

2012 WWF QINLING YOUTH AMBASSADORS

In July, 10 groups of WWFsupported Qinling Youth Ambassadors, with nearly 100 college students, have finished their 10 days voluntary services in 7 nature reserves (Zhouzhi Nature Reserve, Foping Nature Reserve, Huangbaiyuan Nature Reserve, Guanyinshan Nature Reserve, Sangyuan Nature Reserve, Pingheliang Nature Reserve, Motianling Nature Reserve) and a state-owned forest farm (Shaanxi Houzhenzi Forest Farm) in the Qinling Mountains. This year, the theme of this activity is 'Agricultural and Technical Support'. WWF hopes that throughout the cooperation with Northwest Agriculture and Forestry University, Qinling Youth Ambassadors would contribute more to the sustainable community development and the protection of giant panda habitat in the Qinling Mountains.

In 2012, in order to strengthen the agricultural and technical support, every team has received the support and advisories from professors and experts; WWF has also provided a small Purchase Tools Fund to assist relevant activities. At the meantime, 2012 Qinling Youth Ambassadors have also conducted community surveys, voluntary services and teachings in the local villages.

Agricultural & Technical



Out-door experiment of diseased Qinling salamander, © WWF.

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Support

With the help of experts and professors from Northwest Agriculture and Forestry University, 10 groups of Qinling Youth Ambassadors selected more than 10 local villages in the heart of the Qinling Mountains. They have introduced scientific planting and breeding techniques, delivered the new method on pest control and prevention / treatment to common disease to the local villagers. Also, they have taken the unsolved problems back to schools and laboratories in a hope that better solutions will be provided afterwards.

Key methods: out-door laboratory, lectures, guide books, video tutorials, and introducing new varieties, organic fertilizers.

Community Survey

Community surveys have mainly focused on identifying livelihood development needs and the existing conflicts between nature conservation and community economic development in the local villages.

Key methods: questionnaires and interviews.

Community Service

Qinling Youth Ambassadors have also provided voluntary services to the local communities, such as producing environmental-friendly tourist guiding information, cleaning garbage in river ways and on tourist tracks, organizing recreational activities, etc.

Voluntary Teaching

Qinling Youth Ambassadors spent a lot of their spare time on voluntary teaching and tutoring to preschoolaged children and school students, English listening & speaking programs and one-on-one tutorial classes are the top welcomed teaching activities.

Green Bookshelves

'Green Bookshelves' is one of the famous activities that Qinling Youth Ambassadors have developed in the past six years. Every year Qinling Youth Ambassadors will bring varieties of books to local schools and communities in a hope that it can fill the information gaps between mountainous areas and urban areas. These collected reading materials cover nearly all

the field of life, from agricultural production materials to the latest comic books; and most of all, it also contains a good number of books, magazines and videos about nature and conservation work, such as wildlife study and protection, bird watching guidebook, as well as wildlife pocket books on how to live with wildlife and natures. Qinling Youth Ambassadors believe that it is a great opportunity to help locals in a long term, and to showcase the significance of conservation





Up: Filling questionnaire in Huangbaiyuan, Low: Voluntary Teaching, © WWF

and sustainable development at the same time.

Additional Information:

Starting from 2006, WWF, in cooperation with Shaanxi Youth League and several key provincial universities, launched the Qinling Youth Ambassador activities to provide voluntary services and support communities neighboring Qinling giant panda nature reserves. More than 1,000 college students have been sent to Qinling during the summer vacation. In the past 7 years, Qinling Youth Ambassadors were endeavoured in WWF's mission of 'building a future

in which humans live in harmony with nature', and offered a great support to panda and panda habitat conservation, as well as sustainable development of rural economy in the Qinling Mountains.

OVERSEAS FRIENDSHIP TO PROTECT PANDAS

'My name is India Jacob. I am 10 years old and I live in Tuahwihi. I love giant pandas and recently my mum and I have been making cut little panda toys and selling them out. \$10 of each panda sold will go to WWF. Hopefully that money will be used to protect giant panda.

