

Profoundly Understanding the Multiple Relations in Ecological Civilization



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Ecological progress is coordinated and integrated with economic, political, cultural and social progress. Economic development is the foundation, social development the goal, political development the guarantee and cultural inheritance and innovation the soul. In promoting ecological progress, we should bear in mind the current conditions while looking to the future; push it forward comprehensively with clear priorities; practice it in China but also take the lead in the world; and focus on outstanding environmental problems while emphasizing systematic and overall effects. We cannot drain the pond for fish or kill the hen for eggs—that's sacrificing our offspring's well-being for immediate interests and short-term growth; nor can we give up development and willingly stay in poverty for environmental protection. It's hard to realize a sound ecosystem cycle without livelihood improvement, and livelihood won't sustain either if we neglect the improvement of environmental quality. Therefore, we must adopt green development, take the path of sustainable development and walk into a new era of ecological civilization.

1 The Relation Between Five-Sphere Integrated Plan and Spheres Involved

Ecological progress is coordinated and integrated with economic, political, cultural and social development. Ecological civilization, which encompasses vitality, carrying capacity and integrating ability, is the foundation for economic, political, social and cultural progress.

Economic development is the foundation for material civilization. Putting economic development in the center holds the key to solving all problems in China and prospering the nation, and is a fundamental step to lift the nation from poverty

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to affluence and bypass the “middle income trap.” The ecology functions as a bond between nature and economy, society, culture and politics, with the two ends of the bond promoting and complementing each other. Ecological progress is an initiative that considers the big picture and the long term, for which holistic planning of various terms and aligned policies and measures are needed to advance the overall green transformation on the economic, political, cultural and social fronts. In this way, it will put in place a powerful balance mechanism and point out the direction for achieving the harmonious co-existence between man and man, man and society, man and nature.

Political civilization points out the direction forward for ecological progress, which in turn creates the conditions for our current political development. Political civilization should protect different interest groups and their diverse needs, and ecological progress should be an integral part of political development and serve as an opening for institutional reform. As mass events caused by environmental problems have diminished the credibility of some local governments or fueled public discontent, starting the institutional reform in environmental sector will meet less resistance as it complies with the people’s demand for a good life. Steps should be taken to promote public participation in environmental protection, carry out democratic decision-making, management and supervision, so as to gain experience and lay a solid public foundation for political system reform and break new ground for ecological civilization.

Ecological civilization has to be bolstered by cultural civilization. As the fine outcomes of man’s reform of the objective world as well as the subjective world, cultural civilization reflects the progress of human wisdom and morality mainly in two domains. First, it is reflected in science and culture, including social culture, knowledge and wisdom, and the development scale and level of such social undertakings as education, science, culture, art, health and sports. Second, it is reflected in ideology and morality, including political ideology, morality, social ethos, and human values, ideal, integrity, awareness, conviction and sense of organization and discipline. Ecological civilization is an important component of cultural civilization, while cultural development provides mental guidance, spiritual motivation and intelligent support for ecological progress.

In developing ecological civilization, we should focus on prominent environmental problems while emphasizing the systematic and overall effects. Bearing in mind the Five-Sphere Integrated Plan and Four-Pronged Comprehensive Strategy of socialism with Chinese characteristics, we should merge ecological progress with economic, political, cultural and social development in the whole process and on all fronts, and give priority to resolving key environmental pollution issues affecting public health. Measures will be taken to win the critical battles for blue sky, lucid water and clean soil, coordinate source governance, strict process regulation and punishment of non-standard pollutant discharge, and advance resource conservation, low-carbon development, spread of green development concept, institutional establishment, technological innovation and investment in a holistic manner. As such, all the links and factors will form a complete system to make sure lucid waters and lush mountains are invaluable assets.

But a good ecological environment doesn't equal ecological civilization. Ecology is a natural state, civilization is social progress, and the combination of them—ecological civilization—is a harmonious state between man and nature. Civilization prospers when ecology prospers. Ecological civilization not only features a sound ecological environment, but also a sound cultural civilization. Some impoverished regions in the world have great ecological environment, but the people there have to slash and burn wood because of extreme shortage of materials, which leads to water and soil loss and ecological deterioration, which in return worsens poverty, hence the vicious cycle of “poverty—ecological deterioration—poverty.” Only when ecological environment and cultural civilization proceed in parallel can ecological civilization last long.

