

Nation bracing for climate change

New blueprint looks to bolster efforts to deal with global challenge

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China has doubled down on efforts to build up resilience to climate change with a blueprint designed to serve as a stronger response to climate-related risks, establish heightened monitoring capacities and protect vulnerable areas and sectors.

The National Strategy on Adaptation to Climate Change, unveiled by the Ministry of Ecology and Environment and 16 other central government departments on June 13, highlighted the need to modernize national climate-related disaster prevention systems and reduce economic vulnerability in the face of mounting risk from climate change.

The policy document, which replaced a previous version issued in 2013, pledged to make parallel efforts in climate change mitigation and adaptation after China promised in 2020 to bring greenhouse gases to a peak before 2030 and become carbon neutral before 2060.

“Climate change has already had a serious adverse impact on China’s environment and has continued to spread and penetrate its economy and society,” the document said.

It highlighted more frequent floods, droughts, shrinking glaciers and frozen soil, as well as mounting risks to water security, increasing hazards from meteorological disasters and pests and growing health risks as a result of high temperatures and heat waves.

Climate change has also pushed China’s vegetation belts northward as annual average temperatures increased by 0.26 C every 10 years between 1951 and 2020.

Chao Qingchen, head of the National Climate Center, said after the blueprint’s release that climate change and extreme weather, the most significant medium- and long-term risks globally, are set to bring about heightened risks to China’s economic growth and people’s lives.

He cited figures showing that meteorological disasters and their aftermaths affected about 300 million people between 2000 and 2020, causing direct economic losses of 298.7 billion yuan (\$44.6 billion) per year.

The latest national strategy underscored the fundamental role of monitoring and early warning for climate change and the need to bolster risk management, he said, adding that the development of a long-term, stable and consistent climate change monitoring network was also highlighted.

The document sets the target of developing a climate-resilient society by 2035 by building a nationwide system to monitor and assess climate change-related risks, and by improving the ability to prevent and control natural disasters.

It also highlighted a guiding principle for the national adaptation plan, saying that nature must be respected and proper and effective adaptation measures must be adopted based on China’s socioeconomic development and its environmental and resource capacities.

The strategy also reaffirmed China’s commitment to strengthening South-South cooperation with developing nations in Africa, the Pacific and other regions to help them adapt to climate change, especially in terms of agricultural production, water resource management, disaster monitoring and infrastructure development.

To build up its climate change monitoring network, China will step up monitoring of the effects of global warming on vulnerable regions, including drought-prone regions in Northwest China, as well as of water resources, vegetation and desertification in the basins of the Yangtze and Yellow rivers.

There will be an increase in early warnings against extreme weather conditions, and more accurate warnings of floods, geological disasters and forest fires.

Xu Huaqing, head of the National Center for Climate Change Strategy and International Cooperation, said in a co-authored note that the national strategy prioritizes nature, the environment, society and the economy. The plan also seeks to better regulate urban



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and rural environments and enable sectors like finance, energy and tourism to better adapt to climate change.

The note pointed out that inadequacies still exist in national efforts to adapt to climate change, including a lack of analysis and evaluation of its effects and risks, and added that there is a need to raise awareness and to take more action.

To make ecosystems better adapted to climate change, the strategy pledged to implement a nature-based solution, including steps to develop a monitoring system for key rivers, glaciers, frozen land and snow.

In efforts to bolster the water supply and prevent major droughts, the government will seek to extend access to tap water to 88 percent of the rural population by 2025.

Key measures to enhance the resilience of land ecosystems include expanding the coverage of nature reserves to at least 18 percent of the national land area and forest coverage to 26 percent by 2035, which would entail an increase of 23 percent over that of 2021.

The protection of marine ecosystems and the restoration of shorelines were also highlighted in the strategy, which pledged to restore 50,000 coastal wetlands and 1,200 kilometers of shoreline by 2035.

A report published by the United Nations Intergovernmental Panel on Climate Change in March said Asian coasts are projected to experience a higher rise in sea levels than the global average, with Chinese coastline megacities facing high risks of storm surges caused by tropical cyclones of higher intensity.

The report also warned against the potential harm to humans and animals as a result of rising temperatures, which could result in heat stress and mental disorders.

The national strategy pledged to effectively identify health risks and vulnerable population groups and come up with plans to better protect them.

The monitoring network and early warning capacity for climate-sensitive diseases, zoonosis (diseases that are spread from animals to humans) and other key infectious diseases as

well as cardiovascular disease will be enhanced.

To make national infrastructure more resilient to climate change, the document stressed the need to develop a smart hydraulic engineering network and make energy infrastructure more capable of resisting extreme weather.

It also stressed the need to adjust the design of urban protection facilities that deal with rising sea levels and help strengthen their flood prevention capacities.

Xi Wenyi, a researcher with the China Climate and Energy Program at the World Resources Institute, said it is necessary for the country to include the adaptation to climate change in the investment, planning and development of new infrastructure, to shore up its resilience to climate risks.

“Our research has found that improving the climate resilience of infrastructure and boosting associated investment can help avert future losses and usher in benefits in terms of the economy, society and the environment,” she said.