So far I have sold 7 pandas but there are still lots more that still need a home for \$17.50 each. So far I have raised \$165.'

This is a letter from India Jacobs, who is from New Zealand.

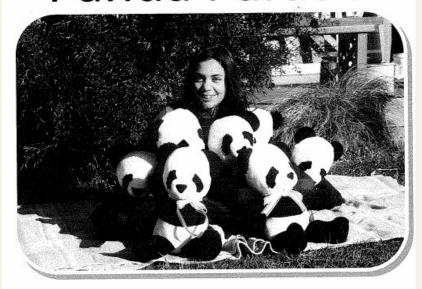
Wang Yue, 12 year-old girl from China, living in Gaoyuan village, Sichuan Province. Gaoyuan Village is near Longxi-Hongkou Nature Reserve, where is the habitat of 8 wild pandas, and other wild animals, like Golden Snob Monkey and Tankin. Wang Yue is fifth grade student, saying that she likes hosting, drawing, playing badminton and english class.

Those two girls never known each other before will become friends due to panda.

India donated NZ\$165 from selling the panda toys to WWF and hopes protect the panda. But how to spend those meaningful money?

Deputy director general, Du XiaoMing, of Longxi-Hongkou Nature Reserve came up an idea. He suggested to find a girl from the

Panda Parade



My name is India Jacob I'm 10 years old and I live in Tuahiwi . I love giant pandas and recently my Mum and I have been making cute little toy pandas and are selling them . \$10 of each panda sold will go to the WWF [World Wildlife Fund]. Hopefully that money will be used to buy protected land for the pandas to live safely!

So far I have sold 7 pandas but there are still lots more that still need a home for \$17.50 each.

So Far I have raised \$165

village near panda habitat to help India to use the money. This girl, is Wang Yue, from Sichuan, the hometown of panda.

Human activities have the direct effect on panda and its habitat. Panda habitat normally is located in the remote high mountains, and the nearby communities is relatively backward in economy, culture, transportation, communication and so on. The communities live in poverty, only seek from the nature resources, such as lumbering for life energy, collecting medicinal materials and other forest byproducts for cash. To alleviate the effect of human activities on panda habitat, WWF has been working with nature reserves to support the efficient energy stoves reducing the consumption of firewood. The sustainable management of forest resources has been applied in the communities to protect the forests. The conservation awareness of the communities has been increased through the environment education. The communication manager of Longxi-Hongkou, Liu Bo says that they will promote the environment protection in the primary school to raise the conservation awareness of student.

With support from the head of Hongkou Primary School, Li XueJun, Wang Yue will use the donation from India to buy some trees and plant in the mountain near the school. We wish the friendship between India and Wang Yue will grow up like the trees; and Wang Yue would appeal other students to protect panda together.

Up: An old lady uses the traditional stove, which costs lots of firewood, .

©Lin Yi; Middle: The lady says that the efficient energy stove saves tons of firewood for her family, © Jiang ZeYing; Low: The students drew their hometown during the environment education class, © WWF.







IMPROVING THE FOREST CARBON SINK ECONOMY AND PROMOTING THE DEVELOPMENT OF LIANGSHAN, SICHUAN BY SAVING STOVES AND MICRO HYDROPOWER PROJECT

During November 26 to December 7, 2012, representatives of countries around the world gathered in Doha, the capital of Qatar, and held the 18th Meeting of the United Nations Framework on Climate Change Convention of the Parties and the 8th Conference of Kyoto Protocol of the Parties. With the Climate Conference in Doha, the developed countries, the developing countries and the less developed countries have to jointly face the problems such as global climate change and environmental pollution, and carbon market will be getting into the real life of the public.

Due to the practical difficulties in technician, economy and so on, energy-saving and emissionreduction works are hard to implement in some economically backward regions in China, and many rare species are seriously threatened and endangered. In order to ensure the protection of the habitat of the giant panda, the WWF launched firewood-saving stoves and micro-hydropower project in 2011, committing to the reduction of the firewood consumption in the panda habitat and thus protect forests, national precious pandas as well as the homeland of all mankind.

