on the role of other partners in the area that the project intends to work, and relatively limited evidence supports the proposed engagement of UNDP and partners through the project. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance.

Evidence

Management Response

The intended beneficiaries of the project will be local government, agriculture-related enterprises, agricultural cooperatives and farmers, the project will also promote the development of regional beef cattle green industry, and improve China's ecological environment. An efficient project organization management and coordination mechanism will be designed before project inception: the project steering committee will be established and key stakeholders will be engaged through the quarterly-basis committee meeting. In addition, the key stakeholders will be engaged in the project activities including but not limited to the demonstration, policy and standard research, workshops, project dissemination and advocacy activities.

Social & Environmental Standards

Quality Rating: Exemplary

7. Does the project seek to further the realization of human rights using a human rights based approach? (select from options 1-3 that best reflects this project)

- 3: Credible evidence that the project aims to further the realization of human rights, upholding the relevant international and national laws and standards in the area of the project. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. (all must be true to select this option)

- 2: Some evidence that the project aims to further the realization of human rights. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget.

- 1: No evidence that the project aims to further the realization of human rights. Limited or

no evidence that potential adverse impacts on enjoyment of human rights were considered.

Evidence

Management Response

The project will produce more, safer and more environmentally friendly agricultural green products to human beings.

8. Did the project consider potential environmental opportunities and adverse impacts, applying a precautionary approach? (select from options 1-3 that best reflects this project)

3: Credible evidence that opportunities to enhance environmental sustainability and integrate poverty-environment linkages were fully considered as relevant, and integrated in project strategy and design. Credible evidence that potential adverse environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. (all must be true to select this option).

2: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Credible evidence that potential adverse environmental impacts have been identified and assessed, if relevant, and appropriate management and mitigation measures incorporated into project design and budget.

1: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Limited or no evidence that potential adverse environmental impacts were adequately considered.

Evidence

Management Response

The project promote comprehensive utilization of waste produced in the process of beef cattle breeding, to form a new cultivation cycle source reduction, process controlling and end using. The project will focus on large-scale farms, and set up pilot on providing alternative energy supply from waste treatment for rural households.

9. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? [If yes, upload the completed checklist as evidence. If SESP is not required, provide the reason(s) for the exemption in the evidence section. Exemptions include the following:

Preparation and dissemination of reports, documents and communication materials

Organization of an event, workshop, training

Strengthening capacities of partners to participate in international negotiations and conferences

Partnership coordination (including UN coordination) and management of networks

Global/regional projects with no country level activities (e.g. knowledge management, inter-governmental processes)

UNDP acting as Administrative Agent

- Yes
- No
- SESP not required

Evidence

SESP is done.

Management & Monitoring

Quality Rating: Exemplary

10. Does the project have a strong results framework? (select from options 1-3 that best reflects this project)

- 3: The project's selection of outputs and activities are at an appropriate level and relate in a clear way to the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators that measure all of the key expected changes identified in the theory of change, each with credible data sources, and populated baselines and targets, including gender sensitive, sex-disaggregated indicators where appropriate. (all must be true to select this option)
- 2: The project's selection of outputs and activities are at an appropriate level, but may not cover all aspects of the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of gender sensitive, sex-disaggregated indicators, as appropriate. (all must be true to select this option)
- 1: The results framework does not meet all of the conditions specified in selection "2" above. This includes: the project's selection of outputs and activities are not at an appropriate level and do not relate in a clear way to the project's theory of change; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change, and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators.

Evidence

Management Response

Yes

11. Is there a comprehensive and costed M&E plan with specified data collection sources and methods to support evidence-based management, monitoring and evaluation of the project?

- Yes

No

Evidence

Project monitoring and evaluation will follow the procedures established by the United Nations Development Program, which are implemented jointly by the project team and the Ministry of Agriculture together with UNDP office in China. The monitoring and evaluation program includes the following tools: a start-up report, quarterly and annual assessment report, and a final assessment. The following sections provide an overview of the main components of the monitoring and evaluation program and the estimated costs of the projects under the program. The monitoring and evaluation program of the project will be detailed and summarized in the project start-up report, which will also provide a set of well-developed evaluation indicators and approaches. Beyond, based on the results framework for the project staff to clarify monitoring and assessment responsibility definition.