2 Relation Between Ecological Civilization and Traditional Civilizations

The human civilization is evolving all the time. In terms of time, human civilization has passed the primitive civilization, agricultural civilization and industrial civilization. Ecological civilization is an inheritance of traditional civilizations while discarding the backwardness and making innovations of its own.

Man has been dependent on nature since the day it was born. In primitive society, man lived by simple productive activities such as collecting, fishing and hunting and could only survive by living in groups, so it evolved together with other creatures and the environment in general. It was only in modern times that man began to shake off the regional restrictions from nature and its ecological conditions. The emergence and use of iron ware marked a substantial leap forward in human ability to utilize and reform nature and pushed human society to the age of agricultural civilization. The extinction of the ancient Egypt, ancient Babylon and America's Maya could perhaps be ascribed to excessive grazing, land reclamation and blind irrigation.

Agricultural civilization represents the time-honored history and splendid civilization of China, and a natural environmental friendliness is the precondition for the uninterrupted agricultural civilization or Chinese civilization for thousands of years. After the People's Republic of China was founded, a major challenge facing us was how to carry on our fine traditions while proceeding with socioeconomic modernization, and blaze out a path of industrialization and urbanization featuring the harmonious co-existence between man and nature. From agricultural modernization in the beginning of new China to urbanization of rural areas after reform and opening-up and to the new model of industrialization and urbanization in recent years, it seems we are still in the mindset of “catching up with” modernization.

The Industrial Revolution in Britain lifted the curtain on the age of industrial civilization, the rise of which prompted the human society to gradually “forget” natural laws and restrictions and pursue a universal (regardless of region), all-time (regardless of season) and unbridled (without restraint) development overriding the restrictions

imposed by natural resources and ecological laws. The development of productivity empowered man to conquer nature on an unprecedented scale, which resulted in tremendous wealth as well as serious environmental crisis. The “eight environmental hazards” in the twentieth century, including the smog disaster in Belgium’s Meuse Valley, Donora’s “killer smog” in the US, London’s smog, photochemical smog in Los Angeles, minamata disease in Japan, and rice bran oil event in Toyama and Yokkaichi, threatened public health and prompted the people to deeply reflect on the traditional economic growth pattern.

In 1962, American writer Rachel Carson published a book titled *Silent Spring*, which sounded the alarm of environmental crisis in industrial society by elaborating on how the massive use of pesticide harmed human race with appalling real cases. In the 1970s, two global energy crises further set off the conflict between economic growth and environment. In 1972, the report *The Limits to Growth* published by the Club of Rome warned the world for the first time that “If the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years,” which drew close attention from all countries. Also that year, the United Nations Conference on the Human Environment was convened, at which a Declaration was released that put out the slogan of “only one earth,” calling on mankind to bear the responsibility and obligation of natural preservation while developing and utilizing it.

In 1987, the then Norwegian prime minister Gro Harlem Brundtland systematically expounded the connotations of sustainable development in the *Our Common Future* report. In 1992, the United Nations Conference on Environment and Development held in Rio de Janeiro, Brazil adopted the *Rio Declaration on Environment and Development* and *Agenda 21*, urging countries to, while boosting economic growth, not just focus on the quantity and speed of development, but also on quality and sustainability.

We cannot simply take ecological civilization as a brand new form of civilization. The concepts it involves carry the ideological quintessence since agricultural civilization. “Harmonious co-existence between man and nature” is a continuation of “unification of nature and man” proposed by ancient Chinese sages, and respecting nature is a theory proposed by Engels in his *Dialectics of Nature*. China’s ecological progress will employ modern technologies and the latest achievements of big data and mobile Internet, take the path of sustainable development, and take the country to the new era of ecological civilization.