By the end of 2012, WWF will complete 1100 saving stoves construction in the communities surrounding Ma Mize Nature Reserve in Leibo County, Liangshan Prefecture, the southernmost giant panda distribution in Sichuan. The preliminary calculations show that one saving stove can reduce 10 tons

of firewood consumption per year; and according to the forest status and its growth condition in Ma Mize, each saving stove is going to reduce carbon dioxide emissions by about 7 tons every year. The reduced carbon dioxide index will be brought to the international carbon market for transactions, and the proceeds will continue to support the emission reduction projects in communities.

At the same time, the microhydropower project collaborated by WWF and Mitsui Products Environment Fund will install 120 micro hydropower machines for the villagers in Shen Guozhuang region, Liangshan Yi Autonomous Prefecture, Sichuan Province, to solve part of the local community's electricity problems. Each machine will decrease 17.5 cubic meters of firewood consumption annually on average, which is equivalent to the protection of 0.213 hectares of forest, the entire micro-hydropower project annually protects 25.56 hectares panda habitat from logging. By reducing firewood felling, protecting forest absorption and decreasing emissions of carbon dioxide of firewood burning, an average of 7.28 tons annual carbon dioxide emissions by each machine is diminished, and the 120 microhydro project is reducing about 873.6 tons of carbon dioxide emissions each year. Assuming each micro-hydropower machine daily works 8 hours at a generating capacity of 1.5 kW h on average, and produces electricity 4380 kWh per year, then the project generates income 246,960 Yuan annually.

Firewood-saving stoves conserving forest resources and benefiting the panda habitat

An old lady Jiqu Mali lives in Qianzhu Group, Da Gudui Village, Gudui Town, Leibo County, Liangshan Prefecture in Sichuan Province. Her husband died a few years ago, and children works outside because of poor economy conditions, thus leaving the only lady staying at the dilapidated old house. The lady is more than 80 years old, and her body has not much trouble except for the poor vision. When it's time for cooking, she squatted and made a fire in the front of a stove made by three stone blocks which is called the "Pot-stake Stove" by the local. After a while, the whole room is filled with white smoke, making breathing hard and continuous coughing, and brings tears to the eyes. The lady seems to have long been accustomed, and just frowned slightly upon that. Shess She made the fire as she said: "Villagers here all use woods to make a fire, prepare a meal, cook pigwash, warm themselves (heating), and all of those spend more than ten tons of firewood per year." Fewer woods survive around the village, and nowadays, people have to go to farther places to gather woods." The lady is too old to carry on firewood by herself, and the piled wood scattered around are all from the neighbors.

Ahou Laye, the director of Ma Mize Nature Reserve said: "The Gudui Town, Changhe Town, Lami Town, Sanleng Town and other townships surrounding the reserve are lagging behind in economy, culture, transportation, communications as well as other aspects, and the local residents dependent a lot on forestry resources: the majority of farmers use traditional "Pot-stake Stove" and "Tiger Stove" making a fire (the "Pot-stake Stove" is a way of energy consumption on fire places made by stone blocks and uses wood as fuel to heat, cook and boil water). This kind of energy consumption has a low fuel utilization which is only 10% of the heat efficiency, and is extremely insanitary; the firewood combustion causes dust problems, which are on the negative to human health."

Backwardness for the development and traditional living habits are great threats to Ma Mize Nature Reserve, Leibo County, Liangshan in Sichuan. Ma Mize Nature Reserve is the best preserved subtropical evergreen broadleaved forest at the same latitude in today's world, and is one of the comparatively intact panda habitat in Liangshan Mountains, and also one of the habitats of endemic birds "Sichuan Partridge". In order to reduce fuelwood consumption of residents of communities surrounding the reserve and protect forest resources, the WWF collaborated with Ma Mize Nature Reserve and built firewood-saving stoves in the pilot Gudui Town, Leibo County in June 2011. The project is welcomed by broad farmers and gets promoted; by

