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About C FORCE LAB

Today, human life on Earth is facing a multitude of pressing challenges, including geopolitical conflicts, climate change, biodiversity loss, and increasing global uncertainty. There is an growing trend of reshaping paradigm of human civilization. To ensure sustainable and prosperous development of the planet, it is imperative to accelerate green transition toward a carbon-neutral future, restore the harmonious coexistence between human beings and nature, and promote the transformation from industrial civilization to ecological civilization.

From the present to a green future, it has become increasingly evident that there is no universal or one-size-fits-all path. Innovation and collective efforts are essential to reshape the future together

This is why Global Climate Futures Innovation Lab (C Force Lab) is established. Incubated by the Institute of Carbon Neutrality at Peking University, C Force Lab is an intercultural, interdisciplinary and inter-generational co-creative platform driven by an ecological worldview. Severing as a “Spaceship Station”, C Force Lab will bridging up the present and the future, the physical and the social sciences, the inner being with outside. It welcome new culture, new agenda, new actors, and new narrative for a better shared future with global partners.

New Culture: Seeking to engage world-class philosophers and scientists in discussions on the harmonious coexistence of humanity, nature, and the planet, this marks a significant shift toward an eco-centric worldview as opposed to an anthropocentric one. Projects incubated under this initiative, such as Beyond Climate, have already invited distinguished figures including Emma Sky, Founding Director of the Yale International Leadership Center, and Mary Evelyn Tucker, Professor at Yale School and co-founder of the Yale Forum on Religion and Ecology, a leading scholar in global ecological civilization, to participate in dialogues and academic exchanges. Additionally, strategic cooperation has been established with Climate Watch, the broadcast program of CGTN (CCTV International Channel).

New Agendas: By tracking international and domestic policy trends, C Force Lab introduces global agendas to China and promotes Chinese case studies on the international stage. Through joint research, pilot programs, and international exchanges, C Force Lab fosters meaningful dialogue between China and the global community. Incubated projects include the Global Accelerator for Food System Transformation (GAFST) in collaboration with Harvard Law School, the Climate and Nature Global Cooperation Network, and the Comprehensive Ecological Civilization Pilot in Tieniu Village, Chengdu, China.

New Actions: Young generation are essential to achieving a carbon-neutral future and serve as its stewards. With a focus on inspiring and cultivating curiosity, courage, and compassion—referred to as the 3C Leadership—C Force Lab designs and implements programs, launches international cooperation initiatives, and nurtures the next generation of global leaders in carbon neutrality. Ongoing projects include Yunqi Philanthropy, the Earth Walker Initiative, and Gaia’s Ark. Flagship programs include the Peking University – Sciences Po Climate Week and the 3C Climate Futures Leadership Workshop.

New Narratives: In the face of multiple challenges and uncertainties, the human instinct is often fear or flee. By integrating the progress of new culture, new agendas, and new actors, C Force Lab aims to develop compelling narratives that guide society toward carbon neutrality and a sustainable future. Embracing what can be described as “stubborn opportunism,” C Force Lab strives to serve as a consistent source of inner strength and motivation, enabling collective efforts to co-create a better future.

*The future is not some place we are going, but one we are co-creating.
C Force Lab is looking for co-creating a shared green and sustainable future with you!*

ABOUT THE INSTITUTE OF CARBON NEUTRALITY,
PEKING UNIVERSITY

Established in March 2023, the Institute of Carbon Neutrality of Peking University is an independent second-class institution launched by Peking University and one of the four key cross-disciplinary platforms till 2030 in PKU. There are over 110 dual-appointed faculties from more than 20 colleges, who are also part of Peking University's new round of "Double First-Class" strategic construction. The Institute is headed by Academician Pu Shilong, Vice President of Peking University. Guide by ecological civilization, sustainable development and the shared future for human being, the Institute is committed to finding solutions to the climate crisis by accelerating the transition to a net-zero future, on the basis of the cross-disciplinary advantages of liberal arts, science, agriculture, engineering and medicine, as well as extensive international exchanges. Adhered to upholding tradition while embracing innovation, achievements has been obtained in terms of research, youth talent development, and public service and international cooperation, etc. For more information: www.carbon.pku.edu.

Preface

Since the Second Industrial Revolution, humanity’ s pursuit of rapid development has led to the excessive emission of greenhouse gases (GHG), resulting in a continuous rise in the average annual temperature. In recent years, climate change has been impacting human society with unprecedented speed and intensity. Although climate change is a threat to everyone, its effects are not the same for all. Much like other humanitarian and development challenges, the climate crisis disproportionately affects women ¹, threatening their rights, livelihoods, health, and well-being. At the same time, it is quite easily overlooked that women hold great potential for climate action. Former UN Secretary-General Ban Ki-moon once pointed out “Women are not just victims of climate change. They possess knowledge relevant to their local survival environment and are experienced in food distribution, crop harvesting, and forest protection. We must recognize that their wisdom can play a vital role in future sustainable natural resource management, leading us toward a greener and more prosperous future.” Therefore, promoting gender equality in climate action is crucial, as it ensures that women have fair and just access to resources, opportunities, and participation in decision-making ².

The year 2025 marks several milestones: the 80th anniversary of the founding of the United Nations (UN), the 10th anniversary of the Paris Agreement, and the 30th anniversary of the Beijing Declaration and Platform for Action ³. It is worth emphasizing that China played a critical role in facilitating both the Paris Agreement and the Beijing Declaration and Platform for Action. At this critical historical juncture, advancing collaborative research and action in the areas of climate and gender can contribute Chinese solutions and wisdom to global climate governance, gender equality, and the achievement of the Sustainable Development Goals. At the same time, such efforts can provide professional support for stakeholders, including the Chinese government, businesses, research institutions, and non-profit organizations to move the agenda on.

This report collects 23 cases from government, international organizations, enterprises, think tanks, and NGOs. Through these diverse cases, we are much encouraged that plenty of synergistic actions on climate and gender have been promoted by different stakeholders, we are witnessing actions from central to local levels, from cities to villages, from plateaus to basins, from mountains to rivers, from daily life at the dinner table to digital energy, from role models to empowerment partnerships. These efforts have genuinely benefited thousands of women across China, turning concept of gender equality to be tangible reality and actions.

During the preparation, we also noticed that awareness of climate-gender synergy still needs to be improved, and women’ s potential in climate action remains to be further recognized and unleashed. More systemic supports from the whole of society are highly expected.

1. “What Does Gender Equality Have to Do with Climate Change?” . <https://climatepromise.undp.org/news-and-stories/what-does-gender-equality-have-do-climate-change>.

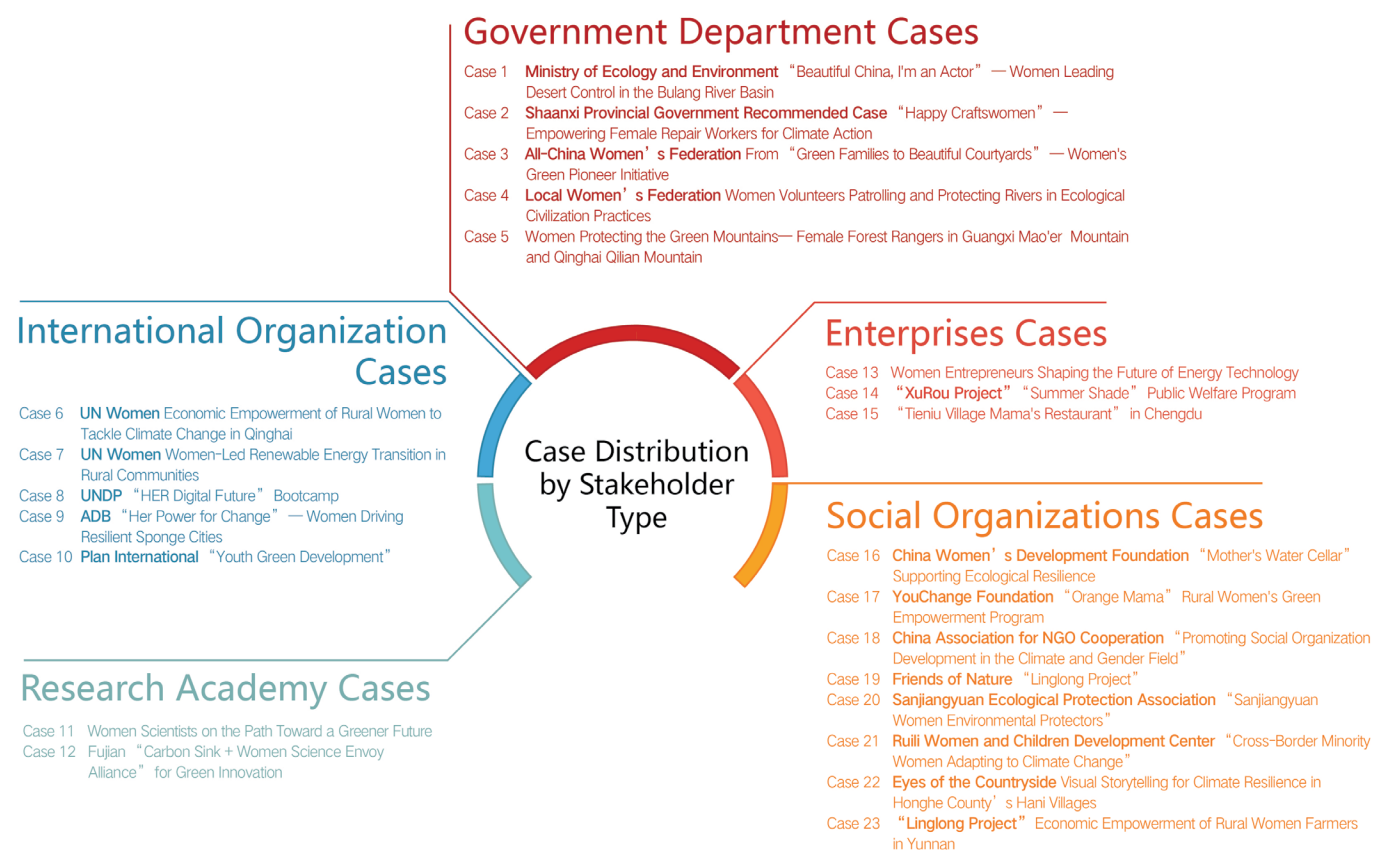
2. “UN Women Calls for Increased Climate Financing to Promote Gender Equality.” . https://www.thepaper.cn/newsDetail_forward_29459703.

3. The Paris Agreement, adopted in December 2015 at the 21st Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change (UNFCCC), is the second legally binding climate accord under the UNFCCC following the Kyoto Protocol. It aims to address global climate change by limiting the rise in global average temperature while promoting sustainable development in all countries. In 1995, the Beijing Declaration and Platform for Action was adopted at the Fourth World Conference on Women held in Beijing. To this day, it remains the most comprehensive global policy framework and action blueprint for achieving gender equality and the rights of women and girls worldwide. It continues to serve as both guidance and inspiration for this ongoing cause (UN Women, 2014).

Case Overview

This collection features 23 cases initiated by various stakeholders (see Figure 1). Among them, 5 cases are related to government departments such as the Ministry of Ecology and Environment (MEE) and the All China Women’s Federation (ACWF); 5 cases were undertaken by international organizations; 2 are research-focused; 3 are corporate or entrepreneurial cases; and 8 were initiated by social organizations or NGOs.

Considering the diverse nature of the cases, this report integrates information across multiple dimensions including background, strategies for promoting gender-climate synergy and actions, outcomes and impacts. It particularly highlights the growth and transformation of individual women involved. The “Highlights” sections analyze the potential significance and value for dissemination to both domestic and international institutions.



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01

Government Department Cases

In order to further promote Xi Jinping’s Thought on Ecological Civilization, advocate green and low-carbon lifestyles, Government Campaign with the name of “Beautiful China, I Am an Actor” was led by MEE and the Central Social Affairs Department in March 2024. Although gender indicators were not explicitly listed, a number of women-centered cases emerged, such as the Bulang River Women’s Militia Afforestation Project (Case 1). The “Happy Crafts-woman” project, which incorporated a gender perspective, was also selected as one of Shaanxi Province’s Outstanding Social Cases in 2025 (Case 2).

As early as 2013, the ACWF, together with the MEE, jointly launched the Women’s Environmental Friendly Ambassadors Action to inspire women nationwide to play a pioneering role in environmental protection. ACWF paid lots of attention to attract community participation and the strategy applied is to select champion from green family so as to expand the social influence. Through activities such as the “Calling for the Most Beautiful Family” and the “Five-Good Family Selection,” a number of exemplary families who had made outstanding contributions to ecological and environmental protection were recognized. In 2024, the ACWF, together with relevant departments, released the national standard Guidelines for Rural Beautiful Courtyard Construction. From the “Most Beautiful Family” to the “Beautiful Courtyard,” efforts were made to fully establish women as green pioneer role models (Case 3). In addition, ACWF at all levels actively organized and guided families and women to participate in ecological civilization practices, such as the “Anji River Sisters” River-basin protection and the “Ama-la” Yellow River Women Volunteers Patrol Team (Case 4).

It is worth noting that the “National March 8th Red-Banner Award” is the highest honorary award for women in China, and over more than 50 years, the title has had a wide social impact. From among the representatives and collectives who received this award after the 18th National Congress (2012), we selected the case of the Guangxi Guilin Mao’er Mountain National Nature Reserve Administration, which won the award in 2024, and the case of the Qingyanggou Management and Protection Station in the Qinghai section of the Qilian Mountain National Park Candidate Area, which won the award in 2025 (Case 5), to show the active role of women in nature conservation.

Case 1

Ministry of Ecology and Environment “Beautiful China, I’m an Actor” — Women Leading Desert Control in the Bulang River Basin

Background

To publicize Xi Jinping’s Thought on Ecological Civilization, and to put into practice the “Beautiful China, I Am an Actor” Plan (2021 – 2025), the Shaanxi Provincial Department of Ecology and Environment, the Provincial Party Committee Social Work Department, the Provincial Office for Spiritual Civilization, and the Communist Youth League of Shaanxi Province jointly organized the provincial campaign “Action Plan for Enhancing Citizens’ Ecological Civilization Awareness.” The project “Happy Crafts-woman” was selected in 2025 as one of the Outstanding Social Cases.

Strategies and Actions for Promoting Climate – Gender Synergy

Shen Yan is an operations officer of the Happy Crafts-woman project, responsible for liaising with communities and repair workers. When she first joined the project, she joked about herself as being a “tool blind,” unable to distinguish between different types of wrenches, holding screwdrivers the wrong way several times, and knowing absolutely nothing about repair work. At her first training

session, she stared at the electric drill on the table and did not dare to use it: “This thing looks so dangerous when it spins. I really don’t dare to touch it.”

The change began with “learning by observing” and “daring to try.” She proactively talk to the male workers and ask: “Which part do you remove first when repairing a washing machine? What are the techniques to judge a short circuit on a circuit board?” The masters were happy to share their experiences, and she went



Figure 1. The Bullanghe Women’s Militia Sand-Control Team planting trees in the Xiaojihan Forest Farm (Image source: The Paper).



Figure 2. The site of the Bulianghe Women’ s Militia Sand-Control Team has transformed into a “desert oasis” (Image source: The Paper).

home and began practicing by disassembling her broken electric kettle. Later, when the faucet at home leaked or the shower head was clogged, she repaired them herself. “Replacing the faucet part only costs a few dozen yuan. First turn off the main valve, remove the old cartridge, replace it with a new one, and it’ s done in half an hour.” Shen Yan uploaded a short video of this repair to the project group, which became a “guiding manual” for her women colleagues.

With Shen Yan’ s encouragement, the project formed its first all-female “Women’ s Repair Team.” More than 20 female repair workers mastered skills such as household appliance repair, furniture restoration, and plumbing maintenance through “theoretical training + practical exercises.” Their transformation is reflected in three aspects: before participating, they could not use tools, believed that “repair is men’ s work,” relied on family support, had no stable income, and were housewives revolving around the family. After participation, they became proficient in using electric

drills and multimeters, capable of independently repairing household appliances such as washing machines and air conditioners, increasing their monthly income by 3,000 to 8,000 yuan, and some became “technical backbones” and “star repairers” in their communities.

Outcomes and Impact

Today, the women’ s repair team of the Happy Crafts-woman project has grown from the initial 5 members to more than 20. Shen Yan and her colleagues are planning the next step, which is to cooperate with vocational colleges to launch “low-carbon repair” courses and teach smart household appliance repair technology; and to promote the model of “community repair mutual-aid groups” to surrounding neighborhoods, covering more households. “What we repair is not only appliances, but also the future of people and the environment.” Shen Yan’ s words expressed the heartfelt voice of this group of women.

Highlights

The ideas and methods adopted during the implementation of the project are worthy of promotion. First, special skill workshops were established to provide women with systematic repair training, “repair training bases” were set up in cooperation with communities. These not only provided women with free learning opportunities, but also creating a master-apprentice model, forming a closed loop of “training – employment – entrepreneurship.” Second, during implementation, activities were carried out in distinctive forms such as the “all-female repair team” and the “Little Happy Craftsmen.” Through the visible practice of women’ s technical skills, these activities broke through prejudice and challenged the gender stereotype that “repair is a male field.” In addition, the project particularly innovated a sustainable community model of “repair instead of purchase,” deeply integrating repair services with low-carbon concepts, and developing an ecological chain of “repair + recycling + remanufacturing.”

Sources: MEE ⁴; People’ s Government of Shaanxi Province ⁵; The Paper ⁶

4. Announcement on the List of Advanced Models of “Beautiful China, I’ m an Actor for Change” . https://www.mee.gov.cn/ywdt/gsgg/gongshi/wqgs_1/202404/t20240426_1071757.shtml.

5. Three Exemplary Cases from Shaanxi Selected for the 2024 List of Advanced Models of “Beautiful China, I’ m an Actor for Change” . https://www.shaanxi.gov.cn/xw/sxyw/202406/t20240611_2332586.html.

6. Exemplary Stories | The Bulianghe Women’ s Sand Control Team Case — One of the Top Ten Outstanding Public Participation Cases in the 2024 “Beautiful China, I’ m an Actor for Change” Advanced Model Selection. https://www.thepaper.cn/newsDetail_forward_27732622.

Case 2

Shaanxi Provincial Government Recommended Case “Happy Craftswomen” — Empowering Female Repair Workers for Climate Action

Background

To publicize Xi Jinping’s Thought on Ecological Civilization, and to put into practice the “Beautiful China, I Am an Actor” Plan (2021 – 2025), the Shaanxi Provincial Department of Ecology and Environment, the Provincial Party Committee Social Work Department, the Provincial Office for Spiritual Civilization, and the Communist Youth League of Shaanxi Province jointly organized the provincial campaign “Action Plan for Enhancing Citizens’ Ecological Civilization Awareness”⁷. The project “Happy Crafts-woman” was selected in 2025 as one of the Outstanding Social Cases⁸.

Strategies and Actions for Promoting Climate – Gender Synergy

With the acceleration of urbanization, China’s female population which migrated from rural to urban

area for working has exceeded 100 million, among whom more than 70 percent are migrant women workers, low-income housewives. They mostly live in old communities or urban villages, facing heavy economic pressure, with an average monthly income of less than 3,000 yuan, and having limited career options.

In 2023, “Happy Craftsman” began to focus on empowering migrant women worker, and designed and implemented the project “Happy Crafts-woman” Project Empowering Female Craftsman to Repair Household Appliances to Address Climate Change (Community Carbon Reduction Demonstration Project in Xincheng District, Xi’an, Shaanxi Province)⁹. Through cooperation with the Women’s Federation, the project carried out “theory + practice” training to improve women’s repair skills such as circuit maintenance and



Figure 3. “Happy Crafts-woman” providing services for local residents (Image source: Xi’an Xincheng District Federation of Trade Unions).

household appliance repair, breaking gender barriers while at the same time promoting the concept of “repair instead of purchase,” in order to reduce residents’ carbon emissions from purchasing new products. It further promoted community micro-renewal and low-carbon transformation as a response to climate change. The project has produced three main outcomes: it trained 20 female repair workers; it achieved a carbon reduction of 500 tons of CO equivalent, which is equal to planting 27,000 trees; and it established the Household Repair Skills Certification standard, which has been included in the “Women Entrepreneurship” project library of the Xincheng District Women’s Federation.