Agricultural adaptation sought as weather grows more extreme

By XU WEI

China will adjust crop structure, promote water-saving irrigation, reduce the use of pesticides and expand the acreage of high-quality farmland in a bid to ensure food security in the face of heightened climate risks, according to a recent policy document.

The National Strategy on Adaptation to Climate Change, released by 17 central government departments on June 13, highlighted the need to develop climate-smart agriculture and bolster national agricultural production, with climate change set to bring about more extreme weather conditions and reshape planting zones.

China’s northeastern region, a major center of agricultural production, is warming at a faster rate than the national average.

While the rise in temperatures benefits agricultural production, the region could be faced with more frequent summer floods, affecting wetlands and vulnerable frozen lands, it said.

A report published by the United Nations Intergovernmental Panel on Climate Change in March warned that climate change could threaten China’s food security, as a warming climate is expected to affect yields of wheat, corn, rice and fish.

It warned that climate change could also exacerbate China’s water scarcity, which could affect farming and livelihoods.

The national adaptation strategy highlighted the need to refine the planning of agricultural infrastructure in accordance with the change in climate resources and disasters.

China will carry out stringent protection measures to ensure that it retains no less than 120 million hectares of farmland, according to the document.

It has set a target of increasing the acreage of high-quality farmland to 71.7 million hectares by 2025.

To build up the climate-resilience of agricultural ecosystems, China will reduce the use of pesticides, promote the use of green pesticide control technologies and better protect agricultural biodiversity.

An action plan on farmland protection will be rolled out to increase organic matter in soil and make it more fertile.

The document added that China will strengthen the development of its seed reserves, including by adding more that are adapted to climate change, and better pro-

tect endangered animal and plant species in the agricultural sector.

Zhu Dingzhen, a meteorologist with the China Meteorological Administration, said China must prioritize efforts to adapt its agricultural sector to climate change.

He noted that crops are increasingly spreading beyond traditional planting zones as a result of rising temperatures, while an increase in the number of days with high temperatures has limited the potential for a boost to rice yields in South China.

“Targeted policies must be adopted to respond to the northward movement of vegetation belts and the increase in natural disasters,” he said, adding that sowing periods must be adjusted accordingly and the crop structure must be planned in a reasonable manner.

Policy Digest

Plan puts focus on Yellow River Basin environment

The Yellow River Basin environment should be improved markedly by 2030, and carbon emissions in the area should peak before then, according to a plan issued by the Ministry of Ecology and Environment and three other departments.

Under the plan, authorities in the nine provinces and autonomous regions along the Yellow River are to plan the development of cities and industries in accordance with water resources and promote green industries.

It emphasized the need to protect water resources, as well as the riverine ecosystem, and to economize on water use, increase treatment of water pollution and restore the ecosystems of rivers and lakes.

The plan laid out specific requirements for reducing air pollutants, including PM2.5, particulate matter with a diameter of 2.5 micrometers or less — and levels of ozone and sulfur dioxide, and called for better coordination between regions to tackle pollution.

Furthermore, authorities are urged to promote the low-carbon transition of the energy sector and come up with practical and feasible timetables for achieving peak carbon emissions.

Epidemic insurance urged at provincial level

Provincial-level authorities should hasten efforts to introduce epidemic prevention and control insurance, which, according to a notice released on Friday, is “an important innovation in sharing epidemic prevention and control costs in a marketized way.”

They should fully promote insurance as a means to help companies and individuals protect themselves against COVID-related risks and boost confidence in the fight against the virus, according to the notice jointly issued by the National Development and Reform Commission, the Ministry of Finance and the China Banking and Insurance Regulatory Commission.

Authorities are also encouraged to deepen cooperation with insurance companies, the notice said, suggesting that regions with favorable conditions come up with preferential policies for insurers offering coverage to companies in battered sectors like logistics, catering, retail, and culture and tourism.

Officials should promote jobs at grassroots-level

Provincial authorities in human resources and social security, education and civil affairs departments should collect and publish information about jobs on offer at grassroots-level organizations suitable for graduates, according to a statement released in June.

The statement, jointly issued by the Ministry of Human Resources and Social Security, the Ministry of Education and the Ministry of Civil Affairs, asked authorities to explore job opportunities for graduates in fields such as social security, residential community management, healthcare, elder care, agricultural technology and social work.

They are to conduct surveys of companies and grassroots-level government agencies and institutions to learn about job vacancies and recruitment plans before updating the information for the public.

Detailed information about the vacancies, including job titles, salaries, requirements, terms of service, locations and the proper avenues of application should be published, with recruitment activities organized in an open, fair, just and orderly manner.

The statement called on authorities to implement favorable policies for graduates who take on grassroots-level jobs, noting that effort to encourage graduates to work at the grassroots-level is key to stabilizing employment.

Meanwhile, the Ministry of Science and Education, along with six other departments, issued a statement asking universities affiliated with the ministry, as well as research institutes and State-owned companies under the administration of the central government, to take on more graduates as research assistants.