



On urban ecological Construction and protection

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Abstract: The development of modern city , The relationship between protection the city , Coordinate the ecological environment of the city construction and economic development in today 's URB An development,unreasonable exploitation and utilization of naturalresources /b16>, causing serious damageto theecologicalenvironment. The main reason lies in the rapid development of industrialization and urbanization, The A post governance, the protection of the "the", "the", "pollution
b110 >, after the destruction of the "error development strategy and the" which pain medicine , the remedy treatment. Urban ecological construction and protection should be-many aspects: national cadres damage to the ecological environ ment need lifelong responsibility; Rely on advanced technology, Improve the ecological environment Monitoring and supervision of effective linkage; Establish a correct view of economic development and environmental protection, and vigorously develop the environmental protection industry; strictly implement the planning environmental as Sessment.

Key Words:urban Development Environmental Protection, Ecological Civilization

cities are human settlements , Has two properties : _ is Social properties centered on human activities , Two is City seat The natural properties of the area . cities are social creations , is human text places to meet , is the activity space for people to live [1] . Healthy ecological environment and rich natural resources are urban developmentFoundation and Conditions . Rich and powerful , Improving People's standard of living is The ultimate goal of city development . A good environment determines healthyquality of life , and environmental pollution and ecological damage can hinder the economy. growth and city development . City's sustainable development , is we create The cornerstone of future generations , leave a good ecological ring for future generations The conditions are the historical mission that we must assume .. so , developmentmodern city , at construction time , First reconcile The Ecology Environment Protection , the relationship between urban construction and urban economic development .

The advent of the Industrial Revolution , predicts the world's urbanization process speed up , City scaled up , of the city quantity and Day club . Advance of the urbanization process , recovery World economy , Fast development of city economy and perfect city function also brings social civilization and economic prosperity to the city . however , city The process is a double-edged sword , Promote social progress , Economic development , But it also creates a waste of resources . , Environmentpollution . so , How can we make the future of the city go Road to sustainable development , at the same time reasonable security in urban construction Protect Environment, Rational treatment of urban ecosystem balance problem . Let humans live in blue sky , white clouds ,, Green water 's beautiful environment .

century, emergence and development of urban ecology, $_$ to a degree that promotes awareness and awareness of environmental protection, also The promotes further research and development of urban ecology.

The advent of the Industrial Revolution, The same that the western countries are speeding up their economic

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development destroys ecological resources, like mining mines, felling trees wood, hunting wild rare animals, etc., in the socio-economic development of the same caused serious damage to the environment. " Silent Spring "1962 Year in the United States, Although the book at that time was full of controversy, But it's the first time humans have focused on the ecological environment. book . the book profoundly predicts the prophecies of human health and ecological environment ruin, The was shaken by the profit-related Ministry of production and Economy door, Their strong criticisms and complaints, from human to ecological The awareness of the environment has entered a new Era . " Silent Spring " q ,, is a cause for governments and citizens to invest in environmental protection in, They pay more and more attention to ecological environment and the harmonious development of human beings, problem, The world has set up a non-governmental organization to protect the environment, with Association, to further promote the United Nations in the 1972 Year 6 Month is inStockholm held " Human Environment Convention ", and signed by States " Human Environment Declaration ", started environmental protection henceforth Eco-environmental protection in people's consciousness constantly add strong, slowly becomes a kind of global scientific thinking, and Subject to the world The attention of governments . last century age International UNESCO organized by " Human and natural biosphere " Research Plan, This is a Inter-governmental interdisciplinary large comprehensive research project, The protection of climate the biosphere Protection is its core content Content covers Soil source, Forest, bio, Health, Sunshine, Air and living space Complex Relationship, Through the study of natural and social sciences, Consider the human structure and function of these ecosystems, affect, Create Biosphere reserves, dedicate to natural landscape, Live State system, harmonious coexistence of urban development, promotion with social

culturally and ecologically sustainable economic and human development . 1972 year 6 [] [] [+] Day , United Nations Human Environment in Stockholm meeting through UN Declaration on Human Environment , become a person Class's first ever global manifesto for environmental protection , This announcement speech to encourage and promote the active protection of the ecological environment of all of humanity played a Positive effect , historic significance . nearly a century ago , Human studies on urban ecological environment are springing up. To , Humans are increasingly aware of the urgency of protecting the environment and the importance of sustainable development of urban construction and eco-environmental protection .

enforce environmental protection , The prevention of environmental pollution is one of our country's Basic State Policy . Our country has always attached great importance to the eco-environment of the legislative workers for , Recent years have made important progress in eco-environmental legislation show . The is currently formed in our country with the the Constitution is based on , with ring Border Protection The eco-environmental protection system based on . Constitution , clause: National Protection and improvement of living environment and Environment , Prevent pollution and other hazards . National Organization and encourage afforestation , Protect Trees . the 9 rule : : National Guaranteed Natural Resources rationale take Advantage of , Protect precious animals and plants . prohibits any organization from or by any means encroaching or destroying natural resources .

Nearly 40 years, Our country has issued a total of 8 Department of Environmental Law, Department Resource Management Law and local government's environmental protection regulations. These laws, regulations, specification restricts city through All kinds of behavior of eco-environment in Jinan construction, for humans in on the road to protect the ecological environment, National eco-ring Border Protection and governance into national economic and social development plan, requires local governments to develop protection plans and specific protection indicators, example [], state explicitly, People's livelihood items except the provincial key can be takes up a small amount of woodland, Cut business class item prohibit occupation forest to, to crack down on all illegal activities. Center full face deepen reform leadership group 14 meetings will also damage the eco-ring The boundary is included in the appointment and dismissal of cadres and lifelong accountability.



a, composition of urban ecosystems

urban ecosystems are urban dwellers interacting with urban environments To form the same _ overall , is human's coordination of the natural environment , production ,the Special artificial ecosystem built up by the transformation . Urban ecosystems are in large populated cities , with Number of people , the social life formed in the subject environment of buildings State system , economic ecosystems and natural ecosystems .