Growing Stories of Women

Shen Yan is an operations officer of the Happy Crafts-woman project, responsible for liaising with communities and repair workers. When she first joined the project, she joked about herself as being a “tool blind,” unable to distinguish between different types of wrenches, holding screwdrivers the wrong way several times, and knowing absolutely nothing about repair work. At her first training session, she stared at the electric drill on the table and did

not dare to use it: “This thing looks so dangerous when it spins. I really don’t dare to touch it.”

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With Shen Yan’s encouragement, the project formed its first all-female “Women’s Repair Team.” More than 20 female repair workers mastered skills such as household appliance repair, furniture restoration, and plumbing maintenance through “theoretical training + practical exercises.” Their transformation is reflected

7. The public announcement of the list of advanced models of “Beautiful China, I Am an Actor” in 2024. https://www.mee.gov.cn/ywdt/gsgg/gongshi/wqgs_1/202404/t20240426_1071757.shtml.

8. Three typical figures from Shaanxi Province have been selected into the list of advanced models of “Beautiful China, I Am an Actor”. https://www.shaanxi.gov.cn/xw/sxyw/202406/t20240611_2332586.html.

9. Achievement Showcase | Women of Bulang River Combat Desertification with Consecutive Sand Control Cases — Our province won the 2024 ‘Beautiful China, I Am an Actor’ Top Ten Outstanding Public Participation Cases. https://www.thepaper.cn/newsDetail_forward_27732622.

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Case Provider: Shaanxi Green Origin Environmental Education Center

Case 3

All-China Women’s Federation
From “Green Families to Beautiful Courtyards” – Women’s Green Pioneer Initiative

Background

Since the 18th National Congress of the Communist Party of China, the country has attached great importance to the construction of green families in advancing the building of a Beautiful China and establishing a nationwide action system for green lifestyles. A series of policies and measures have been introduced and continuously upgraded to promote green family construction, and a variety of green family creation and selection activities have been carried out. These have provided opportunities and platforms for women to participate and play a leading role. From the “Green Family” and “Beautiful Courtyard” initiatives organized and promoted by the ACWF, we have selected representative stories to vividly demonstrate how women, starting from themselves and their families, have made active efforts and contributions to improving the ecological environment.

Strategies and Actions for Promoting Climate – Gender Synergy

As early as 2013, the ACWF actively cooperated with various parties to guide women to play the role of pioneers in environmental protection. In 2013, the ACWF and MEE jointly launched the “Women’s Environmental Friendly Ambassadors Action.” In September 2017, the ACWF emphasized in the National Five-Good Family Selection and Commendation Measures that families should be encouraged to strengthen ecological awareness and environmental concepts and to practice green lifestyles. In 2020, the ACWF, together with the National Development and Reform Commission, MEE, the Ministry of Education, and the State Administration for Market Regulation, jointly

issued the Green Family Action Plan, and subsequently formulated the Urban Green Family Standards and the Rural Green Family Standards, which provided specific guidance for the creation of green families.

The family of Ouyang Xiangping in Beijing has long adhered to low-carbon and environmentally friendly principles, applying many low-carbon concepts to home decoration and layout. She not only designed a household water recycling system herself but also actively participated as a volunteer in multiple public welfare projects related to environmental protection, sharing and spreading low-carbon and eco-friendly life concepts and experiences in various ways. In 2015, at the Paris Climate Conference, the story of Ouyang Xiangping’s family achieving zero discharge of kitchen waste was selected as a featured example for promotion. “In the past, our family often used domestic wastewater to flush the toilet, mainly to save water. At that time, we were renovating our home, and I thought, could we modify the water pipes to permanently collect wastewater and use it to flush the toilet, so as to save water resources?” In order to save water, Ouyang Xiangping personally designed a household greywater recycling system and modified the water pipes, which was put into use at the end of 2013. In the very first month, water consumption was reduced by more than 30 percent. To further practice the low-carbon lifestyle, Ouyang Xiangping integrated all kinds of conservation tips into daily life. She and her family changed their electricity use habits, unplugging appliances promptly, and also modified the panels to include switches. After nearly two months of effort, the household’s monthly electricity consumption was successfully reduced from more than 200 kilowatt-hours to 135 kilowatt-hours, saving more than 30 percent of electricity.



Figure 4. The courtyard of Li Yu, a model household for “Green Families” in Zhongliao Village (Image source: Guangming Science Popularization).

With a history of more than one hundred years, Zhongliao Village in Jiyang District, Sanya City, Hainan Province, is a Li ethnic village with rich minority customs. In Zhongliao Village, a courtyard wrapped in greenery is particularly eye-catching. On both sides of the stone-paved path, succulents thrive in flowerpots transformed from old tires; spider plants cascade from clay jars, interwoven with passion fruit vines; fresh vegetables and fruits in the garden supply the family dining table, while the surplus becomes feed for the household poultry. This vibrant courtyard, honored as a “Green Family” demonstration household in Sanya, is a vivid reflection of the Li Yu family’s practice of green living. With ingenuity in “turning waste into treasure,” the concept of ecological circulation, and the innovation of a homestay economy, she not only created a “paradise” in the beautiful countryside but also led surrounding families toward a green and low-carbon lifestyle.

Zhongliao Village, with its rich Li ethnic customs and idyllic scenery, attracts tourists, and Li Yu keenly seized this advantage by transforming her family courtyard into a guest house. She also integrated green concepts throughout the entire operation: guest rooms are equipped with energy-saving lamps and solar water heaters, and

all food ingredients provided to guests come from the household garden and poultry yard, such as freshly picked vegetables and organic chickens. This not only ensures freshness and health but also reduces transportation-related carbon emissions.

Building on the foundation of green families, in January 2024, the ACWF, together with several relevant departments, released the national standard Guidelines for Rural Beautiful Courtyard Construction, launching the construction of the women’s “Beautiful Courtyard”



图5 李英以绿色理念经营民宿（图片来源：光明科普）



Figure 6. The “Flower Bank” established in Gekeng Village, Hengli Town, Dongguan City (Image source: CCTV.com).

brand. By using the “small beauty” of courtyards to promote the “greater beauty” of the countryside, this initiative has provided strong support for creating a new picture of livable, business-friendly, and harmonious rural areas. In recent years, Women’s Federations at all levels have vigorously advanced “Beautiful Courtyard” construction as an important task, with more than 12 million “Beautiful Courtyards” flourishing across the country. These courtyards carry farmers’ aspirations and pursuits for a better life, showcasing the spirit of rural people participating in rural revitalization and building happy and beautiful families¹⁰.

The Guangdong Provincial Women’s Federation has taken the “Beautiful Courtyards” as an important means to organize and mobilize women to participate in the “Hundred-Million Project.” Centering on “being clean, green and family virtue beauty,” it has continuously expanded and promoted.

Walking along the Hongfen Road beautiful corridor in Gekeng Village, Hengli Town, Dongguan City, one

is impressed by the dragon boat culture murals, family tradition paintings, and wall-hanging art planters on both sides of the alleys. Strolling along the rural paths of Gekeng Village, one might come across the “Flower Bank,” which is widely mentioned among villagers. The “Flower Bank” allows residents to participate in a series of activities to earn “flower coins” for “savings,” which can then be exchanged for gifts and services once a certain number has been accumulated. According to Liu Dong, Vice Chairwoman of the Hengli Town Women’s Federation, this brand-new green and beautiful model with ecological value not only enables villagers to enjoy the tangible benefits brought by green and beautiful construction but also enhances their sense of achievement and belonging, further motivating them to actively participate in the initiative. The “Flower Bank” walls are covered with redeemable welfare items and gifts such as basketballs, fans, and stationery, most of which have been generously donated by local enterprises. Statistics show that more than 700,000 yuan in public welfare funds and over 3,000 flower seedlings have already been raised through the

10. Continuously Advancing and Upgrading the Construction of “Beautiful Courtyards”. https://epaper.cnwomens.com.cn/html/2024-01/22/nw.D110000zgfnb_20240122_3-1.htm

“Flower Bank.”

Peng Yan, Vice Chairwoman of the Dongguan Women’s Federation, stated that currently, Gekeng Village, as one of the first batch of model villages in Guangdong Province’s “Hundred-Million Project,” has built Dongguan’s first “Flower Bank.” Construction of “Flower Banks” in Tian Tou Village and Zhang Keng Village is underway, and 15 other villages (communities) have already identified locations and are in the design stage. At present, Hengli Town has created 189 model “Beautiful Courtyard” households at the municipal level, and Gekeng Village has been recognized as a 2023 municipal-level model village for “Beautiful Courtyards.”

Today, the construction of “Beautiful Courtyards” has progressed from “beauty in one household” to “beauty in a community” and “beauty across the entire region.” However, to achieve “beauty in high-quality,” continuous exploration and practice are still needed. It is necessary to further promote the construction of “Beautiful Courtyards” to higher levels, and broader dimensions, so as to shape the beauty of rural areas, contribute to rural revitalization, and ultimately build a Beautiful China.

Case Sources: Chinese Government Web ¹¹, The Paper ¹², China Women’s Web ¹³, CCTV Web ¹⁴

11. Solidly Promoting Comprehensive Rural Revitalization. https://www.gov.cn/yaowen/liebiao/202404/content_6945144.htm.

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Case 4

Local Women’s Federation Women Volunteers Patrolling and Protecting Rivers in Ecological Civilization Practices

Background

August 15, 2021, marked the eighteenth Ecological Civilization Day of Anji County. In order to further guide families and women to actively participate in eco-civilization practices and promotion of green lifestyle and households, the Anji County Women’s Federation launched the “Anji River Sisters Protecting River-basin Action.” The goal of this initiative was to mobilize more than 500 “Anji River Sisters” to pick up garbage and clear debris along streams such as the Xitiao River, Tongxi River, and Longwangxi River, calling on families and women to actively engage in ecological civilization building and promoting the dissemination and popularization of the green lifestyle concept.

Anji River Sisters Protecting River-basin Action

The Anji County Women’s Federation organized volunteer teams from multiple towns and townships, including Zhangcun, Meixi, and Tianzihu. On the occasion of Anji County’s “Aug 15th” Ecological Civilization Day, these teams joined hands with local residents to participate in river cleaning and management. Among them, Meixi Town organized the Zimei River Sisters, women volunteers, and river chiefs to carry out actions to protect the stream by dredging silt, removing garbage, and clearing aquatic weeds, thus effectively protecting the ecosystem of the Xitiao River. The Women’s Federation of Tianzihu Town mobilized women volunteers from each village to pick up household waste such as plastic bags

along the riverbanks and distributed publicity materials on river protection to nearby residents, guiding them to practice garbage classification and avoid dumping garbage into rivers.

The Women’s Federation of Xilong Township organized the River Sisters volunteer team to carry out patrol and protection actions along the Xitiao River, cleaning up white pollution left on river embankments after typhoons and offering civil persuasion to nearby fishing enthusiasts. The Women’s Federation of Hangai Town formed a women’s volunteer service to publicize to surrounding residents the importance of nature and how to do knowledge, thereby protecting the ecological environment. The Women’s Federation of Zhangwu Town gave full play to the strength of women by organizing the Chuxin River Sisters team to carry out regular river protection actions, salvaging white pollution and cleaning floating debris in the river. They also launched monitoring campaign, and accepted public supervision, truly achieving the principle of “My river, I protect,” and jointly building the most beautiful homeland.

In addition, the Beautiful River Sisters Water Protection Volunteer Service Team of Shangshu Township influenced everyone around them through bringing their children and families to guard the gifts of nature together. The Women’s Federations of Lingxi Community and Huxi Community in Lingfeng Sub-district jointly carried out “River Patrol and Water Protection” ecological civilization volunteer activities, issuing “Little & Young Volunteer” certificates to the children who participated.



Figure 7. Group photo of the “Ama-la” Yellow River Women’s Volunteer River Patrol and Protection Team (Image source: The Paper).

“Ama-la” Yellow River Women Volunteers River Patrol and Protection Team

Aba Prefecture is the only area in Sichuan Province through which the Yellow River flows. It is an important ecological function zone and water conservation area in the upper reaches of the Yangtze and Yellow Rivers. With the guidance and support of the Aba Prefecture Women’s Federation and the Zoige County Women’s Federation, the local community established the “Ama-la”¹⁵ Yellow River Women Volunteers River Patrol and Protection Team (hereinafter referred to as the Patrol Team). Together with women representatives from across the prefecture, members of the Patrol Team planted more than 6.07 mu (0.4 ha) of a “Women’s Forest” on the banks of the Baihe Pasture along the Yellow River in order to prevent ecological degradation.

Since its establishment one year ago, the Patrol Team has grown to more than 60 members. “When the

15. “Ama-la” means “mother” in Tibetan.

team was being formed, everyone was very enthusiastic to sign up after hearing it was to protect our hometown, and family members were also very supportive,” said Si Hongying, the executive captain of the Patrol Team.

“To protect the Mother River, we must widely mobilize women. Now, the Patrol Team includes retired cadres, office workers, laborers, returning university students, and herders from distant grazing areas.”

Case Sources: China Women’s News, The Paper



Figure 8. Members of the river protection team patrolling the river and cleaning up river waste (Image source: The Paper).

Case 5

Women Protecting the Green Mountains— Female Forest Rangers in Guangxi Mao’er Mountain and Qinghai Qilian Mountain

Background

The “National March 8th Red-Banner Award” is the highest honorary award for women in China. From among the representatives and collectives that have received this award since the 18th National Congress (2012), we have selected two cases related to climate change and nature conservation. These include the Guangxi Guilin Mao’er Mountain National Nature Reserve Administration, which won the title of “National March 8th Red-Banner Collective” in 2024, and the Qingyanggou Management and Protection Station in the Qinghai section of the Qilian Mountain National Park Candidate Area, which won the same honor in 2025.

Case of Female Rangers in Guangxi Guilin Mao’er Mountain National Nature Reserve

The Guangxi Mao’er Mountain National Nature Reserve is located in the northern part of Guilin City and is the only national demonstration nature reserve in Guangxi. In 2011, it successfully joined the World Network of Biosphere Reserves. The reserve covers a total area of 17,008 hectares, with a forest coverage rate as high as 98.03 percent. The reserve has 24 staff members, 15 of whom are women.

Mao’er Mountain is characterized by high peaks and dense forests, with clouds and mist lingering all year round. The humidity is extremely heavy, the roads ice over in winter, making it easy to slip and get injured, while in

summer, heavy rain can trigger landslides. Under such harsh conditions, the female staff of the administration have repeatedly organized and participated in special rectification campaigns in the Mao’er Mountain Nature Reserve to combat illegal poaching, bamboo shoot harvesting, grazing, and the digging of wild plants, strictly cracking down on activities that damage forest resources. In 2024, more than 4,600 patrol personnel were dispatched, 780 individuals were dissuaded, and 358 hunting tools were confiscated, ensuring effective protection of the reserve’s ecological environment. Over the past three years, one case of illegal logging and two cases of illegal wildlife poaching were investigated, more than 426 hunting tools were confiscated, and six people were handed over to judicial authorities for prosecution. As a result, the ecological environment of the Lijiang River’s source has been well protected.



Figure 9. Group photo of a volunteer service activity organized by the Mao’er Mountain Administration Office (Image source: Mao’er Mountain official)



Figure 10. Ecological rangers from the Qingyanggou Patrol Station conducting patrol work on the grasslands (Image source: China Daily).

In order to turn the Mao’er Mountain Nature Reserve into a demonstration base for transforming “lucid waters and lush mountains” into “golden and silver mountains,” the female rangers of the reserve have gone deep into communities to uncover and share ecological protection stories. Through the Voice of Mao’er Mountain magazine, the Mao’er Mountain website, and its WeChat public account, they have carried out extensive publicity, making remarkable contributions to ecological protection at the source of the Lijiang River. They have successively been awarded titles such as “Guangxi March 8th Red-Banner Collective” and “Model of Ba Gui.”

Case of Female Rangers at Qingyanggou Management and Protection Station, Qilian Mountain National Park

The Qingyanggou Management and Protection Station is located in Arou Township, Qilian County, Haibei Tibetan Autonomous Prefecture, Qinghai Province. It undertakes tasks such as monitoring forest growth, preventing and controlling pests and diseases, inspecting fire hazards, and protecting and rescuing wild animals

within the Qinghai section of the Qilian Mountain National Park (candidate area). The rangers remain stationed year-round in the depths of the Qilian Mountains at an average altitude of 3,100 meters, patrolling for eight hours a day and managing an area of 15,800 hectares.

In this ecological sanctuary, known as the “wet island of China,” there is a team of guardians composed mainly of women — the 62 female rangers of the Qingyanggou Management and Protection Station. The oldest among them is in her fifties, the youngest only 24, and all are local herders. With 16 years of forestry experience, Yang Maocuo is regarded as the “elder sister.” Sixteen years of patrol experience have made her familiar with every ridge and slope. Yang recalls that in the deep winter of last year, when she led her team to Dala Dongnao to inspect fire hazards, their off-road vehicle skidded on the ice, with half of the car sinking into a hole. “In temperatures below minus 20 degrees Celsius, we lay on the snow digging out ice, our fingers frozen like carrots, but this is our responsibility, and we never thought about giving up.” Zhang Liping’ s words spoke for all the women on the patrol team — whether in household publicity, fire

prevention, pest control, or rescuing wild animals, though hardship and danger are constant companions, none of them has ever retreated.

Thanks to such dedication, the ecology of Qingyanggou has improved year by year. Over the past five years, no major forest fires have occurred within the jurisdiction, sightings of endangered species such as snow leopards and blue eared pheasants have increased by 60 percent, and the survival rate of Qinghai spruce has risen to 85 percent. The perseverance and contributions of the women’ s patrol team have also received wide recognition from society. The Qingyanggou Management and Protection Station of Qilian Mountain National Park was named a March 8th Red-Banner Collective of Qilian County in 2022, of Qinghai Province in 2023, and of the entire nation in 2025. These honors are the best tribute to their spirit of fearlessness, dedication to the plateau, selflessness, and commitment to guarding lucid waters and lush mountains.

Case Sources: Mao’er Mountain Website ¹⁶, Toutiao ¹⁷, Tencent ¹⁸, Xinhua News Agency ¹⁹, China Daily / China.org.cn ²⁰

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02

International Organization Cases

Article 89 of the Beijing Declaration clearly defines: “Gender mainstreaming refers to assessing the gender impact in all policy areas and at all levels, so that equality between men and women becomes an integral part of all decision-making.” Since then, promoting gender mainstreaming has become one of the main tasks of the United Nations and many international organizations worldwide.

As the core agency for promoting gender equality, UN Women has cooperated with governments and stakeholders at all levels in China to advance gender mainstreaming, such as through the “Economic Empowerment of Rural Women in Qinghai to Address Climate Change” project (Case 6) and the “Women-led Renewable Energy Transition and Governance in Rural Communities” project (Case 7), aiming to promote innovative and pragmatic actions for rural women’s participation and leadership in green transformation.

The United Nations Development Programme (UNDP) has adhered to demand-oriented and precise empowerment by digitally enabling rural girls, enhancing their understanding and application of technology (Case 8). Asian Development Bank (ADB) has emphasized women’s power as leaders and innovators in promoting resilient urban water infrastructure, supporting women’s greater participation in decision-making and skills development in various ways (Case 9). Plan International has developed the “Gender Transformative Marker” tool to conduct gender assessments throughout the entire project cycle, ensuring that the needs, risk awareness, and agency of young women are prioritized at every stage of projects (Case 10).

Case 6

UN Women

Economic Empowerment of Rural Women to Tackle Climate Change in Qinghai

Background

Over the past thirty years, China has achieved remarkable economic growth, lifting hundreds of millions of people out of poverty and hunger. However, in this process of rapid economic transformation, the development of certain groups has remained relatively lagging. In particular, rural women, who make up the main body of China’s agricultural labor force, are often the most vulnerable to the adverse impacts of climate change.