3 Relation Between Ecological Progress and Social Development

Ecological progress is an important means to improving people’s lives. As General Secretary Xi Jinping pointed out, the environment is livelihood. Ecological progress

will enable people to fairly enjoy the fruits of development and make the society more harmonious. It seeks benefits and solves difficulties for the people, addresses their most immediate concerns, and makes continuous progress in ensuring people's access to childcare, education, employment, medical services, elderly care and housing. It should be viewed as a key task to materialize, protect and enhance people's fundamental interests, and safeguarding people's environmental rights and interests should be made the highest standard for work performance. Through the united efforts of the whole Party and the whole nation, we will strive to create a dynamic situation where everyone contributes to and shares the benefits in social harmony.

Ecological progress and livelihood improvement promote each other. As people are living an increasingly better life, they are no longer content with being "well fed and well clad," but have higher-level needs such as for a sound ecological environment. They are paying more attention to ecological protection in river basins, sources of drinking water, and life-related topics like smog. Environmental quality directly bears on public life safety as the emergence and spread of some diseases originates in environmental deterioration. Only by intensifying ecological progress and realizing the sustainable use of natural resources and sound cycle of ecological environment can we keep improving the livelihood. If we don't pay close attention to livelihood, a sound environmental cycle is hard to come through; but if we only focus on livelihood and neglect environmental improvement, livelihood won't sustain either. Therefore, we must place equal emphasis on environmental protection and livelihood improvement, and embark on a development path characterized by advanced production, affluent life and sound ecology.

Ecological progress should serve social construction. When approving projects and handling environmental violations and pollution disputes, we must stand fast by the following bottom line—are we safeguarding the people's environmental rights and interests? Are we putting public health and safety first? Democratic rights of the people should include environmental rights, which therefore have to be protected. On the other hand, the people have the right to exercise democratic supervision according to law, and managing public affairs and public welfare undertakings, including environmental protection, is the most effective and widespread approach to letting the people be their own masters. When it comes to specific work, we must make sure the people have access to clean drinking water by strengthening water source protection and the protection and improvement of rural ecology and environment; make sure they can breathe fresh air by reducing the occurrence and adverse effects of smog weather. We must also make sure they have access to safe food by encouraging and supporting ecological agriculture and ecological product development, reinforcing agricultural non-point pollution governance and food safety supervision, and intensifying full-process supervision over the production, processing and circulation of grain, vegetables, meat and aquatic products. Efforts should be made to energetically develop characteristic economic forests and fruits, vegetables, medicine and animal husbandry for "win-win" interactions of "Sannong (agriculture, farms and countryside)."

Ecological progress doesn't equal environmental protection. Ecological progress in the broad sense consists of ecological construction, ecological economy, ecological

security and ecological culture. Ecological progress in the narrow sense consists of land and space layout and its optimization, conservation, protection and sustainable use of resources, environmental protection, pollution control, and institutional establishment. Environmental protection is part of ecological progress, even a priority of priorities given the severe environmental situation, but ecological progress cannot be viewed as a simple upgrade of environmental protection, otherwise it might be delinked from other sectors. Correspondingly, ecological progress is by no means the sole responsibility of the environmental department, but an initiative for which all government departments shall bear their respective duties. Spatial optimization, resource conservation, environmental protection, industrial upgrade, green construction and transportation, social transformation, sci-tech innovation, ecological culture, green consumption, green tax and finance...these are all important contents of ecological progress. The organizational reform of the State Council in 2018 created favorable conditions for establishing and improving the leading system and inter-departmental interaction for ecological civilization development.

4 Relation Between Economic Development and Environmental Protection

Environmental protection and economic development are a unity of opposites. Human production and life cause environmental pollution and ecological damage, even ecological crisis. On the other hand, environmental protection needs capital and therefore affects the quantity and speed of economic growth to some extent. Only by developing the economy can we continuously meet people's ever-growing material and cultural needs. Without quantitative economic growth, the leap from quantitative change to qualitative change would never appear and the accumulation of material wealth would be impossible. Without an economic foundation, there is no ecological progress to speak of. However, if we blindly pursue the scale and speed of economic growth without heeding its quality and benefits, if we wantonly claim natural resources and unscrupulously destroy the ecological environment, and if we trade resources and the environment for economic growth, what awaits us will be resource depletion, environmental destruction and non-sustainable development. We cannot sacrifice our offspring's welfare for immediate interests and temporary growth, which is draining the pond for fish and killing the hen for eggs. Nor can we give up development and willingly stay in poverty or wait for assistance for environmental protection. The key lies in the degree of and balance between development and protection.