Up: Yi traditional cooking tools, the "Pot-stake Stove", © Jiang Zeyin; Middle: Every year the villagers spend 2-3 months collecting and cutting wood, gathering firewood needed by the family in the coming year. The quite heavy labor intensity falls on the women and the elderly at home, © Xiao Sha; Low: Wood saving stoves, © WWF







far there have been 1100 stoves built in the reserve. The benefited farmers have reduced dependence on forests by using saving stoves, thus protects the forest resources in the giant panda habitat, which absorb and fix atmospheric carbon dioxide and release oxygen, in this way contributes to global warming. Moreover, the using of stoves has greatly reduced farmer's labor workload, and the saving workforce go in for other industries or field work, which indirectly effects local industrial structure adjustment. The more pleasing thing is that the income from selling carbon dioxide index which is saved by stoves can be used to repay borrowings for the construction of stoves and invest more construction.

Micro-hydropower take advantage of micro hydropower to the electric age

Sichuan Nature Reserve is located in Yuexi County in Liangshan Prefecture, and is based on the protection of giant pandas, lesser pandas, dove trees, yews and other rare and endangered wild animals and plants as well as their habitats based on wildlife nature reserves and forest type. The panda population within is not only an important consisting part of the resources of Sichuan giant panda population, but also a guarantee and a key corridor for panda population communications between Ganluo County and Meigu County, playing a vital role in

promoting the panda populations in the Liangshan Mountains resources development. However, the surrounding townships have not been energized yet, so community residents light mainly by diesel fuel lamps, causing heavy smoke dust, which is extremely detrimental to the health of residents. Local residents' production and life are still in the traditional way of energy consumption, taking firewood as the main fuel, and most of the farmers use the traditional "Potstake Stove" to cook, depending strongly on forest. And the majority of the people are felling firewood in the reserve, causing a serious impact on the habitat of the giant panda.



WWF promoted micro-hydropower., © Wang Tao.

Seeing the advantaged situation that the local water supply is rich perennially, and the drop is in line with the condition of microhydro resources (not less than 3 meters), which can be driven by the micro-hydropower generating units, the WWF (World Wide Fund for Nature) and Mitsui Products Environment Fund (GEF) have been working together to build micro-hydro in the pilot of this area since 2011. Micro water power electricity not only satisfied the farmers' lighting, heating, but also met the needs of local agricultural irrigation, small scale processing,

Di Gubu, the villager of the Third Group of Wa Lijue Village, Wa Lijue Town, Shen Guozhuang Nature Reserve in Sichuan, told a story about how micro-hydropower completely changed the life of his whole family. He said that he has lived 30 years from birth to now in Shen Guozhuang, and had always lighted by kerosene lamps as well as pine rolling skins before 2009. Later, friends and relatives raised funds together with him and built a micro-hydropower station, but it had a poor motor performance, and generated electric only over 600 watts, emitting very weak light.

In July 2010, the World Wide Fund for Nature (WWF) sent excellent micro-hydro, transmission lines and lighting equipment to the village, and his home got the chance to install a micro-hydro. Now electricity lighting is very bright for kids to read and do homework. Subsequently, the home added TV sets, VCD players, along with household appliances such as induction cooker, electric rice cooker, electric furnace thermostat. And for now, mountain firewood is only used to cook hogwash and get warmth in winter, the dry seasons

as well as cook pigs, cattle and sheep on receiving guests. Now the firewood amount is only onethird of the original, which protects forests and the villagers' living environment.

Micro-hydropower project is conducive to local economic development and environmental protection. Firewood combustion by deforestation is the second source of global greenhouse gas emissions subsequent to the burning of fossil fuels. The clean Development Mechanism (CDM) identified in the Kyoto Protocol allows industrialized countries to offset its commitment of reduction and emission limitation index by the reduction project activities in developing countries. Micro-hydro project achieves emission reduction by reducing deforestation. At the same time, the WWF is trying a sustainable mechanism to ensure fund raising: trade the carbon emission reduction index in the international carbon market under the Gold Standard (GS), the Voluntary Emission Reduction (VER), and the Clean Development Mechanism (CDM), etc. The proceeds will be returned to community microhydro maintenance management in the future and the development of new projects, making more protection project operate sustainably.