In order to strengthen the social and economic empowerment of rural women in Qinghai Province, enhance their knowledge and use of science and technology, policy information, and financial resources, and increase the value of their labor so as to improve their ability to cope with climate change, UN Women launched the “Economic Empowerment of Rural Women in Qinghai Province to Address Climate Change” project. The project was implemented by the Agricultural Policy Research Center of the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (CCAP), in cooperation with the Office of the

IFAD Poverty Alleviation Project Leading Group of the Qinghai Provincial Poverty Alleviation and Development Bureau.

The UN Environment Programme’s (UNEP) International Ecosystem Management Partnership (UNEP-IEMP) and the Farmers’ Seed Network participated as technical support partners in project implementation. The project focused on establishing partnerships with government departments such as the Ministry of Agriculture and Rural Affairs (MARA) and the MEE, with relevant UN agencies including UNEP, IFAD, and FAO, as well as with domestic and international non-governmental organizations, in order to promote the joint participation of different stakeholders.

Strategies and Actions for Promoting Climate – Gender Synergy

The project carried out regular grassroots surveys and activities for information exchanging. Based on the specific conditions of the project areas, it organized



Figure 11. Li Yulan (second from right) with members of the Guanglin Cooperative (Image source: Case contributor).

targeted questionnaire surveys, community interviews, and focus group discussions in order to fully understand the actual needs of local women. These needs included not only learning planting and breeding techniques and exploring income-generating methods, but also expectations for the restoration of rural ecosystems and the overall enhancement of biodiversity. The project placed particular emphasis on the important roles played by women and their urgent needs, thereby laying a solid foundation for effective implementation at the community level in the future.

The project produced three outputs:

1. For governments and service providers, especially grassroots staff, the project enhanced their capacity so that they could better support women farmers in accessing climate-related smart agriculture extension, information, tools, and technology;

2. It strengthened women farmers' ability to use

financial and economic resources, enabling them to increase productivity through agricultural services;

3. It organized networks to enhance women farmers' capacities and move them upstream in the agricultural value chain.

Growing Stories of Women

Among the first secretaries in China's rural villages, women are still relatively rare. Li Yulan, former first secretary of Qiaotou Village, not only broke through gender barriers to reach this position but also used her leadership to mobilize and lead rural women. "When the national poverty alleviation policy began to be implemented in 2014, I felt that I could use the relevant policies to expand the scale of the village's agricultural industry," Li recalled. "I considered that Tie Lingmei had business experience and economic capacity that could serve as initial capital for a cooperative, and she



Figure 12. Huang Lansuo Sishijie in her Qingxiu embroidery workshop (Image source: Case contributor).

had the potential to mobilize other women, so I decided to encourage her to establish a farmer cooperative."

Tie Lingmei, a villager of Qiaotou Village in Minhe County, had driven a taxi in the county town for many years. In 2016, she decided to return to her hometown and, together with other women, set up a sunflower cooperative. She recalled: "In the first year, the harvest in the fields was good, but due to unexpected heavy rainfall, all the sunflowers we planted in the second year were drowned, and we had no harvest at all." In 2019, with the support and assistance of First Secretary Li Yulan and under the leadership of cooperative president Tie Lingmei, the cooperative adopted diversified planting and early sowing to cope with natural disasters, secured sales and income of agricultural products through contract farming, and formed alliances with surrounding cooperatives to share resources and collectively cope with market risks. Through discussions with cooperative leaders and core members, the project basically

determined its focus areas: e-commerce, eco-tourism, leadership training for women backbones, and women's health and hygiene knowledge. Tie Lingmei recalled: "In the past, we only did planting. With the project's technical and financial support, we transformed into a cooperative integrating both planting and breeding. In this model, animal manure is converted into fertilizer, while vegetable residues can be used as feed, making recycling of farm waste possible. This model not only reduces pollution but also improves income."

At present, the Guanglin Cooperative has increased to 53 full-time members, of whom 50 are women. Timely access to market information is a key factor for the cooperative to avoid risks and increase income. "Last winter, when I was in Beijing for expert training, I realized that the price of pork would likely fall after the Spring Festival," explained Tie Lingmei. "After I came back, I immediately told everyone that the boom in pig farming was over and that we needed to sell our

pigs quickly to avoid losses.” In 2020, the Guanglin Cooperative was designated as a National Women’s Demonstration Base for Poverty Alleviation. Li Yulan’s professional expertise and organizational ability made her an important bridge in implementing UN Women’s agricultural technical training activities. She said: “We hope to enter higher-margin markets and sells our products toward urban middle-class consumers who prefer organic vegetables.” In the first quarter of 2021, the price of pork in Qinghai Province plummeted from 25 yuan per kilogram to less than 10 yuan, yet the women pig farmers of the Guanglin Cooperative were hardly affected by the market turbulence.

Without connection to value chains, effective industry networks, and infrastructure support, it is very difficult for rural women’s entrepreneurship to succeed. As a project partner, an intangible cultural heritage transmission enterprise supported by the Cultural Bureau of Huzhu County has helped embroiderers from Wushi Village integrate into larger value chains and business networks. Huang Lansuo Sishijie, an inheritor of the Tu ethnic group’s traditional embroidery (pan embroidery), has been practicing this craft since the age of 12 and has now embroidered for nearly 30 years. She said: “In the past, in order to sell my works, I carried embroidered thangkas around temples year after year, but now the sales are handled by leading enterprises, so we embroiderers can focus on our craft without worrying

about market.” The enterprise has established piece-rate repurchase agreements with embroiderers like Huang, making embroidery a stable source of income for them. At the same time, the enterprise also organizes skills training and learning opportunities outside the village for the embroiderers.

Outcomes and Impact

The project successfully reduced the risks associated with rural women in Qinghai relying on climate-sensitive crops for their livelihoods and helped more than 69,000 rural women in seven counties of the Liupan Mountain area of Qinghai Province significantly enhance their economic resilience in coping with climate change. At the same time, by connecting them with diverse offline and online markets and advanced technologies, the project helped them increase their income. Within three years, more than 50,000 rural women had already benefited from it.

With increased income and disposable assets, rural women were able to secure their dignity of labor and economic autonomy, and they gain more respect in their family.

Case Providers: UNEP-IEMP, Farmers’ Seed Network

Case 7

UN Women Women-Led Renewable Energy Transition in Rural Communities

Background

Promoting carbon emission reduction in agriculture and rural areas is an important measure for advancing the rural revitalization strategy and addressing climate change. As the main force in agricultural production, rural women in China play a key role in promoting the application of renewable energy and the low-carbon transition of agriculture. Globally, women engaged in agricultural production earn 18.4 percent less than men. Therefore, promoting renewable energy in rural areas not only helps achieve emission reduction goals but also effectively increases the income levels of smallholder farmers, especially women farmers.

In order to mitigate climate change while promoting the economic empowerment and development of rural women, UN Women implemented the “Women-led Renewable Energy Transition and Governance in Rural Communities (Phase I)” project from March 2023 to December 2024. The project aimed to work with rural women, women’s organizations, and other key stakeholders in Qinghai Province to apply and promote gender-inclusive renewable energy technologies and other climate-smart agricultural initiatives in agricultural production. It sought to achieve the empowerment of women and their communities, enhance their ability to withstand climate risks, and increase their sustainable sources of income.

Strategies and Actions for Promoting Climate – Gender Synergy

The project established communication platforms among local governments, grassroots women’s organizations, and civil society to facilitate women’s access to and use of renewable energy technologies and facilities. It provided capacity building and training for women and their networks, enhancing their knowledge and abilities in areas such as carbon neutrality, renewable energy technologies, agricultural production, business skills, women’s entrepreneurship, and leadership.

At the same time, the project held discussions with existing renewable energy technology enterprises and technical experts to identify technologies and products that meet women’s needs. In addition, it piloted and incubated projects for women-led agricultural and livestock cooperatives, carrying out demonstrations of technology application.

The project also organized dialogues between representatives and stakeholders from governments of other developing and developed countries to discuss and identify strategies to promote women’s participation and leadership in green governance and climate action. Meanwhile, it summarized, documented, and disseminated best practices, showcasing women’s leadership and contributions in China’s green transition.



Figure 13. Project partners taking a group photo in Yushu City, Qinghai Province, China (Image source: Sanjiangyuan Ecological and Environmental Protection Association).

Growing Stories of Women

“Women must have equal opportunities to participate in decision-making and take leadership positions. We can provide unique perspectives and solutions to address climate challenges,” said Zhang Famei. Three years ago, by chance, Zhang entered the countryside, began farm work, and founded the Zhuomuxiang Farming and Breeding Cooperative in Huangzhong District, Xining City. As a female entrepreneur, Zhang initially only wanted to prove that what men could do, women could also accomplish. But once she truly embarked on this path, she realized that starting a business as a woman was much more difficult than for men.

She recalled that at the beginning of her entrepreneurial journey, she always worked alone, running around tirelessly for business without clear direction. It was not until she participated in training and other programs organized by UN Women that her mindset and outlook underwent a dramatic change. In particular, the constant-temperature water tanks provided with project support solved the major problem of water supply for cattle and sheep during the winter, which greatly contributed to livestock growth. Zhang said: “Now I am no longer the entrepreneur blindly rushing about, but a practitioner of

rural revitalization with a clear goal.” Zhang’s career has not only developed positively, but she herself has also grown tremendously. Her child, noticing the positive changes, said: “Since my mother started learning, the changes in her have made our whole family happy. Mom is really different now.” Her family also said: “Her logical thinking is clearer now, and whether in dealing with our own family or with others, her style has become more tolerant and magnanimous.”

Similarly, in Qinghai Province, there is an environmental advocate named Bayang who has persisted in keeping an ecological diary. Since 2018, she has used her pen to safeguard the ecological environment of her homeland: monitoring local species changes, recording the status of water sources, observing weather patterns and vegetation growth. The Qinghai-Tibet Plateau is undergoing profound impacts from climate change — rising temperatures, glacial melting, and increasingly severe desertification. As a member of the Sanjiangyuan Women Environmentalist Network, Bayang not only pays close attention to these changes but also takes concrete action to promote sustainable development in her community. She learned to make eco-friendly lip balm, handmade soap, and fabric

bags. These skills not only protect local water resources but also inspire those around her to join environmental protection efforts. In her view, every small ecological record and every handmade eco-friendly item is the most sincere act of guarding this pure land of the plateau. Bayang said:

“Since I began acting as a female environmentalist, my mother often says I seem like a different person; after leading my family to become a zero-waste household, I realized that in the future I can inspire more women to join environmental protection efforts.”

Outcomes and Impact

Through the implementation of this project, seven women-led agricultural cooperatives received technical training in renewable energy technologies, e-commerce, finance, as well as gender equality and women’s leadership. Among them, 83 female backbone members visited several advanced demonstration villages in Sichuan Province for study tours. During the execution period, three pilot projects were completed: two women-led agricultural cooperatives and one Tibetan community received support for new solar equipment, benefiting about 3,000 households and more than 2,000 rural women. The project saved local women more than 3,600 hours of unpaid labor, generated nearly 100,000 yuan in economic added value, and achieved an annual reduction equivalent to 3 tons of carbon emissions.

At Junhong Planting Cooperative, the project supported the installation of solar equipment for storage

room insulation and to meet daily electricity needs of the cooperative, replacing scattered coal burning, ensuring the preservation of agricultural products, and thereby increasing sales income. At Zhuomuxiang Farming and Breeding Cooperative, the project supported the installation of solar water heating systems, providing appropriately warmed drinking water for cattle during the cold winter, reducing mortality rates, increasing livestock weight, and raising selling prices. In Ganda Village on the Qinghai-Tibet Plateau, the project provided solar home power systems for the summer pastures of 10 herder households, solving the problem of electricity supply in the summer pastures. Through distributed power generation, herder families were able to use household appliances such as refrigerators and milk separators, which not only enhanced local energy self-sufficiency but also freed women from the heavy manual labor of hand-churning milk, while saving time and energy otherwise spent transporting food between summer and winter pastures.

The project strengthened the leadership and participation of young women in climate action. The Sanjiangyuan Ecological and Environmental Protection Association of Qinghai Province formally established the first Sanjiangyuan Women Environmentalist Network, dedicated to promoting women’s leadership in environmental protection (see Case 21). The network currently has 25 members. Bayang, a member of the Sanjiangyuan Women Environmentalist Network, was selected for the BBC 100 Women 2023 list. In addition, during the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP28), UN Women shared the experiences and recommendations gained from this project with other stakeholders, including policymakers.

Highlights

The ideas and methods of this project are worthy of promotion both domestically and internationally. First, in its design and implementation, the project leveraged UN Women’s technical expertise in gender equality and women’s economic empowerment, as well as its accumulated project experience in the context of climate change and energy transition. It identified two levels of



Figure 14. Tibetan women environmental protectors safeguarding the source region of the Three Rivers (Image source: UN Women / Sanjiangyuan Ecological and Environmental Protection Association).

target groups: rural women and their networks, and government and other stakeholders.

For rural women and their networks, the project proposed targeted technical support programs, capacity-building training, and pilot projects to improve the ability of community residents, especially women residents, to use renewable energy technologies, supporting the development of rural women’s industries, improving livelihoods, and contributing to the green transformation of communities. At the same time, the project continued the excellent experience of the “Economic Empowerment of Rural Women in Qinghai Province to Address Climate Change (2018–2021)” project (Case 6), such as adopting the model of “from one woman to a group of women,” with a focus on enhancing women’s leadership. On the basis of leadership training, it supported women representatives to study advanced experiences in national agricultural pioneer villages.

At the level of government and other stakeholders, UN Women made use of its accumulated broad partnerships — including government agencies, industry associations, renewable energy enterprises, academia, and civil society organizations — to exercise its convening power and coordination capacity, actively carrying out policy dialogue and experience sharing. These activities explored how to further promote gender mainstreaming in China’s climate actions, providing support for future policy-making and project implementation, and expanding the impact of project outcomes.

Case Provider: UN Women

Case 8

UNDP “HER Digital Future” Bootcamp

Background

The Sustainable Development Goals (SDGs) emphasize joint global efforts to ensure that the benefits of technological development reach everyone, with special attention to the rights of women and girls. However, women are still face a significant technological divide. According to UNESCO data, less than one-third of researchers worldwide are women, and in science, technology, engineering, and mathematics (STEM) fields, women account for less than one-third. This phenomenon is particularly severe in rural areas. In 2024, nearly 189 million women worldwide still had no access to the Internet, far behind the number of male users. This gap highlights the persistent existence of gender inequality in the digital sphere and reveals the profound impact of systemic barriers. To contribute to achieving the SDGs, in 2023 the UNDP China Representative Office launched the co-creation project “HER Digital Future” Bootcamp, which provided girls with a series of STEM courses, including practical AI skills. At the same time, it introduced the girls to the Sustainable Development Goals, supporting them in using STEM skills to create solutions that contribute to achieving the SDGs.

The “HER Digital Future” Bootcamp aims to empower rural girls through digital means, bridging gender gaps, enhancing their understanding and application of technology, and helping them explore solutions based on local needs. In this way, it strengthens their awareness and ability to act in addressing issues such as climate change, health, and education, thereby advancing sustainable

development. The bootcamp engaged partners including UNDP, the United Nations Volunteers (UNV) programme, One Kilogram Box, Penguin Teaching Program, Gingko Foundation, Friends of Nature’s Linglong Project, as well as corporate partners.

Strategies and Actions for Promoting Climate – Gender Synergy

First, the project adopted a demand-oriented approach and precise empowerment. Through grassroots research and focus group interviews, it identified the obstacles rural girls face in learning digital skills (such as shortage of equipment and cognitive biases), and designed modular courses (AI fundamentals, data visualization, Internet of Things applications). Teaching was carried out by combining offline workshops with online learning platforms . Second, the project promoted multi-stakeholder collaboration for resource integration. In cooperation with the United Nations Volunteers (UNV) programme, nearly 1,000 volunteers were recruited to serve as technical mentors. Enterprises provided digital tool support, and One Kilogram Box was responsible for course implementation, forming an implementation network of “volunteer teaching + institutional support + community linkage.” Third, the project advocated practice and innovation guided by SDGs. It encouraged girls to work in groups and apply their newly acquired skills to solve community problems, such as developing a “smart rural garbage classification app” and a “health



Figure 15. “HER Digital Future” Bootcamp, Chengdu offline session (Image source: Case contributor).

data monitoring system for left-behind elderly.” In this way, the application of technology was directly linked to environmental protection and community services. The project implemented the above strategies through offline camp-style bootcamps, online teaching support, and regional linkage mechanisms.

Growing Stories of Women

“As long as girls have goals and dreams in their hearts, they can definitely achieve great development in the technology industry,” said 17-year-old participant Mao Xiaomeng from Wandu Village, Ningbo City, Zhejiang Province. “HER Digital Future” Bootcamp provided girls with opportunities to understand and participate in the technology industry, sparking their interest in learning and inspiring them to explore endless possibilities on their own. Mao Xiaomeng used digital technology to design an app focusing on SDG 13 (Climate Action) and SDG



Figure 16. Mao Xiaomeng (center) with participants of the bootcamp (Image source: Case contributor).



Figure 17. Chen Xianyan (right) participating in the bootcamp with other participants (Image source: Case contributor).

11 (Sustainable Cities and Communities) to address the issue of garbage classification, aiming to turn kitchen waste into organic resources. At the same time, the app built a dedicated database and encouraged residents to actively participate through a points system. During her community survey, she discovered that many residents had weak awareness of garbage classification, so she increased publicity efforts and encouraged more residents to download and use the software. She also enjoys painting and hopes to have more opportunities and platforms to learn digital technology-related courses, adding to her knowledge base for becoming an animator and editing videos as exquisite as those she sees online to share with others. In 2023, after being admitted to university the following year, Mao Xiaomeng voluntarily applied to serve as a volunteer for the new cohort of the Bootcamp. Inspired by the training program, she chose courses on digital technology and AI-generated art, joined professional associations, and aspired to motivate more

women to carry out environmental actions.

Another participant is 13-year-old Chen Xianyan from Zhaotong City, Yunnan Province. Twelve years ago, she survived severe burns but was left with a level-2 physical disability, losing most of her fingers. When she learned about AI in the Bootcamp, she was very excited, because she saw a possibility to realize her dream: creating with AI. She used digital painting tools and, together with her teammates, completed a roadshow poster and also drew her vision of “girls and technology.” She felt as if she had been someone trapped in a deep pit, surrounded by darkness, and it was the light of technology that shone into the darkness and gave her hope.

In Xiaying Sub-district, Zhejiang Province, a team of female volunteers has been safeguarding girls’ digital future through concrete actions, helping them stand at the forefront of the digital wave. Team members Xu Jia, Ren Dan, Hu Junhuan, and Liu Hua have devoted themselves



Figure 19. Xu Jia participating in the “HER Digital Future” Bootcamp in Xiaying Subdistrict (Image source: Case contributor).

to public welfare for many years, providing support to women, children, and families through diverse projects. In 2023, the team took notice of the “HER Digital Future” Bootcamp project and realized that its core idea was highly aligned with their own vision. That summer, the volunteer team launched related Bootcamp activities in Xiaying Sub-district. Team leader Xu Jia stated: “Each of our members has accumulated rich experience in fields closely related to the growth and development of women and children. We hope to pool our professional strengths to provide more girls with high-quality technological education resources and valuable growth opportunities, enabling them to achieve breakthroughs in life in the digital era.”

In Xiaying, a place where urban and rural areas converge, the team paid special attention to the particular challenges faced by girls from rural and migrant families. Here, there exists a clear imbalance in access to technology education resources and opportunities for integration into urban society. To address this structural inequality, the team prioritized ensuring that rural girls had the tools, guidance, and support needed for participation. Xu Jia



Figure 18. Chen Xianyan's AI-generated artwork (Image source: Case contributor).



Figure 20. Wang Fuye explaining the Sustainable Development Goals in class (Image source: Case contributor).

explained: “We first organized educational materials on the SDGs into study manuals, which were shared in WeChat groups for participating girls and their parents to preview. This was followed by 2–3 days of intensive offline training, where university student volunteers taught digital skills and teamwork methods on-site. In the final stage, we broke down social research tasks into multiple group projects, supporting students to carry out field research in urban communities, rural villages, and other different settings, deepening their practical understanding through fieldwork.” The bootcamp emphasized combining theoretical teaching with practical learning, strengthening the effectiveness of learning through real-world cases and hands-on experience. With the assistance of Women’s Federation cadres from eight communities and two administrative villages, the project recruited 14 full-time mentors, enabling each student group to be paired with a dedicated instructor to ensure hands-on guidance throughout the learning process. In addition to regular teaching, the team also organized thematic field research, where mentors led students to waste-sorting stations, renewable resource recycling centers, and other practice sites to conduct data collection

and trend analysis. The volunteer team made full use of the open-source curriculum resources provided by the “HER Digital Future” project (including video teaching modules and student manuals), ensuring that the design and planning of the bootcamp courses both inspired rural girls’ interest in learning and effectively addressed their real needs.