Coordinating the relation between man and nature concerns the great victory of the socialist cause with Chinese characteristics, the achievement of the two centenary goals, the great rejuvenation of the Chinese nation, and the building of a community with a shared future for mankind. China is looking at the basic national condition of a large population, inadequate per capita resources, and weak carrying capacity of

the ecological environment. With our economic growth and continuous population increase, especially the rapid development of industrialization and urbanization, the conflict between inadequate resources such as water, land, energy and minerals and fast economic growth is becoming more conspicuous. A direct consequence is the serious environmental situation. If the traditional development mode continues, it will deplete the resources, overwhelm the environment and make development hard to sustain. To meet people's new expectations for a beautiful ecological environment, the key is to improving their lives, to bolstering the sustained and healthy socioeconomic development, and to demonstrating China's positive and responsible image.

We cannot set ecological civilization against economic development. There are some people who put the sole emphasis on "lucid waters and lush mountains" in total disregard of economic foundation. Ecological progress is not giving up development, but to pursue high-quality development at low resource consumption and high efficiency. Development doesn't mean economic development alone or simply GDP growth. Resource conservation, environmental protection, sci-tech innovation, cultural prosperity, social progress and many other factors all make part of the connotations of development. The sentence "lucid waters and lush mountains are invaluable assets" is a full and complete statement that integrates protection and development in an organic whole. Affluent life at the price of ecological deterioration is not ecological civilization; beautiful environment surrounded by poverty and backwardness is not ecological civilization either. We must try and strike a balance between economic development and environmental protection.

5 Paths of Developing Ecological Civilization and Their Relations

The Third plenary session of the 18th CPC Central Committee said ecological civilization should be developed through green, circular, and low-carbon development. In the new era, China has acquired a deeper understanding of what ecological progress implies. Green development is elevated to be a development concept, with building a resource-saving and environment-friendly society being an important aspect. It also coordinates work in such areas as energy conservation and emission reduction, circular economy, improvement of environmental quality, and low-carbon economy.

Circular economy is a term that generalizes the down-sizing and recycling activities in the process of production, circulation and consumption. It gauges development in terms of resource efficiency. In traditional economic growth mode, the earth was regarded as an infinite resource repository and junk yard. While one end of the economic system exploits multitudes of resources from the earth to produce products, the other end discharges massive amounts of waste water, waste gas and garbage to the environment. This is a linear growth pattern following the route of "resources—products—scraps." When the industrial chain is extended in the principle of "material metabolism," "process coupling" and "resource sharing," economic growth has

shifted from relying on the exploitation and utilization of natural resources to the utilization of both natural and recycled resources. This is an intensive growth pattern following the cycle of “resources—products—scraps—recycled resources.”

Low-carbon economy is an economic growth pattern characterized by low energy consumption, low pollution and low emission. Its core is the innovation of energy technologies, innovation of systems, and the fundamental change of human view on survival and development, involving the reform of production mode, lifestyle and values. The British energy white paper—*Our Energy Future: Creating a Low Carbon Economy*—published in 2003 defined low-carbon economy as follows: higher resource productivity—producing more with fewer natural resources and less pollution—will contribute to higher living standards and a better quality of life, the opportunity to develop, apply and export leading-edge technologies, creating new businesses and jobs. Through favorable tax and financing policies, we should guide private investors to increase the input in the R&D of low-carbon technologies, and energetically develop industries focused on biomass energy, solar power, wind power, energy-saving equipment, hydro power, and environmental protection.

Green development is one of the new development concepts. Green development is a kind of development respecting the restraint imposed by resource and environment's carrying capacity, and a sustainable mode of production and consumption. There is no substitute for the current ecological environment. When we use it, we take it for granted. But once damaged, it will struggle to recover. As the Chinese economy is shifting from high-speed growth to high-quality development, green development has become a common consensus. In building a moderately prosperous society in all respect, we cannot give up development in order to protect the environment and guard the “lucid waters and lush mountains.” Nor can we repeat the old path of “governance after pollution” or “pollution and governance in parallel,” still less live on what our ancestors have created while burning the bridges for later generations. Instead, we should adjust the industrial structure, foster new drivers and change the traditional production and consumption pattern featuring “massive production, massive consumption and massive emission.” The path of green, low-carbon and sustainable development has to be upheld to realize socialist modernization with Chinese characteristics where economic and social development complies with environmental protection and man and nature co-exist in harmony.