12. Is the project's governance mechanism clearly defined in the project document, including planned composition of the project board? (select from options 1-3 that best reflects this project)

3: The project's governance mechanism is fully defined in the project document. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. (all must be true to select this option).

2: The project's governance mechanism is defined in the project document; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The prodoc lists the most important responsibilities of the project board, project director/manager and quality assurance roles. (all must be true to select this option)

1: The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided.

Evidence

Following duty and responsibility shall be revised in accordance with the NEX manual and relevant rules UNDP China will be responsible for: (i) Providing financial and audit services to the project; (ii) Overseeing financial expenditures against project budgets approved; (iii) Appointing independent financial auditors and evaluators; and (iv) Ensuring that all activities including

Management Response

procurement and financial services are carried out in strict compliance with UNDP procedures. PMO will appoint a national director responsible for the work plan, coordination, management and financial affairs, as well as the completion status of project target, project reports which including annual work plan and financial report. The PMO comprised of project officer and 2 additional support staff. The main activities of the project including: drafting the work plan, the project implementation management, and terminal evaluation, meetings, communicating and sharing project outcomes. The overall management and detailed coordination should conform to UNDP NEX manual and the relevant rules. The PMO is responsible for all the implementation activities in the aspect of management and coordination: i) Preparing for the work plan and file archiving, drafting quarterly and annual progress reports; ii) Coordination, supervision and management the project activities of consultants and stakeholders; iii) Organizing the investigation, seminar, publicity, training and other activities; iv) Establishment good links with local project personnel; v) Organization of communication and cooperation activities.

13. Have the project risks been identified with clear plans stated to manage and mitigate each risks? (select from options 1-3 that best reflects this project)

3: Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis. Clear and complete plan in place to manage and mitigate each risk. (both must be true to select this option)

2: Project risks related to the achievement of results identified in the initial project risk log with mitigation measures identified for each risk.

1: Some risks may be identified in the initial project risk log, but no evidence of analysis and no clear risk mitigation measures identified. This option is also selected if risks are not

clearly identified and no initial risk log is included with the project document.

Evidence

Management Response

Table 2. The risks and mitigation strategies

Types of risks	Risk description	Levels of the risk	Mitigation strategy
Technical risks	Technician lack the knowledge of advanced technology.	Low	1. Information exchange and knowledge sharing; 2. Trainings and capacity building.
Market and financing risks	1. Publicity awareness to green industry agricultural products is low; 2. The capital is late, so there is a gap in construction funds and which make it difficult to achieve expected planning criteria.	Low	1. Selecting the places for demonstration and popularization in where market acceptance is higher; 2. Strengthen publicity, studying and application of financing mechanism, absorb social capital to participation in construction.
Policy and institutional risks	Government absence in the aspect of making ecological compensation policy and management of agricultural green products.	Low	Strengthen communication and coordination with government departments, and actively offer advice and suggestions to government department's support.

Efficient

Quality Rating: Exemplary

14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners.

Yes

No

Evidence

Operation benefit of beef cattle green chain development depends on the common goal and sincere cooperation of the stakeholders. However, due to the special characteristics in

agricultural markets, most of our farmers operated separately, and sell the agricultural products to wholesalers or retailers with competition. Farmers can not share the benefit from the operation of beef cattle industry chain with separated operation. The project will use a portfolio management approach to promote the effective cooperation of stakeholders, and to create a competitive advantage, reduce market transaction costs and share the benefit of beef cattle industry chain through mutual pull effect and cluster effect among stakeholders. Cooperated with domestic higher agricultural universities, local environmental protection stations, enterprises and so on, studying agricultural green evaluation standards, monitoring environment factors in production process, discussion and formation the beef cattle green financing mechanism. The lessons learned from the project will provide reference for the development of agricultural green industry chain in other areas of China.

15. Are explicit plans in place to ensure the project links up with other relevant on-going projects and initiatives, whether led by UNDP, national or other partners, to achieve more efficient results (including, for example, through sharing resources or coordinating delivery?)

