International Labour Organization

Social Protection in Action: Building Social Protection Floors for All

2022

China: Social protection and climate change

Summary

China has been undertaking significant efforts to combat deforestation, with logging and other restrictions placed on large areas. Many workers in state-owned forest enterprises lost their jobs but got support with job training and placement services. Households depending on farming erosion-prone sloped land received subsidies and cash benefits to turn it into forests.

These tailored efforts provide a useful example of the consideration of a diversity of methods and approaches, including of financing mechanisms and delivery systems, and promote the coherence of policies and procedures across the institutions responsible for the delivery of social protection. In this regard, they support the guiding principles established in the Social Protection Floors Recommendation, 2012 (No. 202).

China's experience also shows how social protection systems combined with measures facilitating return to work and professional retraining can facilitate just transitions. This experience is therefore key in the context of the establishment of the Global Accelerator for Jobs, Social Protection and Just Transitions.

Main lessons learned

- China's depletion of forest cover threatened flora, fauna and people depending on it, while increasing disaster risk and limiting the country's ability to mitigate climate change. China's forests are important for capturing carbon from the atmosphere and fighting soil erosion. But for decades, agricultural development and timber harvesting depleted this resource. Deadly floods linked to deforestation and soil erosion killed thousands in 1998.
- Conservation and reforestation were scaled up, but a logging ban resulted in about one million state forest workers losing their jobs. In 1998, the Government enacted a logging ban across newly protected lands. Nearly one million state forest workers were laid off. Another 120 million rural residents were also affected when the new restrictions on land use were put into place.

Social Protection Floors Recommendation, 2012 (No. 202)

SDG 1.3 aims to implement nationally appropriate social protection systems and measures for all, including floors, and by 2030, achieve substantial coverage of the poor and the vulnerable.

Social protection floors (SPFs) guarantee access to essential health care and basic income security for children, persons of working age and older persons.

187 countries have adopted the Social Protection Floors Recommendation, 2012 (No. 202), to achieve universal social protection.

This note presents a successful country experience of expanding social protection.

- Support to forest-dependent workers enabled them to access other jobs or retire. Subsidy and cash benefits were introduced to support reforestation and alleviate poverty. Forest management opportunities, unemployment protections and state-led active labour market policies assisted many affected workers to find jobs elsewhere. Meanwhile, some 32 million rural households received subsidies and cash to support reforestation efforts.
- Large swaths of land were reforested, households' incomes increased and their sensitivity to climate change reduced. Between 1990 and 2020, China increased its forest cover from 157 million to 220 million hectares. At the same time, subsidy and cash benefits contributed to poverty alleviation, increased productivity and made households less sensitive to climate change by reducing their dependency on natural resources and diversifying livelihoods.

Invaluable forests threatened

From the 1950s, China has experienced a considerable reduction in its otherwise rich and ecologically diverse forestlands. The forests serve several key environmental management functions, including the capture of carbon dioxide from the atmosphere, prevention of soil erosion and flooding.

But clear-cutting for agricultural development, timber harvesting and other human activity destroyed much of the natural forests in previous decades. Deforestation has led to soil erosion, most severely in the Yangtze and Yellow River basins, leaving the area and its residents increasingly prone to flooding following heavy rains. From 1950 onward, the incidence of natural disasters in the region increased, until in 1998 when a series of floods in the Yangtze River valley claimed the lives of over 3,000 people and resulted in more than 44 billion Chinese Yuan (US$12 billion) in property damage and lost production.

The wooded watersheds of the Yangtze and Yellow Rivers also provide crucial carbon sinks that capture and sequester carbon dioxide (CO2) from the atmosphere, reducing greenhouse gases and mitigating climate change. In 1998, the Government began large- scale efforts to reforest certain areas of the Yangtze and Yellow River basins, along with other areas that had become prone to soil erosion and resulting floods threatening local communities. Millions of residents who rely on timber harvesting and processing and other forest activities to earn their living would be affected, making a comprehensive package of transition measures necessary.

Ambitious conservation and reforestation action

Beginning in 1998, the Government imposed bans on logging in natural forests along the Yangtze River and Yellow River basins. As part of this plan, the Forest Conservation Programme (FCP) was launched to provide incentives for individuals to comply with the ban and to reorganize the country's large publicly organized forest industry to shift away from timber harvesting and processing towards forest management activities in those areas targeted for conservation.