The relation between current construction and long-term development should be properly handled. We should bear in mind the current conditions as well as future development, short-term planning as well as long-term arrangements. We should also take forceful and effective actions to resolve pressing environmental issues, as well as keeping environmental pollution from affecting public health and ecosystem on the principle of “prevention first.” On the one hand, we, eyeing the goal of building a moderately prosperous society in all respects, shall perform the ecological civilization tasks for the next five years set out in the report of the 19th CPC National Congress. That is to develop spatial layouts, industrial structures, and ways of work and life that help conserve resources and protect the environment. On the other hand, eyeing the Chinese dream of building a socialist modern power and reviving the Chinese nation, we shall work out the strategic goals, principles and paths for ecological

advancement for the medium and long term, and strive for a modernization featuring man-nature harmony. Taking into account the actual conditions of different areas and sectors, we should deepen and perfect the macro strategy and break it into specific tasks, develop feasible construction drawings and road maps for ecological progress, and make sure all the targets are accomplished on schedule.

6 Relation Between Technological Innovation and Social Governance for Ecological Progress

Science and technology constitute the primary productive force. The drive of development decides the speed, efficiency and sustainability of development. Given China's economic development and size, it would be very hard to achieve sustained and healthy economic development and "double our GDP and per capita income of urban and rural residents from 2010 to 2020" if we cannot ensure a sound development drive.

The technological revolution in the twentieth century ushered in the age of traditional industrial civilization, while the R&D and application of a great deal of green technologies is kicking off the new era of ecological industrial civilization. If we still cling to the view of omnipotent science and technology, we may have the illusion that the current lifestyle is ok, science and technology can solve everything, and resource shortage, diminishing species, climate change and environmental pollution are no big deal and can be effectively resolved with sci-tech progress. If we still cling to that view, we will never go beyond materialism or fundamentally change the direction of civilization development.

In building ecological civilization, we must fully rely on and actively exert technological innovations. The promotion and application of green technologies shall be combined with intensified independent R&D. Also shall be combined is integrating existing technological resources with deploying future technological innovations, primitive innovations and system integration innovations with introduction, digestion, absorption and re-innovation, and strengthening environmental governance and recovery with adjusting economic and industrial structure. Special efforts shall be made to make breakthroughs in major scientific issues and key technologies that obstruct the shift of economic development pattern and sustainable development, thus providing ceaseless knowledge, scientific basis and technological support for ecological civilization development. The role of science and technology is reflected in three ways. First, it enables people to systematically and profoundly understand the natural laws and the laws governing the interactions between man and nature. It makes us realize China's status quo in natural resources and ecological environment and their changing trend. It also helps us recognize the laws concerning the evolution and regulation of the complicated social system. As such, we are in a position to timely adjust the relation between man and nature. Second, the promotion

and application of science and technology in resources, environment and sustainable development can push the shift toward a resource-saving, environment-friendly society. Third, it serves as supportive conditions for changing the economic development mode, boosting economic restructuring and industrial technology upgrade, and realizing sound and fast development.

Modern technologies are powerful instruments for ecological progress and the improvement of environmental quality, but they are not the whole approaches to ecological progress. In fact, science and technology are a “double-edged sword.” On the one hand, with the traditional industrialization in the twentieth century, natural resources have been subject to high-intensity and predatory exploitation and utilization, which has caused serious ecological damages and environmental pollution. This is to a large extent driven by modern technological revolution. On the other hand, science and technology are playing an increasing role in resource conservation, ecological protection and environmental improvement, but the view of omnipotent science and technology must be discarded in building ecological civilization. While stressing the positive effect of sci-tech progress in ecological progress, we cannot become superstitious about modern science and technology. Nor can we equate ecological progress, a complicated socioeconomic progress, with a simple process of technology-based governance while neglecting the role and influence of culture.