Yes

No

Evidence

At present, a lot of projects and initiatives have been conducted for the development of beef green industry, like green ecological beef cattle industry chain development class in Tongzi County, Guizhou province, which assisted the investment company to start the project of green ecological beef cattle, and promoted the development of agricultural and rural economy; and in Yangxin County of Shandong province, where has formed a completely green recycling industry chain of forage planting - calves breeding - standardized breeding - slaughtering and processing - cold chain logistics and distribution - food - leather deep processing - bovine, bovine blood biotechnology research and development; while, Chongqing Cow Beef Source Food Co., Ltd. has realized the goal of industry chain efficient link among cultivation, processing and marketing from pasture to the table. In order to guide the sustainable development of national agriculture, the Ministry of Agriculture, the National Development and Reform Commission, the Ministry of Science and Technology, the Ministry of Finance, the Ministry of Land and Resources, the Ministry of Environmental Protection, the Ministry of Water Resources and the State Forestry Administration had compiled "National Agricultural Sustainable Development Plan (2015-2030)" in 2015, and for the sustainable development of agricultural, the plan has formulated the key tasks of optimizing and developing the layout, protecting cultivated land resources, saving and using water conservation efficiently, controlling environmental pollution and restoring ecological agriculture to solve the problems like lacking of resources aggravating increasingly, serious environment pollution, obvious ecosystem degradation and the incomplete mechanism.

16. Is the budget justified and supported with valid estimates?

- 3: The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget.
- 2: The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget. Costs are supported with valid estimates based on prevailing rates.
- 1: The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget.

Evidence

Yes, the details could be tracked in the MYWP.

17. Is the Country Office fully recovering the costs involved with project implementation?

- 3: The budget fully covers all direct project costs that are directly attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.)
- 2: The budget covers significant direct project costs that are directly attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant.
- 1: The budget does not reimburse UNDP for direct project costs. UNDP is cross-subsidizing the project and the office should advocate for the inclusion of DPC in any project budget revisions.

Evidence

GMS will be charged

Management Response

Effective

Quality Rating: Exemplary

18. Is the chosen implementation modality most appropriate? (select from options 1-3 that best reflects this project)

- 3: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted, and there is evidence that options for implementation modalities have been thoroughly considered. There is a strong justification for choosing the

selected modality, based on the development context. (both must be true to select this option)

2: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted and the implementation modality chosen is consistent with the results of the assessments.

1: The required assessments have not been conducted, but there may be evidence that options for implementation modalities have been considered.

Evidence

Management Response

MOA is our long-term partner for NEX project on GEF initiatives. HACT will be conducted in Sep.

19. Have targeted groups, prioritizing marginalized and excluded populations that will be affected by the project, been engaged in the design of the project in a way that addresses any underlying causes of exclusion and discrimination?

3: Credible evidence that all targeted groups, prioritising marginalized and excluded populations that will be involved in or affected by the project, have been actively engaged in the design of the project. Their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change which seeks to address any underlying causes of exclusion and discrimination and the selection of project interventions.

2: Some evidence that key targeted groups, prioritising marginalized and excluded populations that will be involved in the project, have been engaged in the design of the project. Some evidence that their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change and the selection of project interventions.

1: No evidence of engagement with marginalized and excluded populations that will be involved in the project during project design. No evidence that the views, rights and constraints of populations have been incorporated into the project.

Not Applicable

Evidence

The marginalized and excluded populations that will be affected by the project has been partially involved in the project design, their view and rights have been analysed and incorporated into the root causes. As this project is to improve drinking water management in rural areas where in many counties in China, only elder and children are living there, while middle age generation are going to big cities to work.

20. Does the project conduct regular monitoring activities, have explicit plans for evaluation, and

include other lesson learning (e.g. through After Action Reviews or Lessons Learned Workshops), timed to inform course corrections if needed during project implementation?

Yes

No

Evidence

Project monitoring and evaluation will follow the procedures established by the United Nations Development Program, which are implemented jointly by the project team and the Ministry of Agriculture together with UNDP office in China. The monitoring and evaluation program includes the following tools: a start-up report, quarterly and annual assessment report, and a final assessment. The following sections provide an overview of the main components of the monitoring and evaluation program and the estimated costs of the projects under the program. The monitoring and evaluation program of the project will be detailed and summarized in the project start-up report, which will also provide a set of well-developed evaluation indicators and approaches. Beyond, based on the results framework for the project staff to clarify monitoring and assessment responsibility definition.

21. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum.

Yes

No

Evidence

Management Response

Gender issues has been considered in the project design.

22. Is there a realistic multi-year work plan and budget to ensure outputs are delivered on time and within allotted resources? (select from options 1-3 that best reflects this project)

3: The project has a realistic work plan & budget covering the duration of the project at the activity level to ensure outputs are delivered on time and within the allotted resources.

2: The project has a work plan & budget covering the duration of the project at the output level.

1: The project does not yet have a work plan & budget covering the duration of the project.

Evidence

Already uploaded.

23. Have national partners led, or proactively engaged in, the design of the project?

- 3: National partners have full ownership of the project and led the process of the development of the project jointly with UNDP.
- 2: The project has been developed by UNDP in close consultation with national partners.
- 1: The project has been developed by UNDP with limited or no engagement with national partners.
- Not Applicable

Evidence

project is designed by MOA and will be implemented by MOA as well, it is a NEX project.

24. Are key institutions and systems identified, and is there a strategy for strengthening specific/comprehensive capacities based on capacity assessments conducted? (select from options 0-4 that best reflects this project):

- 3: The project has a comprehensive strategy for strengthening specific capacities of national institutions based on a systematic and detailed capacity assessment that has been completed. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly.
- 2.5: A capacity assessment has been completed. The project document has identified activities that will be undertaken to strengthen capacity of national institutions, but these activities are not part of a comprehensive strategy to monitor and strengthen national capacities.
- 2: A capacity assessment is planned after the start of the project. There are plans to develop a strategy to strengthen specific capacities of national institutions based on the results of the capacity assessment.
- 1.5: There is mention in the project document of capacities of national institutions to be strengthened through the project, but no capacity assessments or specific strategy development are planned.
- 1: Capacity assessments have not been carried out and are not foreseen. There is no strategy for strengthening specific capacities of national institutions.

Not Applicable

Evidence

MOA will appoint a national director responsible for the work plan, coordination, management and financial affairs, as well as the completion status of project target, project reports which including annual work plan and financial report. The MOA will set up a special project management office (PMO) for the monitoring and management of the project implementation, which is comprised of 1 project officer and additional support staff. The main activities of the project including: drafting the work plan, the project implementation management, and terminal evaluation, meetings, communicating and sharing project outcomes. The overall management and detailed coordination should conform to UNDP NEX manual and the relevant rules. The PMO is responsible for all the implementation activities in the aspect of management and coordination: i) Preparing for the work plan and file archiving, drafting quarterly and annual progress reports; ii) Coordination, supervision and management the project activities of consultants and stakeholders; iii) Organizing the investigation, seminar, publicity, training and other activities; iv) Establishment good links with local project personnel; v) Organization of communication and cooperation activities.

25. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.,) to the extent possible?

Yes

No

Not Applicable

Evidence

Local implementing agency (Environmental protection stations, cooperatives, associations, enterprises): responsible for supervision and management the environment during the process of the beef cattle green industry, and doing the publicity and trainings as the PMO required.

26. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation strategy)?

Yes

No

Evidence

China is at a crucial stage of ecological civilization construction and agricultural supply-side reform. The green development of agricultural industry not only satisfied to the development goal of modern agriculture with high yield, high quality, high efficiency, ecology and safety, but

also in accordance with the development concept of agriculture mode changing and structure adjusting. The core of the project is putting ecological in harmony with the economy, creating high-quality special, characteristic and advantages agricultural products brand through optimization of regional agricultural green industry chain, establishment of ecological compensation mechanism and innovation agriculture green industry investment and financing, to achieve the goal of restoring ecological and environmental management through green production, and finally cultivate the new industries, new pattern and new models for China's agriculture and rural development. Agriculture green industry chain is the ideal model for sustainable development of agriculture in the current stage. The successful implementation of the project will speed up the development of regional beef cattle green industry, and also provide experience sharing and technical supporting for other areas in China and other developing countries that faced with the same problems with the possibility of further scaling up.