By the end of 2012, there will be 120 micro-hydro machines in the community, and can solve part of residents' lighting, cooking, heating and even agriculture electricity, in this way it effectively reduces firewood using of the local people and thus reduces the deforestation, restrain soil and water loss, maintains ecological balance, protects giant pandas and other wild animal resources and their habitats within this region.

Meanwhile, it can improve the home environment and health conditions of the people in the community, and promote the harmonious development of the reserve and local communities.

Saving stoves, micro-hydro effectively enhances forest carbon sinks, mitigate climate change and protect the giant panda

There stored nearly 300 billion tons of carbon in the global forest, which is equivalent to 40 times the carbon dioxide released by the annual human burning of fossil energy. If the forest is cut down and incinerated, it will not only greatly reduce the ability of forests to store carbon, but also release large amounts of greenhouse gases in the process. Now the entire world has recognized the necessity of increasing forest carbon sinks to tackle climate change, and restoration and protection of the forest is one of the most fundamental measures to mitigate global climate change.

Every stove can reduce 10 tons of firewood consumption per year, which is equivalent to the protection of the relevant hectares of forest; each micro hydropower annual decrease 17.5 cubic meters of firewood consumption on average, which is equivalent to the protection of the 0.213 hectares of forest. It has practical significance to the forest conservation of the giant panda habitat in Liangshan, and also indirectly preventing soil and water erosion, improving soil fertility, conserving water, fixing windbreak and sand, fixing carbon and releasing oxygen, regulating climate, and enhance the ability of the Earth to adapt to climate change, and further protect our mutual home.

TAIBAISHAN ECO-TOURISM MONITORING REPORT COM-PLETED

August 2012, Taibaishan Ecotourism Club, in cooperation with relevant government agencies, research institutes and local communities, has completed WWF-supported the Taibaishan Ecotourism Monitoring report.

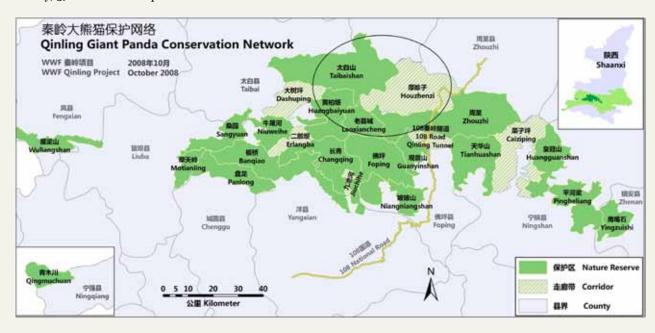
This monitoring report is based on the study of current situation of Taibaishan tourism management and development, and its impact on biological diversity and nature environment in this area, as well as its major influences on conservation work. This newly accomplished monitoring report has carried out in 6 aspects mainly, including 1) basic information on tourism operating units, 2) tourism revenues survey, 3) tourism development

and management research, 4) tourist demographic statistics and behaviours study, 5) community socio-economic development and home-stay operation studies, and 6) stakeholders awareness and government support study.

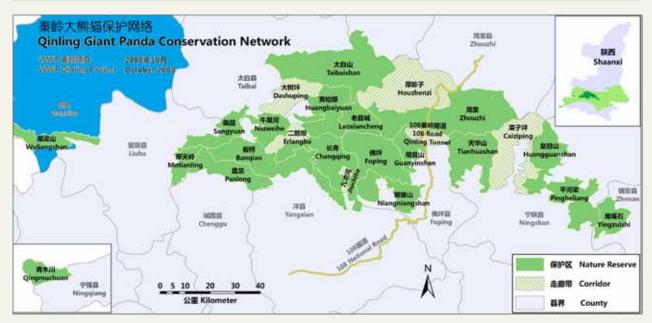
In 2009, in order to promote the sustainable development of ecotourism in Taibaishan region and nature conservation work in this area, WWF has supported the establishment of 'Taibaishan Ecotourism Alliance' with relevant stakeholders. The established association has not only became an effective platform for shareholders' exchanges and cooperation, but also laid the foundation for

the ecological and sustainable development of this region.