At its launch, the FCP was ambitious in terms of the amount of land targeted for conservation. Its objective was to halt or reduce timber production by 2010 in the target areas, and conserve about 90 million hectares of existing natural forest. It also sought to reforest an additional 31 million hectares of then-barren but forest-suitable land through rejuvenation activities, including aerial seeding and manual planting of trees.

The initial pilot phase began in 12 provinces and autonomous regions in 1998, administered by the State Forestry Administration (SFA). Between 1998 and 2000, some 22 billion Yuan (US$3.4 billion) were allocated to the FCP by the State Council, allowing the addition of five more provinces to the programme. Another 96 billion Yuan (US$14.8 billion) was committed by the State Council to finance the programme from 2000 to 2010.

In the most stringent of its provisions, the FCP banned all commercial logging in the Yangtze and Yellow River watershed areas in an effort to conserve over 61 million hectares of forest, bringing to a halt the regional production of more than 12 million cubic meters of annual timber harvest and processing.

Much of the FCP's financial resources were in the form of subsidies to state forest enterprises, designed to offset their revenue losses from reduced or halted timber production. Local governments also received funds from the central Government to help state forest enterprises workers who were laid off from their harvesting and processing jobs as a result of the restrictions. Across China, the number of people working in the forest enterprises dropped from almost a million in 1997 to just a quarter of that in 2010, affecting nearly 700,000 workers

over the preceding decade. Meanwhile, a total 120 million local people, many of whom had previously carried out small-scale agriculture and other activities in newly protected forests, were affected by restrictions in the targeted rural areas.

Protecting those affected, promoting livelihoods

Some assistance to facilitate the move toward more sustainable economic activities in designated FCP areas was put into place for employees of public forest companies and other affected rural residents.

Job placement services

In 1998, the Government launched the Urban Employment and Reemployment Promotion Programmes (UERPP), which provides subsidies to social insurance contributions and other incentives for businesses to hire and for workers to undergo re-employment training.[1] Within the public forest sector itself, job placements were made possible largely by the creation of Forest Protection Units designed to manage the newly designated ecological forests. These units were staffed by workers who had previously worked in the FCP areas in logging and related processing activities. In their new jobs and salaried by the FCP, they worked to professionally conserve and replant the ecological forests. As part of the UERPP, recruitment offices were set up in the forest companies to help workers find other local jobs, also in tourism, construction, or transportation, or jobs in the Eastern provinces for example in manufacturing, provided workers were willing to migrate to those areas. There was also support available for those wishing to start their own businesses.

Employee retirement

For those exiting the labour force, workers in state-owned enterprises were enrolled in pension schemes for the "urban" working population. Once reaching pensionable age, they would begin to receive pension benefits from these schemes. Some who retired before reaching pensionable age could also take advantage of a lesser pension benefit paid directly by their former employer, or receive a lump sum severance disbursement from their former employer. By 2002, four years following the inauguration of the logging ban, around two thirds of affected workers had either been transferred to other jobs within the public forest sector, placed in jobs in other sectors of the economy, or retired.

Unemployment benefits

For those still unemployed and looking for work, as former employees of state-owned enterprises some unemployment protection benefits were available through the "urban" welfare system, which served to replace at least somewhat the protections workers had enjoyed during employment, including health insurance. The FCP provided some financial support to local governments to provide these benefits, as they were faced with severely increased demand following the logging bans and ensuing economic transformation, particularly in districts where the local economy had been heavily reliant upon forestry activity.

Reforestation support

While the FCP articulated provisions for displaced workers and allotted resources to finance them, it did not include support measures for other rural households. A total of 120 million rural residents were estimated to be affected by the new restrictions on logging in FCP target areas. These residents were confronted with new restrictions on cutting firewood, conducting agricultural activities, or performing other forest-related economic activity also prohibited by the FCP. This translated into increased tangible costs in foregone crops, purchasing non-wood energy sources and upgrading cooking and other equipment to use with new energy sources.

For these residents, the Sloping Land Conversion Programme (SLCP) further aimed to increase reforestation and offered some support, although with conditions. The central Government initiated the SLCP as a pilot programme in three provinces (Sichuan, Shaanxi and Gansu) in 1999 and nationwide formally in 2002, with the aim to turn steep sloping farmland into forest in an effort to reduce water and soil erosion. The SFA was put in charge of enrolment, while local governments helped with the selection of eligible plots.