“The open-source curriculum resources provided by ‘HER Digital Future’ helped us tremendously!” volunteer Xu Jia remarked with emotion. “These systematic teaching resources gave us important references in building our course framework, and what touched us the most was that some students have already transformed from project beneficiaries into contributors, returning to the project as mentors.”

Eighteen-year-old high school student Wang Fuye has long been passionate about education, public welfare, and social welfare causes. During his time as a volunteer for the “HER Digital Future” program, he discovered that rural girls in Jiangxi were full of curiosity and enthusiasm for technology and social issues, and always actively participated in classroom discussions.

“When we were designing agricultural assistance apps together and discussing how to benefit rural communities, they showed tremendous enthusiasm,” he recalled. “Based on this observation, I adjusted the course to add more discussion sessions, allowing them to freely share ideas and interact with their peers.”

In his teaching, Wang also identified and summarized three major barriers preventing women from entering the technology industry:

- 1. Employment discrimination: Gender bias still influences hiring decisions, with employers often assuming that women will leave the workforce due to marriage or childcare.
- 2. Social perceptions: In some regions, stereotypes such as “girls should study liberal arts” and “STEM fields belong to boys” still persist, leading many to give up choosing technology-related majors.
- 3. Inequality in access to educational resources: Rural schools generally lack educational resources, and many girls have never been exposed to STEM and digital education during their upbringing, making it harder for them to consider pursuing careers in technology.

“This was not just a teaching experience, but also an opportunity to visit rural areas and understand real issues,” Wang Fuye said sincerely, adding that he hoped more people with the ability to make an impact would participate in the Bootcamp.

In 2021, Yan Yangdi joined the UNDP’s Poverty Reduction and Sustainable Development Demonstration Project as a coordinator for the UN Volunteers programme, formally stepping into the development field. In May 2024, Yan, together with young partners, founded the volunteer organization “Voice of Girls”, dedicated to advancing project ideas incubated through the “HER Digital Future” Bootcamp.

The “Voice of Girls” team adheres to the educational principle of “focusing on the process rather than the outcome,” paying more attention to learning and personal growth. “We encourage volunteers to let students complete tasks on their own. In this way, girls can truly experience the complete process of creation from scratch, cultivating independent thinking and problem-

solving skills. At first, many girls knew little about the field of technology and even doubted whether they were suited for it,” she recalled. “But once they began learning skills such as programming, AI-generated images, and data analysis, the girls gradually realized that technology is not an exclusively male domain — they too can shine in it.”

Yan also observed that the career aspirations of the girls were beginning to change: “In rural and county-level areas, many girls traditionally believed that their future was simply ‘to get into a good school and find a stable job.’ But through this project, they began to see broader possibilities and recognized that the technology industry is also a potential career path. For example, one girl wanted to become an environmental protector, and after being exposed to data analysis, she began to explore how to integrate technological methods into environmental protection.”

Yan pointed out that the obstacles preventing girls from entering the technology industry exist both at the societal and personal levels. These barriers include:

- 1. Social expectations that lead many girls and their families to prefer more traditional career paths;



Figure 21. Wang Fuye with her students (Image source: Case contributor).



Figure 22. Group photo of the “Tongni Voice” Volunteer Team during an offline bootcamp (Image source: Case contributor).

- 2. Lack of self-confidence, making it difficult for many girls to imagine themselves in the technology sector;
- 3. Scarcity of female role models; and misunderstandings about the skill requirements of tech careers and insufficient awareness of opportunities.

In addition, particularly in rural areas, the lack of mentors and guidance resources deprives many girls of the possibility to explore or pursue careers in technology.

Outcomes and Impact

The project provided digital skills and sustainable development education courses to more than 6,000 girls in over 90 rural schools; trained more than 700 volunteers, forming a cross-regional mentor network; and designed and completed more than 400 “girl-led change projects” guided by the Sustainable Development Goals, covering issues such as environmental protection, mental health, women’s empowerment, and renewable energy.



Figure 23. Yan Yangdi interacting with participants of the bootcamp (Image source: Case contributor).

Highlights

This project not only offers valuable references for other developing countries to carry out similar initiatives, but also opens up new pathways and perspectives for the global response to the dual challenges of gender and climate in the digital era. In the face of the global challenge of the “gender digital divide,” the “HER Digital Future” Bootcamp provides an innovative approach that integrates gender equality, quality education, and climate action.

First, starting from institutional support and capacity building, the project focused on grassroots educational settings and volunteer service networks, systematically empowering key actors such as rural school teachers and community women. It enhanced their comprehensive understanding and practical capacity for driving change in digital technology, STEM education, the SDGs, and gender equality. Second, in practice, the project formed a diffusion mechanism of “from one girl to a group of girls,” which not only emphasized short-term technical empowerment of beneficiaries but also focused on cultivating their capacity for long-term growth and giving back. The project particularly emphasized linking digital technology with local climate and environmental issues, encouraging participants to propose technological solutions around real community challenges such as waste management, elderly health, and renewable energy promotion, thereby training them to transform their learning into concrete action. This incubation mechanism guided by the Sustainable Development Goals successfully stimulated girls’ technological creativity and social responsibility, transforming them from “learners” into “agents of community change.”

Case Provider: UNDP China Representative Office

Case 9

ADB
“Her Power for Change” — Women Driving Resilient Sponge Cities

Background

Disasters triggered by natural hazards constitute one of the most pressing challenges to human being, impacting people, ecosystems, and infrastructure worldwide. Rising temperatures, changing rainfall patterns, and sea level rising have led to more frequent water-related disasters such as floods, droughts, and storms. These events disrupt water supply, deteriorate water quality, and threaten access to basic resources, placing lives, livelihoods, and ecosystems at risk. Women are disproportionately affected, as their social roles and responsibilities, coupled with limitations in access to resources, services, and information, make them particularly vulnerable. These challenges are closely linked to several SDGs, such as SDG 6 on Clean Water and Sanitation and SDG 13 on Climate Action. Addressing them requires innovative solutions that integrate diverse perspectives and promote inclusive participation — which is also crucial to achieving SDG 5 on Gender Equality.

As weather patterns become increasingly unpredictable and ecosystems more fragile, China faces a unique vulnerability to natural disasters, as shown by a series of recent events. In the summer of 2023, extreme heat and massive flooding severely damaged food production, affecting millions of people and impacting numerous cities across the country. Just a few months later, in April 2024, heavy rains in Guangdong forced the emergency evacuation of more than 100,000 residents.

Such crises often affect women most severely.

As primary caregivers and managers of household responsibilities, women are particularly exposed to the impacts of environmental degradation. Droughts, floods, and extreme weather not only threaten their ability to secure food, water, and fuel but also destabilize household financial security. Institutional barriers further exacerbate the difficulties women face in post-disaster recovery. Many women lack land or property registered under their names, limiting their access to loans — a necessity for rebuilding. Moreover, women are less likely to receive disaster preparedness information, making it harder for them to respond effectively. Despite playing a critical role in maintaining household functioning and supporting local economies, women are often excluded from decision-making processes, even though they could contribute valuable skills, expertise, and insights to developing more inclusive disaster prevention and response measures.

The ADB’ s Climate-Resilient Smart Urban Water Infrastructure Project in China highlights the key role of women in resilience-building efforts. Officially launched in 2020 and successfully completed in 2024, the project aimed to enhance cities’ capacity to withstand water-related disasters through innovative solutions such as the Sponge City initiative and smart water technologies. One of its highlights was the gender action plan developed and implemented by Shenzhen Water Group Co., Ltd. (hereinafter referred to as “Shenzhen Water Group”). By promoting women’ s career development and



Figure 24. Female volunteers playing an important role in grassroots education activities on smart water management (Image source: Shenzhen Water Group).

participation in decision-making processes, the plan ensured that resilience-building efforts could integrate diverse expertise. ADB and Shenzhen Water Group were the main stakeholders in the project.

Strategies and Actions for Promoting Climate – Gender Synergy

To enhance resilience, it is not only necessary to build the corresponding infrastructure but also to broadly incorporate people’s diverse expertise and perspectives, especially those of women, as they are often the most affected by water-related challenges but remain the least represented in planning and response efforts. From its design stage, the Climate-Resilient Smart Urban Water Infrastructure Project recognized this imbalance and thus integrated women’s needs, insights, and strengths as a core strategy. The project aimed to address increasingly severe challenges such as urban flooding, water pollution, and sanitation gaps, which have disproportionate impacts on women. It did not view water resource management as

a purely technical issue; instead, it combined engineering solutions with the promotion of social inclusion, based on the recognition that resilient infrastructure must account for all groups in order to be truly effective.

One of the most forward-looking features of the project was its adoption of the Sponge City concept — an urban planning model that mimics natural ecosystems to manage rain and floodwater sustainably. By 2023, the Chizhou Sponge City sub-project, supported by ADB loans, had already attracted capital expenditure investments equivalent to USD 85.4 million from Shenzhen Water Group — far exceeding the original target of USD 40 million in flood control investments set for 2026. This marked a clear distinction from traditional “grey” infrastructure, such as concrete drainage and flood control channels. Instead, the project delivered solutions that were more adaptive, environmentally friendly, and cost-effective.

Through the advancement of sponge city construction, Chizhou not only effectively reduced flood risks but also integrated stormwater considerations into

the urban ecosystem through a series of key measures aimed at mitigating flood risks, optimizing rainwater management, and improving sewage treatment capacity. These measures included the construction of bioretention facilities, expansion of rainwater wetlands, and upgrades to drainage systems.

Such innovations are particularly beneficial to women. During and after floods, women often shoulder responsibilities for water management, personal hygiene, and caregiving for family members. By reducing the frequency of flooding and minimizing pollution, the project directly lessened women’s burdens and enhanced the disaster resilience of families and communities.

Beyond flood prevention and control, the project also improved urban sanitation — another critical area where women are disproportionately affected. In 2023, sub-projects such as Phase II of the Shenzhen Fuyong Water Purification Plant and Phase II of the Shenzhen Gushu Water Purification Plant treated a total of over 117.9 million cubic meters of wastewater, benefiting more than 2.3 million urban residents. This not only reduced environmental pollution but also minimized potential health risks that women often face due to their household sanitation responsibilities. Although the Nanshan Water Purification Plant expansion project did not receive ADB loan support, it was successfully advanced through other funding sources. Once fully completed, it will provide high-quality water to 1.8 million residents of Nanshan District.

It is worth noting that the project focused not only on building resilient infrastructure but also on cultivating resilient leadership. Actively promoted under ADB’s Gender Action Plan, the project supported women’s greater participation in decision-making in various ways, thereby enhancing their role as decision-makers. Specific measures included: make the working place more gender inclusive — promoting women into technical and leadership positions in the water sector; skills development — providing practical training in sponge city technologies and climate-smart water management; and knowledge platforms — creating spaces for women to share experiences and participate in shaping urban water strategies.

By positioning women as planners, engineers,

and advocates, the project not only responded to their immediate needs but also enhanced their capacity to formulate both short-term responses and long-term solutions.

Gender inclusion should not be limited to specific departments or administrative roles. Women themselves play an indispensable role in the field of water management. At Shenzhen Water Group, more and more women employees are engaging in technical training, innovative practices, and knowledge sharing in fields such as sponge city construction and smart water systems. The proportion of women in technical positions continues to rise, which not only improves overall efficiency but also ensures that solutions are more comprehensive and responsive to community needs.

Outcomes and Impact

The project achieved its expected goals and expanded the coverage of climate-resilient smart municipal water management in China. Taking the Chizhou subproject as an example, by advancing the construction of green storm water infrastructure and upgrading drainage networks, the project area’s annual runoff control rate was greatly improved, and the rate of rainwater utilization significantly increased. In addition, the project promoted the construction of water infrastructure that supports gender equality. For instance, through the implementation of a water pipe upgrade program, it solved the problem of insufficient water pressure in high-rise residential buildings, improving the stability of water supply. This shortened the time women had to spend purchasing water and reduced their daily burden.

Moreover, the Gender Action Plan enhanced women’s participation in the water sector and facilitated their promotion into technical and leadership positions. At Shenzhen Water Group, the number of women promoted to mid- and senior-level management positions increased from 3 in 2019 to 12 in 2023. The Group developed policies for equal sharing of family care-giving responsibilities, including taking the lead in Shenzhen in introducing 10 days of parental leave, supported by national policy guidelines for transformation.

Career development remained a key focus, with women accounting for 35% of participants in professional advancement training. More than 60 specialized courses provided by Shenzhen Water Group’s Deepwater University covered areas such as sponge city development and smart water technologies.

Knowledge-sharing initiatives also incorporated gender considerations. From 2021 to 2022, a total of 2,226 people participated in resilience-oriented activities (with women accounting for 35% and 30% respectively). In addition, a knowledge product with gender sensitivity was developed.

Shenzhen Water Group also placed strong emphasis on mental health, especially during the COVID 19 pandemic. In response to rising employee stress levels, the Group’s Women’s Federation, together with the human resources department, hired external professionals to provide psychological counseling services and offered financial subsidies. By the end of 2023, 62% of employees who accessed these services were women, reinforcing the Group’s commitment to overall employee well-being.

These measures also produced unexpected positive effects, including fostering a healthier workplace culture and enhancing Shenzhen Water Group’s social recognition as a model of inclusive water sector reform. Overall, the outcomes of the project exceeded expectations, achieving not only measurable impacts but also providing a replicable practice model for promoting women-inclusive urban water management.

Highlights

The highlights of this project include identifying and empowering influential advocates to drive bold yet pragmatic reforms; establishing women-led groups to ensure that gender-inclusive initiatives align with employees’ real needs; institutionalizing interim achievements into long-term policies, moving from raising awareness to implementing accountability; actively promoting women’s participation in innovation, decision-making, and technical fields; and supporting the enhancement of employee well-being, positioning it as a foundation of an inclusive culture rather than an optional add-on.

When women are not only empowered in the workplace but also serve as decision-makers and innovators in the water sector, they grow into a powerful change maker. The experience of Shenzhen Water Group demonstrates that by investing in the cultivation of women’s leadership, it is possible to generate smarter solutions both within organizations and across the entire industry, thereby contributing to the construction of more resilient cities. This lies at the very heart of resilience-building — inclusive leadership and smart urban water systems shaped by diverse voices.

Case Providers: Asian Development Bank,
Zhang Xianshuang, Amanda Satre

Case 10

Plan International “Youth Green Development”

Background

Young women in China, especially those from remote and climate-vulnerable areas, not only suffer severe impacts from climate change but also lack voice and representation in decision-making processes related to climate issues. This gender inequality weakens their ability to speak out and participate in the development of climate solutions. In addition, the public generally underestimates the potential and contributions of youth in climate action. While local social organizations play a key role in addressing climate change, they often lack the awareness and practical experience needed to attract youth participation and to advance gender-related cross-cutting issues.

In response, Plan International launched the “Youth Green Development” project, in collaboration with the China Association for NGO Cooperation (CANGO) and Roots & Shoots Beijing Youth Community Center. Through innovative strategies, the project integrates gender equality with climate action, empowering young women to become climate leaders, enabling them to initiate green actions at the societal level, and supporting them to voice their perspectives on international climate platforms. At the same time, the project also seeks to strengthen the capacity of local social organizations to achieve gender equality and promote youth participation in the process of implementing climate projects and influencing climate-related decision-making.

Strategies and Actions for Promoting Climate – Gender Synergy

Through a series of measures, Plan International aims to empower 6,000 young women, cultivate 400 young women to become peer educators and leaders in the field of green development, support 100 youth-led climate action projects by young women, and promote their active voices at international climate conferences such as the United Nations Climate Change Conference. At the same time, the project will also empower 30 local social organizations, strengthening their capacity in advancing gender equality, youth participation, and climate-related projects, while supporting them in carrying out relevant practices and actions.

Plan International hopes that through this project, a more inclusive and sustainable climate response mechanism can be established. By means of systematic capacity building and platform creation, every participating young woman can transform from a passive bearer of climate change impacts into an active agent driving solutions, and become a pragmatic climate leader within her own community.

The “Youth Green Development Project” has innovatively adopted a multi-level impact strategy and applied Plan International’s unique “Gender Transformative Marker” tool to conduct gender assessments throughout the entire project cycle. This ensures that the needs, risk perceptions, and agency of young women are given priority at every stage of the



Figure 25. Group photo of participants in the “Youth Green Development Project” (Image source: Case contributor).

project. What makes this strategy and tool distinctive is that they systematically integrate a gender perspective into all levels of climate action, embedding gender equality principles into the entire process of project design, implementation, and evaluation.

Through gender equality training which were provided to targeted youth and local social organizations, the project enhanced their understanding and awareness of gender issues in the context of climate change. Meanwhile, with customized capacity-building programs and professional guidance, it effectively dismantled structural barriers to gender equality, providing a solid foundation for the deep integration of gender equality and climate action.

At the individual level, the project aims to develop a “Youth Green Development + Gender Equality” curriculum and organize activities such as “Young Women’s Climate Leadership Workshops” to systematically strengthen young women’s capacities in climate science, policy advocacy, public expression, and community mobilization, cultivating them as core leaders in the field of climate and green development. The project

will focus on supporting young women in designing and leading 100 climate actions and initiatives, while also providing them with channels to voice their perspectives on international climate platforms. In addition, by training 400 young women to become peer educators and leaders on climate issues, the project helps them grow from beneficiaries into change agents, ultimately forming a cohort of young women climate leaders equipped with professional skills and community influence.

At the local social organization level, the project will provide 30 local organizations with capacity building for gender-equal climate action. This includes guidance on how to carry out climate education and advocacy activities with a gender perspective, how to enhance young women’s adaptive capacity and resilience to climate change, how to establish gender-equal participation mechanisms, and how to cultivate young women’s leadership in green development and climate action.

Case Provider: Plan International

03 Research Cases

According to data from the Ministry of Science and Technology, women currently account for about 45.8% of scientific and technological workers nationwide. In recent years, women scientists have demonstrated increasingly prominent research influence in the fields of environment and climate. From awards such as the National March 8th Red-Banner Award, we have compiled representative figures related to the field of climate change (Case 11), showcasing the indispensable power of women scientists in climate action.

In addition, we have specifically selected the case of the “Fujian Women Science and Technology Commissioners.” Fujian Province is a pioneer in ecological civilization nationwide and also the birthplace of the Science and Technology Commissioner system. Implementing the ACWF’s deployment on women’s contributions to agricultural development through science and technology, the Fujian Women’s Federation has continuously advanced the initiative “Women’s Support on Science and Technology for Agriculture in Carbon Sink Development.”

Case 11

Women Scientists on the Path Toward a Greener Future

Background

In recent years, women scientists have demonstrated increasingly prominent research influence in the fields of environment and climate. According to data from the Ministry of Science and Technology, women currently account for about 45.8%²¹ of the country's scientific and technological workforce. In 2019, women made up 5.3% of the academicians of the Chinese Academy of Engineering and 6%²² of the academicians of the Chinese Academy of Sciences. Since 1991, ACWF together with the Publicity Department of the CPC Central Committee, the Ministry of Human Resources and Social Security, and 25 other ministries and commissions, has widely carried out the "Women's Achievements" campaign among urban women nationwide, fostering and promoting a large number of female industry elites, skilled workers, and entrepreneurial role models with distinct characteristics of the times.