Additional Information: Taibaishan Mountain is the peak of Qinling, the watershed of the Yangtze and Yellow Rivers and northernmost distribution area of giant pandas in China. Taibaishan has an altitude of 3767.7m, the highest in eastern China. Taibaishan is not only famous for its natural resources. but also for its culture influences. Chinese Taoism, advocating the philosophy of being natural and pure, regarded the mountain as a holy mountain. The beautiful sceneries and religious background of Taibaishan attract many tourists and prayers every year.



HCVF IDENTIFICATION PROGRESS & ACHIEVEMENT



'Shaanxi High Conservtion Value Forest (HCVF) Identification

-Fengxian County Pilot
Demonstration Project' is an expansion of Shaanxi HCVF Identification Guideline
Development Project', supported by WWF and Shaanxi Forestry
Department. WWF believes that the definition and identification of HCVF in Shaanxi Province is significant to panda habitat protection and sustainable forest

planning & management in the Qinling Mountains.

The project in Fengxian County has built a HCVF Database and Geographic Information System. The result of HCVF mapping will be incorporated in the overall planning of Fengxian County in the future, and the work in the pilot site will be promoted in other counties and forest management units in Shaanxi Province.

Additional Information: Fengxian County is located at the southwest slope of the Qinling Mountains and the watershed of the Jialingjiang and Hanjiang rivers. It is the westmost area for Qinling giant panda habitat, and also well known for its dense distribution of wild musk deer. Fengxian is also one of the 23 key forestry counties in Shaanxi Province, with its woodland covers more than 90 per cent of the county area.

DONGHE COLLECTIVE FOREST MANAGEMENT PLAN ESTAB-LISHED

Donghe village is in the far north of Changjiaoba town, Foping County. It has 52 families and is the only village within Shaanxi Guanyinshan Nature Reserve. In the past, the livelihood of Donghe villagers largely relied on logging, planting edible fungus & mushroom, collecting herbs and reaping lacquer; however, they had to stop the original production and business activities since the implementation of the National **Natural Forest Protection Projects** and other forest conservation regulations. The latest survey in 2012 reflects that the annual income of Donghe people is less than 3,000 RMB, and mainly comes from parttime jobs and government subsidies (e.g. return farmland to forests subsidy and national support on poverty-stricken counties), which takes 18% and 14% of their total revenues respectively.

Donghe village has an area of 1466 ha collective forest. As part of panda habitat within Guanyinshan nature reserve, the management of these collective forests has become critical and essential to panda conservation in this area. From May 2012, WWF has supported Guanyinshan nature reserve, in cooperation with local community and government, to explore ways of managing these collective forests effectively and sustainably. WWF hopes that the establishment of Donghe Collective Forest Management Plan can serve for the panda-friendly management of the forests and sustainable forest economy development of the village over next five years.

Additional Information: Guanyinshan Nature Reserve is located on the south slope of the Qinling Mountains; it connects several pieces of isolated giant panda habitat in Qinling and formed a corridor for the genetic exchange of wildlife. It is a favourable environment and migrating route for many rare species, such as giant panda, takin and musk deer.





Up: A family house in Donghe Village, © WWF; Low: Visiting Donghe village, © WWF.

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ACKNOWLEDGMENTS

Special thanks to WWF Netherlands, WWF-Switzerland, Fondazione Zegna and EU for their financial supports to the Qinling Project Phase III, WWF UK, WWF US, WWF Germany and WWF Sweden for their financial supports of Minshan Initiative, and WWF Netherlands, WWF UK, WWF US, WWF Germany, WWF Sweden, WWF Switzerland and WWF Canada for their supports of the Green Heart of China Programme. Sincere thanks to the Coca-Cola Company for WWF-TCCC Partnership, WWF Network and WWF-US Humanitarian Partnership Programme for making efforts to post-disaster reconstruction plans, and Carrefour for Sustainable Management and Development Project for Medicinal Plant Resources.



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.panda.org

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