Rice subsidies

From 1999 to 2002, a rice subsidy was the only form of compensation available through the SLCP. The amount of rice provided was set at regional level depending on the

[1] The Chinese welfare system has a historically dual structure with provisions typically falling into one of two categories: urban or rural. Employees of state-owned enterprises in China are eligible for "urban" benefit schemes, sometimes despite the location of their workplace.

opportunity cost of the farmers' foregone agricultural yields (1,500 kg of rice per year for each hectare of cropland repurposed by programme participants for reforestation in the Yellow River watershed, and 2,250 kg in the Yangtze River). Participating households often received more rice through the programme than their average production due to a national supply surplus that exceeded demand in the late 1990s. Surveys conducted on revenues from farming in SLCP provinces suggest that SLCP participation was more lucrative than farming for many households.[2] Subsidies, however, were granted on the condition that at least 70 per cent of the seedlings provided along with technical guidance for planting survived on the sloping land.

Unlike the FCP, participation in the SLCP was, in theory, voluntary, provided participants lived in one of the 25 target provinces and were able to carry out conservation tasks like planting and nursing trees on sloped land. But many participants lived in areas with new restrictions on forest activities and, therefore, limited income-earning opportunities, leaving them little choice but to retire their farmland and collect the subsidies.

As with many similar programmes providing payments for environmental services, the duration of the support was finite: Depending upon the type of regeneration activity carried out by participants as a condition of their eligibility (conversion of their farmland into grasslands, economically viable trees growing fruits or nuts, or purely ecological trees), compensation would last for two, five or eight years, respectively.

Cash transfers

Beginning in 2002, the Government introduced several complimentary cash compensation incentives, all of which were conditioned upon the performance of conservation activities. An additional 300 Yuan (US$46) per hectare per year, known either as the "subsidy for living standard" or "education and medical subsidy," was introduced. The Government also began to provide 750 Yuan (US$91) per hectare exclusively for the purchase of seeds and other supplies required to perform afforestation.

In 2004, the remaining rice subsidy component was replaced entirely with an additional cash compensation on top of the yearly 300 Yuan (US$46) per hectare "subsidy for living standard" and seedling reimbursement schemes, which both remained in place. Instead of the 1.5 metric ton of rice, participants received 2,100 Yuan (US$322) per hectare of land reforested in the Yellow River watershed and approximately 3,150 (US$483) in the Yangtze River watershed.

Programme adaptations

In 2007, the Chinese Government adjusted the programme, before most compensation contracts were set to expire. The conversion of farmland into forests was suspended because of local food security concerns due to the reduced production. The support to participating households, however, was extended by eight years considering the limited viability of seedling forests and the continuing needs for land management services. Participants received approximately half of what was previously paid beyond the eight years of initial support, while the original amount was kept for those who had not reached eight years of participation. This was later found to result in greater significant household productivity improvements. Participation in the SLCP also significantly reduced farmers' sensitivity to climate change by decreasing their dependency on land and natural resources for income and by diversifying livelihoods.

Between 1999 and 2008, the SLCP involved 124 million people or 32 million households across 25 provinces in reforestation and conservation activities. The total investment in subsidy and cash benefits, seed fund, maintenance fees and various special funds until 2012 amounted to 438.5 billion Yuan, of which 326.2 billion was paid directly to households. By the end of 2012, afforestation had reached 29.4 million hectares, boosting forest coverage in the programme area by three percentage points on average.

Between 2014 and 2020, the Government implemented a new round of the SLCP, limited to specific areas, such as sloping land over 25 degrees or farmland of severe desertification or salinization. While the subsidy duration and compensation standard were lower, farmers were able to decide whether or not to participate, which plots to enrol, what trees to plant, and how large of an area to convert to forest land.

[2] According to surveys, in 1999, revenues from farming in Shaanxi province were 645 Yuan (US$99) per hectare and 2,865 Yuan (US$440) in Sichuan. Meanwhile, the value of rice subsidies received in these provinces was 2,400 Yuan (US$369) and 3,450 Yuan (US$530) per hectare, respectively.

Impacts and way forward

Both China's FCP and SLCP have contributed to a vast reforestation of agricultural or otherwise suitable, barren land in China. Between 1990 and 2020, planted forest area increased by over 40 million hectares, while naturally regenerated forests increased from 113 million to over 135 million hectares – a massive reversal of the rapid deforestation experienced over decades prior.