Growing Stories of Women

Qinggelejirigle was born into a herdsman's family in Alxa Right Banner, Alxa League, Inner Mongolia. In 1998, she was admitted with excellent grades to study Steel

Metallurgy at the University of Science and Technology Beijing, thus beginning her career in the steel industry. The key to the green development of steel lies in blast furnace iron-making, with the core challenge being the reduction of carbon emissions. China's blast furnace iron-making has long relied mainly on sinter, supplemented by pellets, and producing one ton of sinter generates more than 200 kilograms of carbon emissions. In this industry, long considered a man's world, Qinggele left her unique youthful mark. After more than 500 experiments, she successfully developed high-quality, low-silica, basic pellets, achieving over 50% industrial application in ultra-large 5,500 cubic meter blast furnaces, providing an important demonstration of carbon reduction for blast furnace iron-making in China. This achievement is of great significance for China's steel industry, which operates nearly a thousand blast furnaces, and earned her the First Prize of Metallurgical Science and Technology in 2020.

With new development needs, technologies such as carbon capture and utilization have become focal points in the steel industry. Facing new fields and directions, Qinggele chose to rise to the challenge, leading her team to independently design process technology solutions

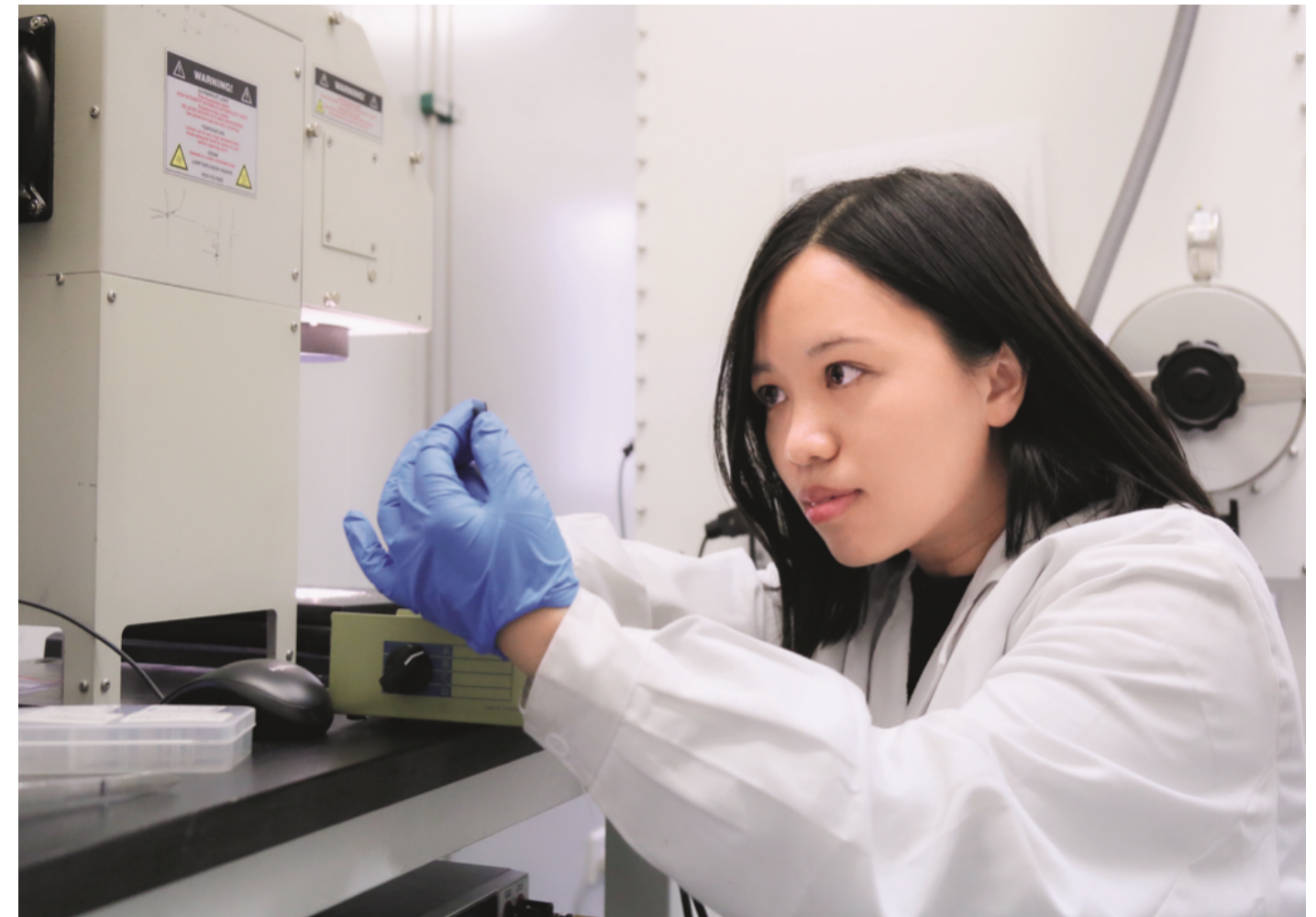


Figure 26. Zhou Huanping in the laboratory (Image source: China Women).

and equipment schemes. By integrating and innovating knowledge from steel-making and chemical engineering, they identified the effects of impurities such as chlorides, organic sulfur, and inorganic sulfur on carbon capture and developed efficient CO₂ capture technology for blast furnace gas. These studies will provide strong support for exploring deep decarbonization in the steel industry.

Among the National March 8th Red-Banner Awards, there are not only scientists but also outstanding women leaders. Academician Duan Huiling, Dean of the College of Engineering at Peking University, is an outstanding representative. As a leading talent in scientific and technological innovation under the National Ten Thousand Talents Plan, she has received numerous honors, including the China Youth Science and Technology Award, the China Young Female Scientist Award, the Sia Nemat-Nasser Award from the American Society of Mechanical

Engineers. In March 2025, Peking University established its Faculty of Engineering, composed of six schools including the College of Engineering and the School of Mechanics and Engineering Science. The Faculty aims to serve national strategic needs and advance the development of "New Engineering." Academician Duan Huiling was appointed as its first director.

Among the many outstanding young teachers in Peking University's Faculty of Engineering, Zhou Huanping, Vice Dean of the College of Materials Science and Engineering, stands out for her contributions to the field of renewable energy. MIT Technology Review annually selects 35 global innovators under the age of 35, and in its 2017 list, Zhou Huanping was one of six Chinese selected, recognized for her achievements in perovskite solar cell research. In 2025, Zhou and her team made another major breakthrough in the field of solar

21. Breaking the "Ceiling" of Development and Strengthening the Power of Women in Science and Innovation — China Daily. https://epaper.cnwomen.com.cn/html/2024-07/30/nw.D110000zgfnb_20240730_7-2.htm.

22. Results of the 2021 Academician Election Announced: Eleven Female Scientists Elected to the Chinese Academy of Sciences and the Chinese Academy of Engineering — The Paper. https://www.thepaper.cn/newsDetail_forward_15409155.

cells, publishing two consecutive papers in Science within a single week, proposing new principles and methods for developing perovskite solar cells, and providing solutions for realizing next-generation photovoltaic technology with both high efficiency and stability.

Solar energy, as a representative of clean energy, is currently over 90% based on crystalline silicon materials. However, the photoelectric conversion efficiency of crystalline silicon solar cells has nearly reached its theoretical limit, and costs are difficult to reduce further. Perovskite has attracted wide attention as a new solar cell material, but its stability remains the main obstacle to industrialization. To improve intrinsic stability, Zhou Huanping’ s research group at Peking University’ s College of Engineering, together with the research groups of Yan Chunhua and Sun Lingdong at the College of Chemistry and Molecular Engineering and their collaborators, proposed introducing europium ion pairs (Eu³⁺ /Eu²⁺) as a “redox shuttle” into the perovskite active layer to simultaneously eliminate Pb and I defects, thereby significantly improving device lifespan. This method addresses one of the key intrinsic factors limiting the stability of lead halide perovskite solar cells and offers valuable reference for other inorganic semiconductor devices facing similar challenges.

Case Sources: China Daily²³, Xinhua News²⁴,
Peking University News²⁵

23. Zhou Huanping: Innovator of Perovskite Solar Cells and the “Little Sun” in Her Students’ Hearts. <https://www.pkuef.org/old/info/1175/4871.htm>

24. “Steel Rose” Pursuing Green Development — A Tribute to Qingge Lejrile, National Model Worker and Scientist at Shougang Group. <http://bj.news.cn/20250524/a252da09b403481987f71037af81816d/c.html>

25. Exploration and Practice in Graduate Education at Peking University | Duan Huiling: Deeply Cultivating a Solid Foundation in Research and Innovating through Interdisciplinary Integration. <https://news.pku.edu.cn/xwzh/8b54188a5c46421899c90d23cf011dd0.htm>

Case 12

Fujian “Carbon Sink + Women Science Envoy Alliance” for Green Innovation

Background

Fujian Province is a pioneer in ecological civilization nationwide and the birthplace of the Science and Technology Commissioner (STC) system. Implementing the ACWF ’ s deployment on women’ s contributions to agricultural development through science and technology, the Fujian Women’ s Federation has continuously advanced the initiative “Women’ s Action to Support Carbon Sink Science and Technology in Agriculture.”

Since 2021, the Fujian Women’ s Federation has fully leveraged the role of female STCs and, for the first time in China, established the “Carbon Sink + Women Science and Technology Commissioners Alliance,” organizing female STCs under a social organization system. To date, more than 800 female STCs have joined the alliance, providing paired services to 1,418 carbon sink agriculture and forestry bases.

Growing stories for Women

Professor Liao Hong is one of the initiators of the “Carbon Sink + Women Science and Technology Commissioners Alliance.” In 2015, as a high-level talent, she was recruited from South China Agricultural University to Fujian Agriculture and Forestry University, where

“building green ecological tea plantations” became her new research focus. Having long interacted with tea farmers, Liao Hong also has another side unfamiliar to them: she is a National Leading Talent in Scientific and Technological Innovation, a Ministry of Education “Changjiang Scholar” Distinguished Professor, a recipient of the National Science Fund for Distinguished Young Scholars, and a distinguished agricultural science talent of MARA. She has led or participated in numerous major national and international research projects, published more than 200 papers in professional journals, and was selected for three consecutive years as a Highly Cited Researcher in Plant Science and Agriculture in the ESI (Essential Science Indicators) global database. Since being elected as a deputy to the 14th National People’ s Congress, Professor Liao has submitted annual proposals closely related to agriculture and farmers.

The soil in Fujian tea plantations is mostly acidic, with poor buffering capacity and prone to compaction. Once fertilizer is applied excessively, nutrients from the fertilizer leach away, causing water pollution. During her field research in the Wuyishan tea-growing region of Fujian, Liao Hong observed that due to large-scale reclamation and cultivation, tea plantations commonly suffered from



Figure 27. Liao Hong (second from left) guiding tea farmers in intercropping soybeans within an ecological tea plantation in Wuyishan (Image source: Fujian Daily).

low nutrient-use efficiency, soil degradation, declining fertility, and severe soil erosion. In November 2015, Liao Hong was appointed Director and Chief Scientist of the Root Biology Research Center at Fujian Agriculture and Forestry University. As a Science and Technology Commissioner, she visited many places in Wuyishan, providing technical guidance to 600 mu (about 40 hectares) of cooperative tea plantations.

Addressing the challenges of acidic soil, Liao Hong cultivated soybean varieties that not only adapt well to acidic soil conditions but also fix nitrogen efficiently. By further inoculating these soybeans with rhizobia, she enhanced their nitrogen-fixing capacity. After solving the survival problem of soybeans, she proposed a green inter-cropping model of “soybeans in summer and rapeseed in winter.”

Soon, new challenges emerged. For tea farmers pursuing high-quality tea, suitable soil and correct

fertilization practices are fundamental to producing premium tea leaves. However, most traditional organic fertilizers available on the market were general-purpose nutrient mixes, which did not fully meet the specific growth requirements of tea plants. As a result, farmers’ choices were quite limited. To address this, Liao Hong and her team formulated a special bio-organic fertilizer tailored for tea plants based on their biological characteristics, replacing chemical fertilizers. Three years later, the tea quality in experimental plantations had significantly improved. Liao Hong then initiated further trials and demonstrations of the “tea – soybean intercropping” ecological model in Yanzike.

Today, the Yanzike Ecological Tea Garden Demonstration Base has become a national pilot site for sustainable agricultural development. In December 2020, the Fujian Provincial Department of Agriculture and Rural Affairs promoted the “tea – soybean inter-cropping”

ecological model across the entire province. What makes Liao Hong most proud, however, is the paper she and her team published in the internationally renowned journal *Journal of Integrative Plant Biology* (JIPB), titled “Aluminum is an Essential Nutrient Element for the Growth and Development of Tea Roots.” This research was the first to propose that, in addition to the 14 essential mineral nutrients required by plants, aluminum is an essential nutrient for the growth and development of tea plant roots.

Outcomes and Impact

By inter-cropping soybeans and rapeseed, Liao Hong protected the soil while suppressing weed growth, enabling tea farmers to stop using herbicides and further reducing environmental pollution. After inter-cropping, the ecological environment and natural landscape of tea gardens were greatly improved. In 2022 alone, Liao Hong’s team reduced carbon emissions by 30% for the Yanzike Ecological Tea Garden and cut phosphorus

use by 90%. In ecological agriculture, this was an initial attempt to shift from the original “carbon deficit” state to a “carbon surplus.”

As a Science and Technology Commissioner, Professor Liao and her team have established over 10,000 mu (around 667 hectares) of high-quality, efficient ecological tea garden demonstration bases in Fujian, driving the development of more than 100,000 mu ((around 6,670 hectares) of ecological tea gardens. She has also collaborated with “field experts” and “farmer talents” in other agricultural domains, transferring the inter-cropping technology from tea gardens to Pinghe honey pomelo, Duwei pomelo, and Pucheng ratooning rice, bringing more agricultural innovations to “show farmers how to do it, lead them to do it, and help them profit from it.”

Case Sources: China Women’s News²⁶, ScienceNet²⁷, “Technology Empowering Rural Development: Special Report 2024 — The Power of Women in Rural Revitalization”²⁸

26. “Female Science and Technology Commissioners” Help Turn Forest Resources into Green Wealth. https://epaper.cnwomen.com.cn/html/2024-07/30/nw.D110000zgfnb_20240730_7-2.htm.

27. Liao Hong, the Female Scientist with a Hoe: Writing Her Papers on the Land. <https://news.sciencenet.cn/htmlnews/2025/3/540076.shtml>.

28. Special Report Series on Science and Technology Empowering Rural Development 2024: “Her Power” in Rural Revitalization. <https://www.undp.org/zh/china/publications/kejifunengxiangcunfazhanxiliezhuantibaogao2024xiangcunzhenxingtaliliang-0>.

04

Corporate Cases

In the field of climate change in China, both the proportion of women employees and women entrepreneurs has been steadily rising. In this set of cases, we are delighted to highlight female entrepreneur Wang Chunguang in the new energy industry (Case 13), the Xurou Initiative as a platform supporting women’s innovation and entrepreneurship (Case 14), as well as the story of Tieniu Village (Case 15), a new model of rural revitalization jointly created by both long-time and new residents in Tieniu Village.

Case 13

Women Entrepreneurs Shaping the Future of Energy Technology

Background

The new energy industry has long been dominated by men, with very few women practitioners, and even fewer women entrepreneurs. The longstanding constraints brought by expectations of women’s roles, age-related concerns, and traditional perceptions are not issues that can be changed within just a few generations. However, in China’s climate change field, the proportion of both women employees and women entrepreneurs has been steadily increasing.

Growing stories for Women

Wang Chunguang is the founder and CEO of Ekon Energy Technology (Shanghai) Co., Ltd. She is not only a “Green Echo” global climate change scholar, but also a Senior Fellow of the Harvard University Social Innovation Seed Community, Senior Advisor to the United Nations Energy Agency, and a board member of the MIT Shanghai Alumni Association. She has been selected as a high-level overseas talent of Shanghai Municipality

and as a recruited talent under the “3310” Program in Yangpu District. She is also a recipient of the Cartier Women’s Initiative Award and was recognized by the Asian Development Bank as a leading figure in Asia’s new energy sector.

Upon her return to China, Wang Chunguang set her sights on Shanghai—a city with not only a broad international vision but also an open market atmosphere. She hoped to use Shanghai as the hub of her business while radiating out to the Yangtze River Delta, a region densely populated with manufacturing and real economy enterprises. This would help her company establish cooperation with leading clients in its early development stage. During her first two years back, however, the importance of this industry was not yet understood by the general public. As the consumer economy, driven by the internet boom, became the hotbed of attention and investment, traditional energy enterprises seemed to fall out of favor. Many even believed that energy was something to be managed by the state and government,



Figure 28. Wang Chunguang at the Women’s Pavilion “Unlimited Possibilities” energy conference (Image source: Cartier).

not an area for a startup to venture into. As an entrepreneur, Wang Chunguang longed to find like-minded supporters and partners.

Through relentless effort and with the dream of “creating a better environment for the next generation,” Wang Chunguang successfully founded Ekon Energy, dedicated to tackling environmental pollution through the power of technology. This energy optimization technology company leverages big data and artificial intelligence to provide energy efficiency and carbon emission management solutions, improving efficiency, promoting emission reduction, and enhancing air quality by managing energy data.

At present, Wang Chunguang and Ekon Energy continue to deepen their expertise in the fields of energy efficiency and carbon emissions. They have already helped client companies save millions of dollars in costs

while effectively reducing energy consumption and carbon emissions. For example, they developed an industrial rotating smart fan operation and maintenance platform for Baowu Steel Group, collecting real-time data on fan operating temperature, vibration, and more. By integrating AI core algorithms, the platform achieved a 99% accuracy rate in anomaly detection, while reducing the workload of high-risk operating personnel by 70%.

On the path toward a low-carbon future, she has undoubtedly moved a step closer to her dream of “creating a better environment for the next generation.” “Business for good” has become a guiding principle for more and more responsible entrepreneurs. Represented by Wang Chunguang, China’s influential women entrepreneurs are demonstrating remarkable foresight that is capturing the world’s attention.

Outcomes and Impact

In just five years, Ekon Energy has become a major force in the transformation of smart energy, successively collaborating with organizations such as Shell, Engie, General Electric, Wanda, New World Group, and China Resources Power. As of the end of October 2019, it had helped users reduce carbon emissions by 82,763 tons and save nearly 600,000 megawatt-hours of energy. Over the years, whether in applying energy technology to smart manufacturing or advancing smart energy, Wang Chunguang has not only witnessed the tremendous growth potential of the Chinese market but also recognized the country’s determination in energy conservation and carbon reduction. This was precisely the original intention behind her founding of Ekon Energy—to help realize a low-carbon future.

In 2018, Wang Chunguang was selected for the “Homeward Bound Women Scientist Antarctic Expedition Project,” and in 2019 she spent three weeks conducting field research in Antarctica. Seeing glaciers melting with her own eyes and little penguins unable to find food due to climate warming, a sense of urgency immediately surged: “Climate change is not about the future—it is happening now. Right now, we must think: what do we want to leave for the next generation?” Wang Chunguang said: “Our generation should have a sense of responsibility and mission, to do something for this country and for society. That is why, after studying and working abroad for many years, we must bring that knowledge and experience back to apply it in our homeland.”

For young people with dreams, especially overseas returnees like herself who want to start businesses, Wang Chunguang offers heartfelt encouragement: “Although you will encounter all kinds of challenges and discomforts along the way, always remind yourself of the original intention you had when you came back to do this. Believe that people around you are willing to reach out and help you. The only thing you need to do is dream big and ask for help.”

Case Source: Shanghai United Front Work Department
WeChat Public Account

Case 14

XuRou Project “Summer Shade” Public Welfare Program

Background

The Xurou Initiative is a platform jointly launched by a group of women long dedicated to sustainable development, deeply engaged in technology and investment fields, together with partners from various sectors. With a focus on supporting women’s innovation and entrepreneurship and promoting sustainable development, it encourages a “business for good” economy and fosters positive, sustainable social progress.

In 2024, the Xurou Initiative and corporate partners jointly launched the “Cooling Shade for Summer” public welfare project. This initiative is a community cooling action aimed at improving summer living conditions through innovative energy-saving technologies. Its purpose is to apply cutting-edge technologies such as electricity-free cooling coatings (iPaint) to public community spaces, focusing on vulnerable groups under extreme heat and creating cooler, energy-saving, and more comfortable living environments for residents. Guided by the GLP (Global Life Protected) concept, the project has been implemented in key locations such as nursing homes, dining halls for aging population, schools, and public welfare institutions in Guangdong, Hong Kong, Sichuan, Hubei, Xinjiang, and Malaysia.