Science and technology are in no way omnipotent. Bearing this in mind, we won't think there is an alternative to everything, but would admit “we have only one earth” and consequently protect this only planet we call home. The theories and methods of ecosystem management point out the way to straighten out the macro system encompassing population, resources, environment, economy and society. Employing the approaches of systematic engineering and the principles of human ecology, it studies the dynamics and cybernetics of the composite ecosystem. Ecosystem management coordinates the complicated relation of systematic coupling between man and nature, economy and environment, part and whole on such dimensions as time, space, quantity, structure and order. It promotes efficient use of matters, energies and information, fully merges technology and nature, and maximizes human creativity and productivity, so as to protect the ecosystem functions and people's physical and mental health to the largest extent, and ensure the sustained and healthy development of economy, nature and culture. Promoting ecosystem management on the basis of China's advantageous management system will help generate satisfactory results across the board through our ecological civilization efforts.

7 Relation Between Ecological Security and Ecological Culture

The Chinese plan for building ecological functional zones proposes to develop an ecologically secure spatial layout. This consists of “two barriers”—the Qinghai-Tibet Plateau and the Loess Plateau-Sichuan-Yunnan ecological barriers, and “three belts”—the northeast forest belt, north China sand belt, and south China hilly belt. They, along with important water systems including rivers and seas, constitute the general skeleton of the spatial layout, interspersed with important areas where development is prohibited by the state.

Ecosystem is the material foundation for human survival and development. Ecological civilization is a conscientious human action following the rules of ecology and sociology—it is the practice and outcome of pursuing harmonious co-existence between man and nature when productivity is highly advanced and material very abundant. Human survival and development is an integral part of natural evolution. Engels said, “we, with flesh, blood, and brain, belong to nature, and exist in its midst.” Man and nature have a dialectical relation. On the one hand, man takes resources and space from nature, enjoys the services and functions provided by ecosystems, discharges wastes into nature, and its activities affect nature’s structure, function and evolution. On the other hand, nature provides the resources and environment needed for man’s survival and development, accommodates and digests the wastes generated by human activities; but natural changes, such as natural disasters, environmental pollution and ecological damages, also act upon man and restrict its survival and development.

We must combine the concept with conscientious practices. To build ecological civilization, we must uphold green development and keep enhancing the public awareness of ecological civilization, a concept that takes a long time to form. We must strengthen the publicity and education of this concept in breadth, intensity and depth to truly make the public more aware of conservation, environmental protection and ecology, create an ecology-caring social climate, and turn the concept into a common consensus and code of conduct for every social member. In the meantime, we have to “change both the way of thinking and the way of action; the way of production and the way of life; the way of economic development and the way of social development.” From the government and society to enterprises and individuals—they should all start with details and strive for long-term development. All entities shall implement the idea that everyone is responsible for protecting the environment, and act consciously to implement and demonstrate the ecological outlook and promote the harmonious development of man and nature.

Steps should be taken to include ecological civilization in the educational system and social construction, spread knowledge about ecology and environment among the public, and make such educational or informative activities are extensive, enduring, targeted and interesting. Topics such as respecting nature, protecting the ecological

environment, conserving resources and coordinated co-existence should be advocated in a universal, regular and permanent manner. The moral standard and institutional incentive system for ecological equity and justice shall be established across the society and observed and supervised by all. We must take advantage of the market mechanism and perfect a long-term mechanism aimed at minimal resource consumption and maximal benefit and service. No one has the right to occupy more resources than others, and everyone can find its right place and exert its full potential, thus integrating equity, efficiency and justice. We will carry out a series of ecological civilization activities to urge the people to actively participate in ecological progress and environmental protection. Various social groups and organizations will be brought into full play to foster the production mode, lifestyle and consumption mode conducive to resource conservation and environmental protection.

Ecological progress is a systematic undertaking directly concerning national welfare, people's livelihood and socioeconomic development. It needs not only the close attention, firm leadership and effective guidance from the CPC and governments at all levels, but also the close coordination of all sectors and the concerted efforts of the whole society. As Chinese economy keeps developing at a fast pace and people are living a better life, they have high demands on production safety, food safety, water security and environmental quality. To resolve or mitigate resource and environmental issues, not only should the management be more professional in such sectors as water conservancy, forestry, agriculture, industry, environmental protection and land, but social management should be enhanced too. Sector management should focus on the normal state and be law-based, unified and scientific. Social management, on the other hand, should focus on the crisis state of special, emergency and serious conditions, and the ability and level of it should be reinforced in various ways.