Protections extended to affected workers were in part made possible thanks to China's public organization of its timber harvesting and processing sectors, as well as the ensuing forest management industry that sprung up following the inauguration of the FCP. However, as the share of the workforce in state-owned enterprises and their gross domestic product (GDP) contribution shrink (around 80 per cent of China's GDP in 1979 versus just 18 per cent in 2012), other mechanisms have begun and will continue to play an increasingly large role in providing support to workers affected by environmental policies.

The transition was also facilitated by China's existing unemployment and other social protection provisions, which provided unemployment benefits, reemployment services, pensions, social welfare and other support to workers affected in the conservation effort. China's social protection system will be instrumental moving forward as the country takes aim at other sectors of the economy in its efforts to address other environmental problems.

Box present the Guidelines for a just transition adopted by the ILO Governing Body in November 2015.

▶ Box. Guidelines for a "just transition"

In 2015, a tripartite meeting of experts set out to develop a set of guidelines to promote the move toward greener economies and societies while protecting people in the transition. These policy responses were proposed and negotiated by ILO constituents from Brazil, Indonesia, Germany, Kenya, Mauritius, Turkey, South Africa, the United States and elsewhere. The second guideline related to social protection policies (para. 34) reads, "Integrate social protection into policy measures and responses to environmental impacts and the challenges of the transition for those likely to be negatively affected, in particular workers largely dependent on natural resources or facing major structural changes."

The guidelines were later adopted by the ILO Governing Body in November 2015.

References

Cao, Shixiong, Xiuqing Wang, Yuezhen Song, Li Chen, and Qi Feng. 2010. "Impacts of the Natural Forest Conservation Program on the livelihoods of Residents of North-western China: Perceptions of Residents Affected by the Program". In *Ecological Economics*, Vol. 69, issue 7.

Delang, C. O., and W. Wang. 2013. "Chinese Forest Policy Reforms After 1998: The Case of the Natural Forest Protection Program and the Slope Land Conversion Program". In *International Forestry Review*, Vol. 15, No. 3, pp. 290–304.

Edstrom et al. 2012. "The Natural Forest Protection Program in China: A Contingent Valuation Study in Heilongjiang Province". In *Journal of Environmental Science and Engineering*, Vol. 1, No. 3, pp. 426–432.

FAO (Food and Agriculture Organization of the United Nations). 2021. *Society, Economy and Forests: The Unfolding Forest Transition in China and the Lessons for the Future*. Bangkok.

Gutiérrez Rodríguez, Lucas, Nicholas J. Hogarth, Wen Zhou, Chen Xie, Kun Zhang, and Louis Putzel. 2016. "China's Conversion of Cropland to Forest Program: A Systematic Review of the Environmental and Socioeconomic Effects". In *Environmental Evidence*, 5, Article No. 21.

Carter, John, Michel Bédard, and Céline Peyron Bista. 2013. *Comparative Review of Unemployment and Employment Insurance Experiences in Asia and Worldwide*. ILO.

ILO. 2015. *Outcome of the Tripartite Meeting of Experts on Sustainable Development, Decent Work and Green Jobs*. GB.325/POL/3.

ILO. 2015. "Universal Pension Coverage: People's Republic of China". *Social Protection in Action: Building Social Protection Floors*.

Liu, Zhen, and Jing Lan. 2017. "The Effect of the Sloping Land Conversion Programme on Farm Household Productivity in Rural China". In *The Journal of Development Studies*, Vol. 54:6.

Liu, Zhen, Qiuming Li, Jing Lan and Assem Abu Hatab. 2020. "Does Participation in the Sloping Land Conversion Program Reduce the Sensitivity of Chinese Farmers to Climate Change?". In *Land Use Policy*, Elsevier, Vol. 99.

Ministry of Finance. 2016. as cited in: Chen, Y. et al., 2021. The Role of a Social Protection in Green Policies to Ensure a Just Transition.

Uchida, Emi, Jintao Xu, Zhigang Xu, and Scott Rozelle. 2007. "Are the Poor Benefiting from China's Land Conservation Program?". In *Environment and Development Economics*, 12(4), 593–620.

Zhang, Zhaohui, and Krishna P. Paudel. 2019. "Policy Improvements and Farmers' Willingness to Participate: Insights from the New Round of China's Sloping Land Conversion Program". In *Ecological Economics*, V l. 162, pp. 121–132.

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