Strategies and Actions for Promoting Synergy Between Climate and Gender Governance

The project worked closely with local organizations such as the Vine Social Work Service to precisely align with community needs and ensure smooth implementation. As an important practice of the Xurou Initiative in the field of climate and gender synergy, the project aimed not only to provide cooling solutions for communities but also to enhance women’s leadership and influence in community-level climate action. Ms. Liu Anqi, co-founder and secretary-general of the Xurou Initiative, stated: “We hope to bring electricity-free cooling technology into communities to provide residents with relief from the heat, and at the same time, through this project, we hope to raise greater awareness of women’s roles and contributions in addressing climate change.”

Technological innovation was the core highlight of the “Cooling Shade for Summer” project. Technology companies provided the core electricity-free cooling technology, ensuring the scientific soundness and effectiveness of the cooling solutions. This technology was inspired by the Saharan silver ant, one of the most heat-resistant insects in nature, capable of foraging even when ground surface temperatures reach as high



Figure 29. Group photo of the Turpan Action under the XuRou Project (Image source: Case contributor).

as 70°C. These ants are covered with specialized hair structures that possess two critical biological traits: on one hand, the triangular prism-like structures of the hairs have extremely high solar reflectivity (in the visible and near-infrared spectrum), reflecting more than 95% of sunlight and reducing external heat absorption; on the other hand, they exhibit strong mid-infrared radiation capability, efficiently dissipating internal heat into the cold of outer space.

This natural phenomenon became the inspiration for electricity-free cooling technology. Drawing on the silver ant’s “high reflection + high radiation” traits, companies designed a material that provides continuous cooling without relying on energy. The material’s solar reflectivity and mid-infrared emissivity both exceed 95%, far surpassing industry standards, offering significant advantages in cooling and energy saving. By simulating the structure of the ant’s hair, companies successfully developed high-performance nanomaterials capable of delivering passive cooling and energy efficiency in buildings, thereby providing an innovative solution for coping with extreme heat conditions.

Outcomes and Impact

As an advocate in the field of climate and gender synergy, the Xurou Initiative took charge of overall planning and resource coordination. Through storytelling and community interaction, it effectively mobilized residents and raised public awareness of the role of women in climate-related issues. By the end of 2024, the “Cooling Shade for Summer” initiative had covered more than 6,000 square meters of community projects, with an actual coating area of approximately 5,100 square meters—equivalent to a carbon reduction of 553 tons, or the planting of 25,200 trees. The “Cooling Shade for Summer” project has grown into a flagship initiative that integrates science education, technological innovation, and social care. By popularizing knowledge on climate change, the project has enabled the public to better understand the profound impacts of global warming on life and health.

Case Provider: Xurou Initiative

Case 15

“Tieniu Village Mama’s Restaurant” in Chengdu

Background

Tieniu Village, located in Xilai Town, Pujiang County, Chengdu, derives its name from the iron slag left at a Western Han iron-smelting site in the village, which resembles an iron bull. Beginning in 2020, more than 80 young people from first-tier cities such as Beijing, Shanghai, Guangzhou, and Shenzhen, carrying with them their imagination of rural life, gradually came to Tieniu Village, about 80 kilometers from downtown Chengdu, to embark on an experiment in rural aesthetic living.

One of the new villagers, Zhan Hao from Dalian, who now resides permanently in Tieniu Village, is one of the founder of “Tieniu Mama’s Restaurant.” He recalls: “When we first arrived in Tieniu Village, the very first thing we did was go door to door visiting the households. Through this process, we discovered that the local mothers had incredible cooking skills—truly the wisdom of everyday life. We wondered if we could gather these mothers together and let them use a meal, the taste of food, to represent the countryside. In this way, every person who comes here can, through a single meal, integrate into village life and understand its customs and traditions. So, in November 2020, we held an event called ‘The Taste of Tieniu Mama.’ Because it received such positive feedback, we decided to solidify this model

and open a restaurant. That’s how ‘Tieniu Mama’s Restaurant’ came to be.”

The restaurant was officially established in 2021. Its managers hope that by inventing the new and old villagers, they can continue to find out more skills and potentials of the mothers, bringing this most heartfelt warmth of rural life to more people, while encouraging new and old villagers to embark on entrepreneurship together.

Growing Stories of Women

Xiaoyu is one of the “Tieniu Mamas.” She is a native villager who previously ran the only somewhat sizable farmhouse eatery in the village—Tieniu Zhai—which specialized in Sichuan’s traditional wood-fired chicken. She had been running it for more than ten years and had attracted a number of diners. In March 2021, when the idea of establishing a restaurant emerged, community partners rented Tieniu Zhai. It was a typical western sichuan courtyard (a traditional rural residential compound), dining space, woodland, fishpond, vegetable garden, and orchard. “Tieniu Mama’s Restaurant” took root in this courtyard. After more than a month of renovation, the former farmhouse eatery was completely



Figure 30. Group photo of the members of “Tieniu Village Mama’s Restaurant” (image source: Sichuan Cuisine Magazine WeChat official account).

transformed into Tieniu Mama’s Restaurant.

After the restaurant opened, Xiaoyu also joined the kitchen team as head chef, collaborating with several new villagers to develop new dishes. Local villagers such as Sister Liang, Aunt He, Aunt Li, and Xiaohui, who was not yet 20 years old, gradually joined the restaurant as well—they were all long-time villagers of the area.

At dawn, Aunt Li would go out to pick vegetables and then head to the restaurant to experiment with recipes and cook in practice. After becoming part of the Tieniu Mamas, her life became much more interesting. At first, she nervously presented her own dishes to diners, but to her surprise, they were highly praised. Gradually, Aunt Li grew more and more confident. Thanks to years of healthy eating, her physical condition also improved.

“We hope that through this team working of new and old villagers, we can continue to bring this most heartfelt warmth of rural life to more people, while encouraging both new and old villagers to embark on entrepreneurship together,” said Zhan Hao.

To eat only in season, to consume what is locally grown, and to follow the rhythms of nature—these are the core principles that guide the Tieniu Mamas when developing new dishes. Whatever ingredients are produced in a given season are used in their cooking. The mothers have a deeper understanding of nature and the seasonal cycles; they often tell the new villagers which local foods are at their best during each season.

In addition to the monthly updated seasonal dishes, many classic recipes have been preserved and become staples on the menu. The most popular dish is steamed native eggs, simple and rustic, yet the most comforting embodiment of “mother’s taste.” Another signature is the crispy-fried vine flowers. Seasonal harvests of gourds and melons are transformed into delicious dishes, with vines, leaves. In summer, cucumbers, bitter gourds, and luffas are used and in autumn, pumpkins and sweet potatoes. Each season offers something different. Even the pepper leaves from the courtyard in the backyard have found their place on the dining table.

Some of the restaurant’s ingredients come from

the organic farming of both new and old villagers, and the mothers know exactly who sells the freshest produce. From the moment they arrived in Tieniu Village, the new villagers have treated themselves as role models, practicing a low-carbon and sustainable lifestyle: doing projects by hand whenever possible, sourcing materials locally, and returning to simplicity in food, clothing, housing, and travel.

Together, the new and old villagers explore ways to shorten the distance from land to table, and to design dining experiences and atmospheres that allow people to derive the maximum nutritional and nourishment from food. Besides sourcing fresh produce locally, dried goods such as shiitake mushrooms, black fungus, grains, and seasonings are purchased from organic farms and brands run by friends across the country, such as Maikunta. At the same time, efforts are being made to establish a community-supported agriculture (CSA) membership system to support the growth of more eco-farmers, ecological farms, and organic brands.

Case Provider: Sichuan Cuisine Magazine WeChat Official Account²⁹, Sichuan News³⁰

29. What Makes This Restaurant—Without a Single Professional Chef—So Special That It Was Featured by CCTV and People’s Daily?. https://mp.weixin.qq.com/s?src=11×tamp=1756288273&ver=6200&signature=vLpIANClzj2tdfu7Rtua5ZZWY2WqFTeFVn0Vs9vY9IR0DW2SxtJrXL6alvj6w0uejzxTZP8JIH62WexgemPcuxtsd-CedumnESTfkgZFKsY*m4CnjSrlX05FeeHUnn&new=1.

30. The Story of Tieniu Village: A Group of New Villagers and Their Ecological Agriculture Experiment. <https://sichuan.scol.com.cn/ggxw/202204/58507639.html>

05

Social Organization Cases

In the 2025 Report on the Work of the Government, it was emphasized that “we will guide and support the sound development of social organizations, humanitarian aid, volunteer services, and philanthropy.” This marks the 16th time that “social organizations” have been included in the Government Work Report. In recent years, the role of social organizations in helping the state improve social governance effectiveness has received increasing recognition.

In this session, we have collected 8 cases initiated by social organizations than by any other stakeholders. This reflects the fact that in China, the actions that focus on the synergy of climate and gender has a relatively solid foundation at grass-root or community level. This section presents nine cases. Among them, the China Women's Development Foundation's “Water Cellar for Mothers” (Case 16), as well as the China Social Entrepreneur Foundation: “Orange Mom” Program (Case 17), focus on strategies and actions jointly advanced by grassroots philanthropic institutions, enterprises, and government to promote the synergy of women's empowerment, climate action, and economic empowerment. The CANGO for International Exchanges' Training Program for Civil Society Organizations (Case 18) and Friends of Nature's “Linglong Project” (Case 19) highlight efforts to build networking platforms that identify and empower organizations or individuals, support policy advocacy on climate and gender, which will ultimately enhance impacts of Chinese civil society in the process of social governance and development. In addition, the Sanjiangyuan Women Ecological Protection ” Project (Case 20), the Ruili Women Adapting to Climate Change (Case 21), and the Yunnan Village Eye Center for Native Cultural Research (Case 22), together with the “Economic Empowerment of Rural Women Smallholders in Yunnan Province to Cope with Climate Change” (Case 23), vividly illustrate how indigenous wisdom and the empowerment of local women can enhance their potential and leadership through long-term accompaniment and supports. These organizations, each with their own characteristics, are empowering women from different angles and offering new perspectives for climate action through a gender lens.

Case 16

China Women's Development Foundation “Mother's Water Cellar” Supporting Ecological Resilience

Background

Women are not only direct beneficiaries of water environment protection and improvements in living conditions, but also key participants and change makers. In 2000, to support the UN Millennium Development Goals (MDG) and China's Western Development Strategy, the ACWF, the Beijing Municipal People's Government, and China Central Television jointly launched the “Mother's Water Cellar” project, organized and implemented by the China Women's Development Foundation. The project aimed to help women and families in water-scarce areas overcome drinking water difficulties. Since its inception, it has been committed to addressing water shortages in rural China, especially in arid and very poor regions, while also focusing on women's participation in environmental protection and agricultural development.

Strategies and Actions for Promoting Climate and Gender Synergy

The “Mother's Water Cellar” project has evolved from initially constructing household-level rainwater cellars to gradually developing into a “1+N” integrated development model, with water cellars as the core, combined with biogas, planting, livestock rearing, sanitation, and courtyard greening. The project expanded

its focus from addressing domestic water needs to ensuring water for both people and livestock, as well as production, actively promoting and implementing safe drinking water projects, and strengthening the sustainable use of water resources.

In 2011, building on the achievements of its first 10 years, the project further established a new development framework—safe drinking water projects, environmental sanitation, and health education—while extending into the “Mother's Water Cellar—Campus Safe Drinking Water” initiative. In Shanlin Village, Lujia Gou Town, Dingxi City, Gansu Province, villagers previously relied mainly on



Figure 31. Water and fertilizer integrated equipment donated by enterprises (Image source: China Women's Development Foundation).



Figure 32. Irrigation canal in a water-saving agriculture project (Image source: China Women's Development Foundation).

cement cellars to store rainwater as their domestic water source, which was extremely difficult. The project built eight new centralized water supply points and laid 6.34 kilometers of pipelines, not only solving the drinking water problem for 178 households (653 people) and 12,000 livestock, but also effectively improving the yield of local drought-resistant crops such as potatoes.

At Yongdong Town Central School in Xiushan County, Chongqing, after the project was implemented, new sinks were built and direct drinking water facilities installed. The principal happily said: “Children no longer have to spend their entire 10-minute break queuing for water. They can finally enjoy the small happiness of drinking straight away. Both students and teachers love the direct drinking water—it's sweet, and especially after running, grabbing a cup of it is so refreshing!”

In order to enhance rural women's awareness of water resources and ecological environment protection, in 2018 the “Mother's Water Cellar” project was further upgraded to integrate sanitation management, water source protection, and women's empowerment, launching the “Mother's Water Cellar—Green Countryside” initiative. This became an important

practice in promoting the sustainable development of water and the environment. The project was carried out in Hubei, Shaanxi, and Henan, implementing water system improvements, toilet renovation, sewage treatment, garbage classification, environmental management, and environmental education training. Liangshuihe Town in Danjiangkou City, Hubei Province, is a major citrus-producing town. The project upgraded the water supply network in Youfang Village, ensuring that pipelines extended directly into orchards, covering 250 mu of citrus groves. Female villager Yang Wanxiu said: “In the past, growing citrus meant working hard all year with little to show for it. Now that the citrus trees drink the ‘comfortable water’ brought by the ‘Mother's Water Cellar—Green Countryside’ project, life has more hope.” Seventy-seven-year-old villager Zhou Youlian added: “The state built us new houses, and the ‘Mother's Water Cellar—Green Countryside’ project built us sanitary toilets. I never thought I could live in a new house with a flush toilet. Life is truly a blessing!”

In 2021, the China Women's Development Foundation released the “Mother's Water Cellar” 2021–2025 Upgrade Plan, which expanded the scope of the project to include agricultural water use. By building



Figure 33. A melon farmer from Zhenbao Village holding a honey melon (Image source: China Women's Development Foundation).

high-quality water-saving agricultural infrastructure, equipping farms with water-efficient devices, and promoting water-saving irrigation technologies, the project aims to create a path toward sustainable agricultural development that conserves water and is environmentally friendly.

In 2023, the Foundation launched a rural revitalization agricultural water-saving project in Zhangye, Gansu Province, adopting an innovative model of “infrastructure construction + agricultural training.” Through training, the project enhanced water-use planning and management, empowered rural women, and fully tapped into their unique potential and vitality in agricultural production, helping rural women and their families increase both yields and incomes. In Xinhua Village, Ningyuanbao Town, Jinchuan District, Jinchang City, efficient water-saving equipment provided by the project laid several pipelines across fields, transforming once arid farmland into fertile land with high-efficiency irrigation. Villager Yang Xiaofang expressed heartfelt gratitude: “In the past, irrigation was hard—finding labor was difficult, and watering was slow. It used to take two people half a day to irrigate one mu of land, and yearly water and labor costs amounted to over 10,000 yuan. It was costly, time-consuming, and

exhausting. Now, one person can water five mu of land in just a few hours. It’s much faster and far easier—we feel greatly relieved.”

The project also actively organized women to participate in agricultural skills training, not only guiding them in how to use water and save water, but also introducing them to new crop varieties and more scientific cultivation techniques. Zhang Haixia, chairwoman of the Women’s Federation in Sanshilidian Village, Dangzhai Town, Ganzhou District, explained that the string beans she now grows were introduced through project training: “They’re easy to manage, save water and fertilizer, have a short cycle, and yield high profits. This year the income was 6,000 yuan per mu.” Under the project’s guidance, the village established agricultural cooperatives and family farms. Many women began cultivating apples, corn, pumpkins, and peppers, as well as engaging in livestock breeding, thereby raising household incomes.

In 2024, the China Women’s Development Foundation launched the “Mother’s Water Cellar Green Homeland” project, focusing on four areas: water ecology construction, drinking water safety, water-use efficiency improvement, and raising awareness of

water resource protection. Actions include building piped water systems to bring tap water directly into households, carrying out drinking water hygiene training to ensure safe water access in water-scarce areas, implementing agricultural water-saving projects equipped with water-efficient devices to promote agricultural development, and encouraging women to participate in daily patrols and river protection activities. These measures aim to raise ecological protection awareness and foster a social atmosphere of water conservation. The project has already been implemented in Beijing, Shanghai, Hubei, and Chongqing, among other regions.

Outcomes and Impacts

By the end of 2023, the “Mother’s Water Cellar” project had constructed 139,900 rainwater cellars, 2,007 centralized water supply projects, 10 agricultural water-saving projects, and 4,234 sanitary toilets across 30 provinces, autonomous regions, and municipalities. It has helped 3.8 million people improve drinking water quality, enhance living environments, and develop green agriculture. The hygiene conditions of kitchens, toilets, and courtyards in beneficiary households have been greatly improved. Not only are individual courtyards clean and tidy, but public spaces and village streets have also become well-kept, leading to a remarkable transformation in village appearance.

According to third-party evaluations, over 60% of project villages have seen significant improvements in water supply infrastructure and public services, in the establishment of environmental sanitation management systems, and in village appearance reconstruction. Evaluations also indicated that in 80% of the project sites, local Women’s Federations provided training to key women beneficiaries, with each trained woman subsequently engaging an average of 11 villagers to learn about hygiene, health, and environmental protection, thereby supporting more effective project implementation.

The “Mother’s Water Cellar” project has been included in the White Papers China’s Rural Poverty Alleviation and Development, Gender Equality and Women’s Development in China, and China’s Practice in Human Poverty Reduction. In 2005, it won the inaugural “China Charity Award.” In 2015, International Minor Planet No. 207715 was officially named “Mother’s Water Cellar Star.” At the 2024 Global Poverty Reduction and Development Forum, the project was selected as one of the “Top Global Poverty Reduction Cases” at the Fifth Global Poverty Reduction Case Contest, and was included in the South-South Cooperation Poverty Reduction Knowledge Sharing Database and Online Platform.

Case Sources: Official website of the Mother’s Water Cellar project, China Women’s Development Foundation

Case 17

YouChange Foundation

“Orange Mama” Rural Women’s Green Empowerment Program

Background

Climate change and extreme weather have become major threats to global agricultural production, with particularly severe impacts on women entrepreneurs in rural areas. Through follow-up visits to beneficiaries of previous rural women’s economic empowerment programs, the YouChange China Social Entrepreneur Foundation (hereinafter referred to as “YouChange Foundation”) found that 65% of beneficiaries reported that the quality and yield of their agricultural products were highly vulnerable to extreme weather, leading to increased production costs but reduced income. Therefore, how to improve rural women’s ability to cope with climate change, promote green entrepreneurship, and support business transformation has become an urgent challenge to be addressed.

In 2024, the YouChange Foundation, together with enterprises, local governments, women’s federations, and social organizations, launched the “Rural Women’s Green Empowerment Initiative.” This initiative aims to support rural women entrepreneurs facing the risk of falling back into poverty due to climate change challenges, by enhancing the resilience of rural supply chains and upgrading agricultural technologies. It seeks to help rural women expand integrated development models of primary, secondary, and tertiary industries in leisure agriculture, increase their income, and thereby better cope with the challenges brought by climate change, injecting new vitality into the sustainable development of rural economies.

Strategies and Actions for Promoting Climate – Gender Synergy Governance

The project adopts empowerment training as its core approach, combining offline intensive courses, field-based teaching, and green product co-creation workshops to explore locally adapted strategies across different regional contexts. The first phase was launched in Anqing, Anhui Province, and Huan County, Gansu Province. Although the two regions differ greatly in terms of natural and industrial conditions, rural women entrepreneurs share three common challenges: First, household agricultural products remain at the lower end of the industrial chain, with weak marketing and promotion capacity and little bargaining power; Second, cultural and intangible heritage resources have not been effectively integrated into agricultural industry development; Third, the uncertainty brought by climate change directly threatens agricultural income—while leisure agriculture shows potential, its business models are still in their infancy.

To address these issues, the project designed a series of courses including “Opportunities and Challenges for Leisure Agriculture under Climate Change,” “Innovative Design and Green Low-Carbon Integration of Rural Products,” and “Upgrading Green Family Farms.” It also introduced a mentorship co-creation mechanism, organizing group practical sessions on topics such as green product design, eco-friendly packaging, and brand building. The courses not only focus on disseminating green concepts but also emphasize the practical transformation of capacity. In the course “Embracing



Figure 34. Li Xiaoyu and the diversified transformation of the grape industry (Image source: “Orange Mama” WeChat official account).