8 Relation Between Government and Market in Ecological Progress

On March 5, 2019, General Secretary Xi Jinping generalized for the first time the “four ones” about ecological progress when participating in the discussions of the Inner Mongolia delegation. To be specific, ecological progress is one aspect of the Five-Sphere Integrated Plan; adhering to harmonious co-existence between man and nature is one basic policy of upholding and developing socialism with Chinese characteristics in the new era; green development is one of the new development concepts; and pollution prevention and control is one of the three tough battles. This generalization has enriched the Xi Jinping Thought on Ecological Civilization and is a basic principle and action guide for ecological civilization development in China.

When building ecological civilization, we should give full play to the market's basic role in resource allocation to make economic growth more vibrant and efficient. In the meantime, we should give full play to the government's role in macro-management and regulation to overcome or make up for the market's defects and shortcomings and solve problems that the market cannot. As industrialization, urbanization, marketization, information application and global economic integration are all picking up speed and our reform has come to a critical juncture, the government should well play its role in boosting employment, adjusting allocation, perfecting social security, ensuring social equity, coordinating urban-rural and regional development, protecting the ecological environment, and maintaining economic stability.

Strengthened government control can effectively conserve resources and reduce the immense hazards imposed by backward market economy on the whole society. It also avoids the waste of resources resulting from repeated construction and blind investment, and restricts construction projects that cause high consumption and high pollution and seriously affect the ecological environment. Great efforts must be made to accelerate the shift in government functions, clear the institutional barriers to fundamentally change the economic growth mode, and effectively address the over-reaching, omission and mismatch of government functions. Upholding the idea of open, transparent and honest management and power-duty consistency, the government should comprehensively and correctly perform its duties in "economic adjustment, market supervision, social administration and public service." It must represent equality and efficiency in resource and environmental planning, price mechanism, investment policy and administrative system, and make sure government intervention is just, open and equitable. Government decisions should be more scientific, so they can rectify market malfunctions while preventing government malfunction, and avoid disorderly or excessive competition and possible inefficient, unfair or unequal phenomenon such as monopoly. Special efforts should be made regarding the allocation of significant rare resources and state-owned public resources. The government should work hard to achieve reasonable and just social objectives and sound economic order, and modernize its governing capabilities.

We can use the market mechanism to build ecological civilization at a lower cost and higher efficiency. Ecological progress doesn't equal government leadership, fiscal input and government purchase of services. Instead, the market's basic role in resource allocation should be brought into full play. We must take advantage of the price leverage, so that the price of resources fully reflects the real cost of ecology, resources and environment, and polluters, resource developers and users will bear the losses of environmental and ecological damages as well as the cost of resource depletion. An environmental resource market shall be created, such as the water market and discharge trading market, to effectively keep down the cost of pollution control. Public fiscal fund shall be spent in such a way as to steer private capital to ecological progress, and all kinds of entities shall be mobilized to actively participate in this cause. Enterprises should consciously act as entities responsible for pollution control, have a keener sense of social responsibility for environmental protection,

and achieve harmonious development between man and nature through economic means.

Regarding the relation between domestic governance and international cooperation, we have to bear in mind both the domestic and international situations, and foster a domestic environmental governance system with the government taking the lead, enterprises as main entities, and social organizations and general public taking part. We must work to resolve the environmental problems in China based on national conditions, and stick to the path of ecological progress characterizing advanced production, affluent life and sound ecology, with the goal of building a beautiful China. We will actively engage in global environmental governance, and adopt a global perspective toward ecological progress at home. We will urge ecological exchanges and cooperation of all countries, try to secure more international discourse power, and contribute to tackling global ecological challenges and boosting world sustainable development. China as a responsible developing major country will take an active part in global ecological governance and undertake international responsibilities commensurate with its national conditions, development stage and actual capabilities. Making full use of multilateral cooperation mechanisms such as the Belt and Road Initiative, it will communicate and cooperate with the international community in management mode, advanced technologies, experience and achievements, in the joint endeavor to explore a path of ecological civilization for the whole world.