Innovation and Unlocking Women’s Leadership,” the project encouraged women entrepreneurs to actively identify new opportunities under climate risks, foster innovative thinking and adaptability, and drive their transition from being “farmers” to “leaders of the green industry.”

Growing Stories of Women

Li Xiaoyu is a rural woman entrepreneur from Anqing, Anhui Province. For many years, she was engaged in grape cultivation, but the frequent extreme weather events brought by climate change posed significant risks to her agricultural production. Traditional farming models proved particularly vulnerable to natural disasters, and as grapes are at the upstream end of the tertiary industry, their returns fluctuated sharply. Through her participation in the “Rural Women’s Green Empowerment Initiative,” Li Xiaoyu gradually came to realize the limitations of a single agricultural business model. With guidance from

the program’s mentors, she developed new ideas for agricultural diversification. Today, Li Xiaoyu is planning to introduce value-added services such as grape-picking tourism and family farm experiences, shifting her industry focus from simply “growing well” to also “selling well.”

Huan County in Gansu Province was hit by strong winds and drought all year around. Dou Rong, who has long been engaged in corn cultivation and pig farming, practiced integrated ecological recycling agriculture, but drought remained an unavoidable development bottleneck. Facing this challenge, she chose to join the “Green Empowerment Initiative” in search of a breakthrough. During the project’s training, Dou Rong systematically learned about green product design, AI applications, and online sales strategies. The digital hands-on sessions and co-creation workshops on green packaging made her realize that innovation could bring new opportunities to agricultural business. “Before, I only thought about how to grow well. Now I’ve learned how

to sell well,” she said. In the future, she plans to continue expanding online channels, enhance her farm’s risk resilience, and achieve a shift from “survival agriculture” to “sustainable agriculture.”

In 2020, a flood wiped out Hu Chunxia’s gua lou (trichosanthes) base, which she had built up through years of hard work. Confronted with this sudden disaster, she came to deeply understand that “living at the mercy of the weather” was no longer viable. During the reconstruction process, she not only brought in nearby disaster-affected women to join the cooperative and secure stable employment, but also promoted the full value chain of gua lou seedling cultivation, processing, and packaging at the base, enhancing both its stability and added value. Through her participation in the Green Empowerment Initiative, she further clarified the base’s development direction—integrating leisure agriculture with rural homestays. “I had always wanted to transform, but I didn’t know where to start. This training showed me scientific methods and successful cases.” She hopes to leverage the program’s resource networks and training system to turn the gua lou base into a green model integrating agricultural experiences, cultural tourism, and community co-creation.

After two years of implementation, the “Orange Mama” project has successfully provided green entrepreneurship training for 2,000 rural women, helping them enhance their capacity to cope with climate change and driving the green transformation of rural industries.

Case provided by: YouChange Foundation, Orange Mama
WeChat Official Account

Case 18

China Association for NGO Cooperation “Promoting Social Organization Development in the Climate and Gender Field”

Background

The proposal of China’s “dual-carbon” goals has accelerated the prominence of climate issues. Meanwhile, topics such as women’s participation in climate action and the integration of gender perspectives into climate agendas have gradually gained attention. However, the number of social organizations working in the fields of gender equality and climate change remains relatively small, and their capacity for engagement is limited. Many social organizations face challenges in institutional development, professional expertise, policy advocacy, and often struggle to effectively incorporate gender perspectives into climate action.

Since 2023, CANGO, in partnership with the Shaanxi Women and Children Development Foundation and the SIP Lvse Jiangnan Public Environment Concerned Centre has launched a three-year project. This initiative focuses on policy advocacy in the fields of climate and gender, aiming to strengthen the participation and enhance capacity of Chinese social organizations in terms of their engagement on social governance and development.

Strategies and Actions for Promoting Climate – Gender Synergy Governance

The project focuses on social organizations in Northwest China that are dedicated to gender equality, as well as those in Eastern China that focus on climate change. By providing capacity building and other forms of supports (such as funding, technical assistance, and information), the project helps these organizations strengthen their policy advocacy capacity and upgrade their operational management. At the same time, it

seeks to build and consolidate both new and existing communication and cooperation networks. Through organizing diverse dialogue activities, it facilitates exchanges and collaboration between social organizations and policymakers, think tanks, enterprises, media, and the public. The ultimate aim is to foster an open and inclusive policy and public environment that fully unleashes the potential and vitality of social organizations, enabling them to play a key role in addressing climate change and advancing gender equality.

The project provides professional training, financial support, and international exchange opportunities to 30 gender-focused social organizations in Northwestern provinces and 25 climate-focused organizations in Eastern coastal provinces. Expected outputs include: strengthened policy advocacy capacities of targeted social organizations in the areas of climate and gender; improved operational management and resource integration, enabling these organizations to participate more effectively in social governance; the establishment and strengthening of cooperation networks that facilitate collaboration and knowledge exchange, providing social organizations with broader platforms for cooperation and enhancing collaborative governance; the generation and submission of high-quality policy recommendations based on practice, offering valuable references for policymakers and contributing to the formulation and improvement of relevant climate – gender policies; and finally, expanded project impact through outreach activities that raise public awareness of climate – gender issues and create a supportive environment for social organizations to engage in synergistic governance.



Figure 35. Members of a women’s organization conducting river ecosystem monitoring (Image source: Case contributor).

Highlights

On the banks of the Gan River in Jiangxi Province, the Nanchang Gan River Water Keeper (hereinafter referred to as “Qinggan Environmental”) has advanced innovative practices to promote women’s deeper participation in climate action and support their growth. To lay a solid foundation for women’s involvement in climate initiatives, Qinggan Environmental took the lead in establishing a Women’s Committee—the first of its kind within an environmental organization in Jiangxi Province.

In terms of internal governance, the organization revised its charter to explicitly include “conducting research, advocacy, and practice on climate change and gender issues,” and required the integration of gender perspectives into environmental education, public activities, and project evaluations, with particular attention to women’s needs and contributions. It also stipulated gender balance in its board composition and established a review and oversight mechanism for the “Gender Equality Action Plan,” ensuring that resource allocation and decision-making processes reflect fairness.

In Le’an County, Fuzhou, female farmers worked with Qinggan Environmental’s team to jointly develop the “regular maintenance + dynamic monitoring for

ditch-depth” approach, effectively addressing the problem of frequent canal collapses caused by overly soft soil when using traditional ditching techniques. In Fengxin County, Yichun, women farmers’ demand for improved water resource management drove the upgrading of drone-mounted multispectral sensors. Through regular aerial monitoring, LCI index maps were generated to reflect crop health, allowing the team to precisely locate water-deficient areas, optimize irrigation decisions, and reduce farming risks. In this way, drone remote sensing technology became truly responsive to the most pressing production needs.

Qinggan Environmental also applied drone technology to river ecosystem protection, training 27 women volunteers as drone pilots, three of whom obtained official drone operator licenses. Leveraging the Women’s Committee platform and dedicated training resources, the organization provided community women and members with skills training in drone operation, multispectral data collection and analysis, and river ecological monitoring. These women pilots now fly drones regularly over the Gan River and its tributaries, monitoring channel changes, identifying illegal sewage outlets, tracking algal blooms, and assessing riparian vegetation health. They translate the collected spectral data into intuitive images and



Figure 36. Female volunteers participating in the Jiangxi – Anhui environmental training operating a drone for environmental monitoring (Image source: Case contributor).

reports, providing scientific evidence for river protection while also converting complex environmental information into accessible “climate stories” that play a unique role in community environmental education and policy advocacy.

In 2025, Qinggan Environmental hosted a five-day “Learning Together with Mountains and Rivers” climate action retreat, bringing together environmental women from Jiangxi and Anhui’s Huangshan region. Participants engaged in a “climate resilience simulation challenge” to strengthen emergency collaboration skills in the field. The event also featured a roundtable on “Gender Perspectives in Climate Action,” where Qinggan Environmental members shared experiences in advancing low-carbon transitions and policy advocacy—such as family waste-sorting education and using drone imagery to tell “climate stories.” Partners from Huangshan contributed their experience with women-led eco-guided tours, demonstrating how emotional storytelling can connect the public with nature.

Outcomes and Impact

With project support, three organizations received professional training and financial assistance, successfully embedding gender perspectives into their governance structures and operational practices. This enabled them to achieve cross-sectoral institutional development and business expansion, providing institutional safeguards for female staff while introducing new perspectives and approaches to their work.

At the same time, the project fostered dialogue and collaboration between social organizations and policymakers, businesses, media, and the public, enhancing awareness of the critical importance of gender perspectives in climate action. These practices not only serve as strong demonstrations for promoting gender equality and sustainable development in the climate field, but also provide scalable experiences that can be applied to more organizations—contributing valuable references for mainstreaming gender perspectives in global climate change responses.

Case Providers: China Association for NGO Cooperation (CANGO), Nanchang Gan River Water Keeper

案例19

Friends of Nature “Linglong Project”

Background

In 2021, in response to the lack of public awareness of climate change in China and the absence of effective pathways for participation, Friends of Nature, with the support of the Energy Foundation, K2 Foundation, and Partnerships for Community Development (PCD), officially launched the Citizen Climate Action Program – Linglong Project. Friends of Nature believes that individual actors can respond to climate change through proactive action, contribute to achieving the 1.5°C goal, ensure that everyone can safely navigate climate risks, and be treated fairly in the transition. The core strategy of the Linglong Project is to inspire with vision, use incentives to foster action, let action influence the public, and ultimately drive systemic change. With this vision, the project seeks to motivate outstanding potential climate leaders who believe that individual participation in climate public action can lead to transformation and that they themselves can play a significant role.

Strategies and Actions for Promoting Climate – Gender Synergy

The program aims to identify individuals who already possess professional expertise or influence in their respective fields but are just beginning to focus on climate change, as well as those who are newcomers in climate action with innovative thinking. Through systematic knowledge empowerment, mentor-ship, peer-to-peer support, and small grants, the project supports them in designing and implementing citizen-led climate actions. By cultivating climate issue leaders and long-term climate activists, the program provides society with replicable, scalable, and shareable climate action models and experiences, thereby encouraging broader public awareness and participation.

The project relies on a comprehensive support system to progressively inspire potential leaders, helping them grow into true leaders of climate public action. At the same time, through communication strategies, it amplifies the



Figure 37. Students from Xiantian Foreign Language School co-creating the shaded plant area of the “Climate Change Sensory Garden” (Image source: Case contributor).

influence of these outstanding role models, showcasing the practical actions and sense of responsibility of diverse social actors, thereby motivating and inspiring more of the public to join climate action and drive broader social change.

Once admitted, Linglong fellows undergo nearly five months of online climate knowledge learning, project design and refinement, and one-on-one mentor-ship guidance, and then carry out climate actions lasting 8 to 12 months or even longer, showcasing women’s wisdom and leadership across various sub-issues. Since the program’s launch in 2021, five cohorts have been implemented, with a total of 1,363 applicants, 157 selected seed fellows, and 93 Linglong fellows funded to carry out citizen climate actions (from cohorts 1 to 5). Among them, 63.6% were female actors. In addition, 18 long-term climate activists were funded, of which 61% were women.

Growing Stories of Women

In 2022, Liu Siqi, a female fellow from the first cohort who was about to graduate from university, noticed that every June during graduation season, fresh flowers not only adorned graduates’ memories but also generated enormous waste. Through her research, she was shocked by the high carbon emissions of the cut-flower industry. This motivated her to launch the “Sustainable Graduation Season with Flowers” project, calling on more young university students to adopt reusable and alternative solutions to reduce flower waste.

In 2022, Li Jingting, a female fellow from the second cohort of the Linglong Program and a landscape designer, launched the “Nature in Climate Change” project and designed a rooftop garden at Xiantian Foreign Language School in Shenzhen. The garden integrated science education with ecological design, enabling students to perceive climate change directly. The project won the Nature-friendly Garden Award at the 2023 Shenzhen

Co-Created Garden Fair. Through exchanges with other Linglong fellows and mentors, Jingting Jump out out of the traditional landscape designer’ s mindset and, in 2023, founded her own Sustainable Studio, where she designed and developed the “Small Climate Actions” toolkit. This toolkit won the Silver Prize in the Professional Group of the first National Nature Education Cultural and Creative Product Design Competition. Thanks to these experience, Li shifted her career path and joined a global environmental organization to continue her deep engagement in climate action.

In 2023, Wu Xinzu, another female fellow from the second cohort, launched the project “Food for Thought—Youth Food Initiative” , calling on university students to adopt climate-friendly diets and take climate-conscious food actions. Facing her career choices shortly after graduation, she received an invitation from one of the Linglong Program mentors to join a climate communication think tank in Shanghai. Now, Xinxu has a clearer career pathway and direction and in 2024, she applied for a second round of Linglong program, assembled a youth team, and began producing popular science videos to explore common climate myths among young people.

That same year, Cai Ziqi, a recent graduate and fellow from the third cohort who, along with her teammates, had experienced life as left-behind children, decided to take action for rural children suffering from extreme weather. They developed a climate education toolkit—the “Sunny Feelings Weather Box” —designed to help and protect rural elementary school students vulnerable to extreme weather events.

In the summer of 2024, Yu Kun, a fourth-cohort fellow, rode an electric bike through the scorching heat of Zhengzhou to experience and record the lives of food delivery workers. She produced and released short videos to spread awareness of heat waves, providing outdoor workers with practical knowledge on how to cope. During that same summer, Zhou Jianqing, a second-cohort fellow, reviewed her year-long field research in rural areas and launched the “Community Climate Adaptation” project. She organized 15 creative camps, each lasting 5 to 7 days, reaching 244 rural girls. These camps encouraged participants to focus on climate change issues and use

digital technologies to explore the unknown and discover their own limitless potential.

Beyond young women, the Linglong Program has also nurtured another group of female with potentials, that is full-time mothers. One fellow from the first cohort, Chai Qing, had been a stay-at-home mom for many years before joining the program. Through Linglong, she co-founded the Nature Magic Wand team, using audio storytelling to teach young children about climate change. In 2024, Chai even attended COP29, where she shared her team’ s climate wisdom on the international stage. Similarly, Zhang Zheng, a fourth-cohort fellow, initiated the “Cooling the Earth with Conscious Eating” campaign in Changsha. By building a community of mothers, she mobilized more than 300 families to practice low-carbon lifestyles.

In August 2024, Zhang Hui was selected as a fellow in the fifth cohort of the Linglong Program. After more than four months of study and mentor-ship, she launched the project “Extreme Weather Safe House—Climate Solutions for Parent-Child Families” in January 2025. Targeting urban households with children, her project focuses on the risks posed by extreme weather. She and her team designed an Extreme Weather Safe House Game Kit, combining fun with education. Through a series of easy-to-play activities, children learn basic knowledge about climate-related disasters, while parents and children together practice making correct decisions in uncertain scenarios. The project not only strengthens each family’ s capacity to cope with climate risks but also raises public awareness of climate change, fostering a culture of resilience across society.



Figure 38. Chai Qing leading the “Nature Magic Wand” activity (Image source: Case contributor).

In 2024, Zhang Wen joined the Linglong Program with a strong commitment to supporting people with physical disabilities. She launched the “Raising Climate Awareness for Persons with Physical Disabilities in the Guanzhong Plain” project. Through interviews, online and offline workshops, and participatory co-creation activities, she worked with disabled communities to increase their climate awareness and explore adaptive solutions. Her research revealed that people with different levels of disability face specific climate vulnerabilities. For instance, individuals with high-level paraplegia often have little or no ability to sweat, increasing their risk of heatstroke or heat-related illness. Women with high-level paraplegia face heightened risks of urinary tract infections during heat waves. Wheelchair users, whose devices are often made of dark-colored metal, face risks of burns during high temperatures or rapid movement. Zhang Wen plans to continue co-developing solutions with disabled partners through participatory workshops, combining practical adaptation with empowerment and advocacy.

Although the Linglong Program was not designed exclusively for women, it has attracted many compassionate, women representatives to confront the systemic and complex challenges of climate change. In both numbers and creativity, women have emerged as the program’ s main force. They are simultaneously

among the groups most vulnerable to climate change and among the most innovative actors in designing grassroots responses. Each woman’ s initiative reflects her lived experience and heartfelt concerns, which makes their projects both authentic and effective. Supporting and safeguarding their willingness to act is, in itself, the most powerful form of empowerment.

Over the past four years, the Linglong Program has supported 58 female climate leaders who have carried out impactful actions in areas such as climate education, science communication, greenhouse gas mitigation, nature-based solutions, and community climate adaptation. Their work has directly reached tens of thousands of beneficiaries. From translating children’ s climate books to conducting frontline research, organizing theater performances and workshops, and developing climate-themed board games and toolkits, these women have demonstrated the creativity and leadership of grassroots climate action in China. They exemplify how women can transform vulnerability into agency, and challenges into solutions, forging innovative, bottom-up pathways for climate governance.

Case provided by: Friends of Nature, Beijing

Case 20

Sanjiangyuan Ecological Protection Association “Sanjiangyuan Women Environmental Protectors”

Background

The Sanjiangyuan region is located in southern Qinghai Province on the northeastern Qinghai-Tibet Plateau. It is the source catchment areas of the Yangtze, Yellow, and Lancang Rivers, characterized by extremely fragile ecosystems with high sensitivity. Climate change has brought significant economic losses to local herders, while permafrost thaw has exacerbated grassland degradation and desertification. Wetland ecosystems are also under threat, undermining the region’s eco-capacity for flood mitigation and water purification. In response to these mounting ecological changes and livelihood challenges, the Qinghai Sanjiangyuan Ecological Protection Association (hereinafter referred to as the “Sanjiangyuan Association”) has, for many years, drawn on the ecological philosophy and rich cultural heritage of the Qinghai-Tibet Plateau. It has focused on three major themes—training environmental leaders, conducting watershed protection initiatives, and promoting zero-waste communities and sustainable rural ecological civilization—working closely with government agencies and civil society to protect the Sanjiangyuan ecosystem, restore environmentally friendly pastoral livelihoods, and

advance both ecological protection and community sustainability in the region.

The vast majority of the population in this region is Tibetan. Shaped by religious and cultural traditions, Tibetan women often carry the primary responsibility of caring for families. They tend to be reserved in public settings and, living year-round in the remote snow-covered grasslands, have limited access to new knowledge and opportunities. As the Association’s work progressed, it became clear that the lack of women’s perspectives and low female participation in environmental initiatives posed challenges to project implementation.

In response, with support from UN Women, the Sanjiangyuan Association launched the “Sanjiangyuan Women Environmental Protectors” project. The initiative builds collaborative partnerships with organizations such as the Yunnan Village Eye Center for Local Culture Research, local start-ups, community leaders, and volunteer groups to ensure synergy in knowledge dissemination, capacity building, and resource integration, thereby securing the project’s sustainability



Figure 39. Sanjiangyuan volunteers and association partners visiting local women in the community (Image source: The Paper).

and amplifying its impact. The project aims to empower local women by enhancing their environmental awareness, communication skills, and technical capacities, encouraging their active participation and leadership in community governance and ecological protection. In doing so, it seeks to gradually dismantle traditional role constraints and foster a more inclusive and diverse environmental action network. Confronting the acute challenges posed by climate change, the project also equips women with adaptation strategies to strengthen community resilience to natural disasters and to promote the sustainable development of both ecosystems and society.

Strategies and Actions for Advancing Climate – Gender Synergy

In implementing the project, the Sanjiangyuan Association upholds the core philosophy of “accompanied growth”, which emphasizes respect

for local culture and women’s agency while focusing on long-term support and continuous empowerment. The project follows a “discover – cultivate – accompany” approach: identifying women leaders in each community who show willingness and capacity, encouraging them to form teams, and motivating more women to step out of their homes and participate in public affairs. The Association provides systematic training and support across diverse areas—including handicraft skills, health knowledge, visual storytelling, and market access—helping women gradually grow into community leaders capable of independently designing and implementing projects.

The initiative pays particular attention to embedding environmental concepts into women’s daily livelihood practices. Examples include producing pollution-free handmade soaps using natural ingredients such as yak milk, butter, and lavender; designing reusable eco-bags; and promoting zero-waste lifestyles. This economic model not only reduces plastic pollution but also



Figure 40. Bayang (right) with the bread she made by hand (Image source: The Paper).

creates new income opportunities for women, thereby enhancing their economic status and social voice. In 2022, the Association launched the Sanjiangyuan Women’s Environmental Film Empowerment Program, guiding women to document their lives, environmental practices, and perceptions of nature through cameras, which strengthened their capacity for self-expression and expanded their public influence. Since 2023, in partnership with China Youth Climate Action Network (CYCAN) and other collaborators, the Association initiated the “Highland Pastoral Areas and Climate Change” project, organizing film screenings and discussions on themes of climate change, pastoral livelihoods, and women’s participation. Women environmental protectors from Sanjiangyuan actively engaged in these discussions and later brought translated films back to their own communities, continuing to spread environmental awareness.

On climate change adaptation, the project actively guides women to engage in community-based practices. These include reseeded grasslands to restore vegetation and reduce soil erosion; implementing seasonal livestock transfer systems to avoid disasters and optimize pasture use; and establishing “forage banks” (grass reserves) to buffer against feed shortages during droughts or snow disasters. Such measures not only strengthen the resilience of women and their families but also contribute to broader ecosystem recovery and stability.

In addition, the project addresses women’s practical needs in areas such as reproductive health,

family education, and legal awareness. Based on women’s needs, tailored making lecturers are invited to give in-village courses, to ensure the content remains practical and relevant to their lives. As a result of these efforts, an increasing number of women now speak up at community meetings and hold seats on natural resource management committees, gradually shifting from traditionally silent and passive roles to active leadership positions.

Growing Story of Women

Bayang, from Nasuoni Village, is the second of seven children. She dropped out of middle school to care for her ill mother and was long confined to domestic chores. In 2017, she joined her father’s environmental protection team and began ecological documentation work. Her life took a dramatic turn in 2021 after joining the Women Environmental Protectors team. She learned to make handmade soap, eco-bags, and bread, gave up junk food, and embraced a “zero-waste” lifestyle. Through film training, she completed her personal documentary Finding the Me Who Dreams. Today, she is one of the artisans at Qiongzong Workshop, working to fulfill an order of 1,000 eco-bags. Her dream is to open a bakery in her hometown.

In Ganda Village, Sonam Zhuoga keenly recognized the difficulties local women faced in accessing menstrual products. She took the initiative to pool orders from women, purchase sanitary pads online, and distribute them within the community, becoming both a disseminator of women’s health knowledge and a protector of their well-being. Other women such as Daji, Yangcuo, and Gensong Yongcuo have pursued different paths: some learned felt-making techniques to protect the grassland ecosystem through eco-handicrafts; others delivered health education sessions to raise women’s awareness of their own well-being; and some, as women’s federation leaders, promoted greater female participation in ecological management roles.

Together, their stories vividly demonstrate the personal growth and transformation made possible through the project.

Project Outcomes & Impact

By the end of 2023, the project had connected 28 core women environmental protectors from multiple villages, inspiring and mobilizing hundreds of other women in surrounding communities. The women acquired diverse skills, including handicraft production, video documentation, environmental knowledge, and health awareness. Some members have even become full-time environmental practitioners. Increasingly, families began supporting women’s participation in public affairs, with women gaining more speaking power in community meetings and natural resource management committees.

The project has effectively reduced environmental pollution in pastoral areas and promoted a zero-waste lifestyle that has gained widespread recognition. Gender awareness within the communities has gradually increased. Rather than imposing external gender theories, the project promoted an “equal respect” perspective by encouraging men and women to engage in dialogue and joint decision-making, fostering a new understanding of gender relations within Tibetan communities. Particularly in addressing climate change, women’s unique perspectives and contributions have proven crucial—not only as practitioners of ecological restoration but also as key drivers of community resilience.

Highlights

The Project is the first grassroots initiative in Tibetan regions of China to deeply integrate environmental protection with gender equality, filling a critical gap in practice. The project fully respects indigenous wisdom, avoids imposing external gender frameworks, and instead promotes change through dialogue and mutual respect. Its “light intervention, long-term companionship” model emphasizes accompanying women in their growth, nurturing both inner confidence and capacity. The project has not only enhanced women’s abilities but also delivered ecological improvements, economic development, and stronger community cohesion—achieving multiple layers of shared value. By bringing their unique observations and care into environmental protection through diverse forms of engagement, women have imbued ecological action with a more human-centered dimension. Their leadership has proven especially valuable in climate change adaptation, where their contributions offer distinctive advantages.

Case provided by: Sanjiangyuan Environmental Protection Association, China Youth Climate Action Network (CYCAN)

Case 21

Ruili Women and Children Development Center “Cross-Border Minority Women Adapting to Climate Change”

Background

Ruili City is located in Yunnan, bordered on three sides by Myanmar, with complex geography and dramatic differences in elevation. Over the past 30 years, climate warming has intensified the subtropical humid climate, with frequent alternations of heavy rains, floods, and droughts. Summer heat waves have led to increases in heatstroke, heat-related illnesses, malaria, and dengue fever. Rural areas are more vulnerable to climate risks than urban communities.

Gaoli Village in Mengxiu Township is a traditional multi-ethnic settlement, predominantly Han, with Jingpo and Lisu minorities. Among its 83 households, 29 are cross-border marriage families, mostly Myanmar women marrying into the village. For generations, the “one village, two countries” geographic pattern and frequent cross-border interactions have shaped a unique cultural and social ecology. Women make up 60% of the agricultural workforce in Gaoli Village. Bearing both household and community responsibilities, they are highly sensitive to climate change and play a central role in resource management and community mobilization, making them key actors in local climate adaptation.

In 2023, with support from Oxfam (Hong Kong) Beijing Office, Gaoli Village in Mengxiu Township launched the “Ruili City Project for Building Livable and Prosperous Villages.” Grounded in a gender perspective, the project addresses differences in resource access, decision-making participation, and adaptive capacity across genders and vulnerable groups (including cross-border marriage families). Through the pathway of “cultivating women leaders – revitalizing culture and confidence – Co-creating livelihood models – strengthening community governance,” the project aims to raise awareness and enhance responses to climate change, build community climate resilience, and foster livable, sustainable rural development.

Strategies and Actions for Gender-Responsive Climate Governance

The project applies empowerment theory to strengthen the cultivation of female talent within the community, incorporating cross-border marriage women as key participants, making project more inclusive. Through regular learning sessions, field



Figure 41. Yang Ruidong sharing climate-related knowledge with local villagers (Image source: Case contributor).

visits, climate-themed cultural activities, such as “Grandma’s Climate Stories” sharing sessions, the Green Agriculture Learning & Mutual Aid Cooperative, the project integrates cross-border and cross-cultural perspectives, local wisdom, and technical expertise. This approach cultivates community female leaders as “climate pioneers”, who in turn mobilize the village to actively participate in climate adaptation actions and enhance rural community resilience to climate change.

The project has four outputs, including conducting women-led climate surveys using the IPCC Hazard – Exposure – Vulnerability framework to accurately assess the village’s vulnerability to climate change and formulate appropriate intervention strategies; cultivating female leadership groups to significantly enhance women’s capacities, enabling them to gain greater voice in community decision-making; exploring rural livelihood development under climate risk through the Green Agriculture Learning & Mutual Aid Cooperative and the promotion of water-saving irrigation technologies, achieving integration of short-term and long-term livelihoods and promoting balanced development of family industries; and establishing a community climate

support network that, through women’s leadership, fosters interaction and collaboration between women and other villagers, thereby strengthening the community’s climate adaptation capacity.

Growing Story of Women

Yang Yulan and Yang Ruidong are two female Party members in the village and serve as core members of the “Leading Goose Development Program”. In the early stages of establishing the women’s leadership group, they actively participated in internal and external training sessions, comprehensively mastering climate change knowledge, which they then shared with other women. They organized field research to help everyone understand the intrinsic link between global warming, agricultural yield reduction, and water scarcity.

Meiyu is a Burmese woman who has lived in China for 15 years. She is diligent, intelligent, and helpful. A year ago, she began planting ginger, starting with 5 acres and achieving good yields in her first year. This year, she decided to expand her planting area to 15



Figure 42. Meiyu (first on the right) with other ginger growers (Image source: Case contributor).

acres. During the cultivation process, she realized that the key to successful ginger farming lies in controlling viruses and pests, while using organic fertilizer to ensure the quality and productivity of the crop. She understands that personal success is not true success; only collective development counts. Therefore, she actively shares her experience with her fellow women, explaining in detail the process of ginger planting, including how to select high-quality seed ginger, apply organic base fertilizer, prevent viruses and pests, and manage irrigation. She combines her own experience to teach her peers how to adjust watering frequency according to weather and soil moisture to ensure optimal ginger growth.

Through the implementation of the project, a women's leadership group capable of driving community development was successfully established. Led by the core members, the group organized "Climate Adaptation Week" activities, taking charge of planning and execution, holding a total of 17 village meetings, increasing participation from 28% to 76%, and serving 2,890 residents. In the past, although Chinese and Burmese women in the village coexisted harmoniously, an invisible barrier existed between them.

One Burmese woman admitted that she was afraid to speak at village meetings, worrying that her Mandarin might not be understood and that others would laugh. Various activities driven by the shared challenge created a space for participation where nationality and identity differences no longer mattered. By participating in and leading these activities, the confidence and public engagement of these cross-border women were greatly enhanced.

Case Provider: Ruili Women and Children Development Center

Case 22

Eyes of the Countryside Visual Storytelling for Climate Resilience in Honghe County's Hani Villages

Background

Qielong Zhongzhai in Azhahe Township, Honghe County, Yunnan Province, is a typical Hani traditional mountainous community. Fifty-two households, totaling 264 residents, live here, relying on terraced rice paddies and maize cultivation, with water sourced from a location 10 kilometers away. The permanent population mainly consists of elderly residents, left-behind women, and children. The community is socioeconomically vulnerable, lacks climate disaster early-warning systems, and has limited emergency response capacity, making adaptation to climate change particularly challenging.

Since 2023, the Eyes of the Countryside Indigenous Culture Research Center (hereinafter referred to as "Eyes of the Countryside") has implemented the "Using Visual Media to Build Climate Change Consensus and Promote Community Action" project in Qielong Zhongzhai. By using the storytelling approach, the project trains women and community leaders to document the impacts of climate change on water resources. The initiative promotes collective restoration of water channels, the establishment of water management rules, and the creation of a "Terrace and Water Resource Protection Fund." The project integrates traditional Hani indigenous knowledge with modern technologies to enhance

community climate resilience, promote gender-equitable participation, and support the repair of over 1,000 meters of water channels.

Strategies and Actions for Gender-Responsive Climate Governance

Strategically, the project emphasizes gender-inclusive management, empowering women to take a leading role in climate action. The community established a "Women's Media Group," encouraging women to use visual tools to document climate impacts—particularly on water resources—as a pathway to engage women in climate governance decision-making. Operationally, starting in September 2024 and supported by the Ginkgo Foundation, the Women's Media Group continuously documented the effects of climate change on water resources, as well as community-led activities where women repaired and maintained water channels. The project organized community screenings of the visual materials, sparking discussion and reflection among residents to collectively seek solutions. Additionally, the group recorded and disseminated Hani traditional water culture and ecological knowledge, providing indigenous



Figure 43. Aerial view of Qielong Zhongzhai Village (Image source: Eye on the Countryside website).

wisdom to support climate action. The extensive visual footage captured by the group was compiled into a cohesive community climate story and produced into a documentary, which has been widely shared both within and beyond the community. This process fostered a collaborative environment for water channel maintenance and communal water management, strengthened local water governance, and enhanced women's skills and decision-making authority. As a result, women became a key driving force in the community's climate action efforts.

Growing Story of Women

In Qielong Zhongzhai, many women previously had limited participation and voice in family and community affairs. After the establishment of the Women's Media Group, they began documenting climate change impacts through visual storytelling. Initially unfamiliar with filming

and with only a vague understanding of climate issues, these women gradually developed the skills to proficiently use visual tools to record community climate stories and deeply analyze the impacts of climate change on water resources and daily life. For example, some women in the group actively communicated with other villagers during filming to understand the challenges and needs faced in adapting to climate change, and presented these insights through their visual work. During community screenings, they courageously expressed their views and ideas, evolving from passive observers to advocates and organizers of climate action. They mobilized women to participate in water channel repairs, coordinated resources, and in the process, enhanced their communication, organizational, and management skills. They also established a new reputation within the community, gaining respect and completing a transformation from passive to proactive and from peripheral to central roles.



Figure 44. Women in Qielong Zhongzhai Village collectively repairing irrigation canals (Image source: Eye on the Countryside website).

Highlights

Following the project's implementation, villagers' understanding of the link between climate change and water resources significantly improved, and climate perspectives have been integrated into village development planning. Through collective water channel restoration, the formulation of water management rules, and the establishment of the "Terrace and Water Resource Protection Fund," community water management efficiency was greatly enhanced, and self-organization capacity noticeably increased. The project successfully leveraged and integrated Hani traditional ecological knowledge to achieve equitable

and sustainable management of water resources. The Women's Media Group has become a key driving force for community action, promoting gender-equitable participation in climate governance. The resulting "Visual Empowerment – Climate Action" model provides a replicable participatory climate adaptation framework for other mountainous communities, contributing locally grounded solutions to global climate change challenges.

Case Provided By: Village Eye Indigenous Culture Research Center, Yunnan

Case 23

“Linglong Project”

Economic Empowerment of Rural Women Farmers in Yunnan

Background

From March 2023 to September 2023, Wang Ying, a Phase III participant of the Linglong Project (see case 20) organized by Friends of Nature, collaborated with local partners in rural Yunnan to implement the six-month project “Economic Empowerment of Rural Women Smallholders Responding to Climate Change in Yunnan Province”. The project aimed to strengthen climate change awareness among women smallholders in minority villages, through training or hands-on guidance on crop biodiversity and climate-friendly farming practices.

Heinigou Village, located within a water protection zone, is isolated from industrial activity and economically underdeveloped. In recent years, extreme weather events caused by climate change have increasingly damaged crops. Most households rely on husbands working as casual laborers outside the village, resulting in very low family income. At the same time, urban consumers often remain unaware of the challenges faced by rural women smallholders. Against this backdrop, the project focused on Heinigou Miao Village in Songming County, Kunming, aiming to improve agricultural resilience to

climate change by increasing crop variety diversity in farmland ecosystems. The initiative sought to provide practical evidence and solutions based on traditional local knowledge for climate-adaptive agriculture.

Strategies and Actions for Gender-Responsive Climate Governance

The core strategy of the project is the establishment of “Women’s Action Groups.” The first focus is to enhance rural women smallholders’ awareness of climate change and encourage proactive adaptation measures through targeted training and guidance for the women’s action groups. The project promotes a series of practices aimed at crop diversity and the restoration of basic farmland ecosystem functions. At the same time, by connecting production with sales, the initiative boosts smallholders’ confidence, linking climate-friendly cultivation practices with public consumption and expanding sustainable living concepts within stable consumer communities.

Growing Story of Women

Long Xingmei, originally from another village and now the women’s representative in Heinigou Village, is a key leader of the women’s climate action group. At 49, besides managing household duties and farming, her primary responsibility is now to mobilize other women in the village to participate in project training and agricultural production activities. With more than 20 years of experience in village leadership, Long Xingmei demonstrates creativity, imagination, and execution skills on par with men. She works out financial plans carefully and administers women-related affairs in the village, prioritizes women’s and children’s health, and values women’s work.

Long Xingmei notes that many rural women are highly capable and they are familiar with agricultural production, skilled in household management, quick learners, and able to handle complex interpersonal relationships. However, due to extreme weather events, their incomes have noticeably declined, making daily life increasingly difficult.

When asked why climate has been worsening, the farmers replied, “We can only rely on the heavens and take whatever comes.” Yet in Yunnan, springtime droughts have become increasingly frequent, making subsistence farming extremely challenging. Long Xingmei and the women of Heinigou Village are direct victims of the drought—they rely on farming, livestock, and foraging wild mushrooms for their livelihoods. Villagers remarked

in conversation, “These past few years, the climate has been terrible—not only are field yields poor, but even wild mushrooms have become scarce. The truffles, which sell best in winter, are hard to find. The climate has been very unusual lately, probably because too many pesticides were used, harming the land and the natural environment.”

Thus, Long Xingmei established a “Women’s Climate Action Group” in Heinigou Village. After multiple discussions and training sessions, she encouraged the women to diversify their crops. While staple crops like corn and wheat continued as usual, they allocated one or two acres to plant highland barley and bitter buckwheat, which not only improve drought resilience but also enrich their home diets. Farmers also practiced intercropping and relay planting on hilly terrain—for example, planting chili, taro, and potatoes under chestnut saplings, or konjac and Jerusalem artichoke alongside corn.

The women didn’t just design planting plans, they worked the fields together. It quickly became apparent that this wasn’t a matter of simple instruction. These women were already expert cultivators, but they lacked systematic scientific knowledge. While attending the training, they shared valuable experiences and traditional agricultural techniques, creating mutual learning opportunities and concrete gains for everyone.

During implementation, they encountered challenges: as the climate warmed, pests and diseases became more prevalent, even introducing insects that had never been seen before. For women with limited formal education, the instinct was to apply more pesticides, believing that harvests would be impossible without them. Long Xingmei and her partners devised natural solutions, such as using water infused with pepper or tobacco leaves as organic insecticides, which also help retain soil moisture.

These eco-friendly cultivation practices brought tangible benefits: crop yields were safeguarded, additional income emerged, and switching to older crop varieties reduced costs and labor. The project also facilitated direct connections between urban consumers and local farmers, inviting city residents to visit Heinigou Village. Participation grew in both numbers and engagement, people brought fruits and snacks to share and even sang and danced during training. Gradually, the women



Figure 45. Wang Ying with the “Women’s Action Group” of Heinigou Village (Image source: Case contributor).

shifted from passive recipients of instructions to active, enthusiastic participants in the project.

The women farmers participating in the Women’ s Climate Action Group gradually reduced their reliance on chemical agricultural inputs and began to recognize the importance of climate adaptation and crop diversity for ecological sustainability. They achieved tangible benefits from the project and slowly regained confidence in agricultural production. Compared to previous practices, agricultural activities in the village became more diversified: staple crops such as corn and wheat were still planted, but with slightly reduced yield and area, allowing some land to be converted to highland barley and bitter buckwheat. Additionally, smaller plots under chestnut trees were planted with chili, taro, and potatoes, while areas alongside corn were planted with konjac, Jerusalem artichoke, chili, taro, and other crops.

By May 2024, the annual net income of female smallholder households participating in the project had increased from 20,000 yuan in 2023 to 24,000 – 30,000 yuan, while production costs decreased by 1,000 – 4,000 yuan per household due to reduced pesticide, fertilizer, and labor inputs. The women also began actively exploring sales channels, including Douyin livestreaming. Notably, their awareness and agency increased—they started planting crops based on personal preference and market demand, managed their own finances and time more autonomously, and participated more actively in collective and cultural activities.

In June of the same year, group members participated in the Hua Shan Festival, a major Miao cultural heritage event that many had not attended in the past five years. They may not have realized it, but the seeds of sustainability were quietly taking root, and the most valuable changes occurred subtly, shaping both their livelihoods and community life.

Case providers: Wang Ying,
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Abbreviate List

ACWF	All China Women’s Federation
ADB	Asian Development Bank
CYCAN	China Youth Climate Action Network
CWDF	China Women’s Development Foundation
CANGO	China Association for NGO Cooperation
C Force Lab	Global Climate Futures Innovation Lab
FAO	Food and Agriculture Organization
GHG	Greenhouse Gas
IFAD	International Fund for Agriculture Development
ICN at PKU	Institute of Carbon Neutrality at Peking University
MARA	Ministry of Agriculture and Rural Affairs
MEE	Ministry of Ecology and Environment
NGO	Non-Governmental Organizations
SDGs	Sustainable Development Goals
STEM	Science, Technology, Engineering, and Mathematics
UNDP	United Nations Development Programm
UNEP-IEMP	The UN Environment Programme’s (UNEP) International Ecosystem Management Partnership
UNESCO	United Nations Educational,Scientific and Cultural Organization



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