1. Eco-System

The economic ecosystem of the city runs through the ecology, Assign, Stream Pass and consume every one link (such as communications, technology, Finance, trade, Transport, Building, Industry, etc.). The system is from the economy Systems and ecosystems intersect with each other, an integrated that affects each other Composite system. Economic activity requires a certain amount of space to support, Supply of ecological Resources; Pure natural Ecosystems No one Participating activities of the class, economic ecosystems are economic activities and cities. The collaborative body of the underlying physical environment.

2. Natural Ecosystems

natural ecosystems are in Fuding space and time categories inside, relatively stable ecosystems maintained according to natural conditioning Unified. The natural ecosystems of cities, including the urban community, the underlying physical environment of the (like Sunshine, Air, Forest, Freshwater, Ocean, land, Animal, Plants, etc.).

3. Social Ecosystem

A social ecosystem is defined in a certain space, Biological Community with a non-biological environment through the material cycling process, combined with a liveState Basic functional Unit. Urban social ecosystems including city People's social activities, aspects of economic activity and cultural activity, Is mostly about people, between people and collective and collective and collective Various relationships (live, Travel, Service, Education, Civic, medical, Diet etc.).

two , Urban construction and development to the ecological environment of all kinds of Problem

In recent years , the appears in the major industries of central and eastern China City Smog Weather , sweep range , Duration length , bring great distress to people's travel . haze Weather (reason) , also has a pollution emitter due to . experts point out that , the main reason for haze weather is : ① this Some areas near ground air relative humidity large , Ground Dust wide , the people and the traffic in the ground stirred the dust. ;@ In recent years Cars in cities more and more , emission of car exhaust is caused by A major cause of haze weather ; ③ Two pollution from factory emissions ; ④ Winter Heating emissions C 0 2 Pollutant . however , Eco is the basis for the environment that affects human survival and development , is related to society and comprehensive eco-systems for sustained and stable economic development .

in today's urban development, Unreasonable exploitation and utilization from Resources, cause serious damage to the environment. Improper hing water Conservancy or unreasonable irrigation causing soil erosion, Wet The has been compromised, and so on. High-speed development of urbanization and industrialization, causing serious environmental pollution. The original ecological environment is being eroded by a "" Step-by- step, soil Erosion, Land Desertification, forests and grasses Original resource reduction, biodiversity reduction increasingly threatening people The ecological environment on which they live is a faces such serious threats, The international community reached a consensus, resolutely follow the path of sustainable development.

1. climate change in cities

accelerated development of cities, causes a climate of "Heat island effect, City Unchecked development is climate" heat island effect "Culprit for with the acceleration of the urbanization process, high-rise building with a rise to the ground and up, Forest green space decreasing, direct sunlight without obstruction ground, ground



temperature rises eventually cause climate warming, City City warming further caused some of the city's unusually high temperatures and land drought, temperature rise, sea level rise causes city low flooded, Increase in surface water and groundwater salt to affect cities Water supply, waste heat discharged into the city, cause air heat content to increase, This aggravates the city's heat island effect, city "heat island effect", frequently appears, The has caused haze weather in recent years, for human life. The live and health is a great obsession, weather variation plus play, Increase in frequency and intensity of the disaster, All and city increased heat island effect has a very close connection.

2. Urban environmental Pollution

Industry, Traffic, fossil fuel combustion in thermal power plants exacerbates city City air Pollution. Industrial effluent emissions cause the source to enter the The Clean Water, causes the occurrence of the disease; the various caused by urban development class noise sources affect people's normal work and life. City construction Emissions of solid wastes cause multiple habitats pollution.

3. shortage and depletion of natural resources

shortage and depletion of natural resources, especially energy and freshwater Exhaustion of resources, Too much land becomes arable land for construction., Further reduce the biological diversity in the Global water reserves, Fresh water accounts for only 2.53%. in the utilization of water resources Human beings have taken unreasonable development and management measures, cause water resources source waste is prevalent, plus a lot of local waters heavily contaminated, make less-than-adequate freshwater resources more is scarce. China Land resources, acreage 1.28 billion ha, Approximately the total land area of the 13.7%, but due to large population, per capita less arable land 0.1 ha. In recent years, with our economy rapid growth, City construction, traffic construction, Water Conservancy construction with and construction land for building and mining are increasing, occupy a lot of tillage, make less arable land per capita.

Biological extinction accelerated . statistics , China about 15-20% plants are in an endangered state , only endangered plants are more up 5000 rest . Recent decades of research data show that , i country bald leaf , giant panda , South China tiger , black monkey etc precious Wild The area of the Living animal is significantly reduced , population decline . current , The rare and endangered wild vertebrates in China (except marine fish outside) has 4357 type [2] .

a sharp reduction in forest resources . driven by economic interests , forest deforestation , forest area significantly reduced . National Forest consumption amount to more than tree growth , Excessive consumption of forest resources is Typical ecological deficit , forest resources for future generations have been The is too prematurely consumed by contemporary people for .

grassland degradation intensifies , Desertification area increased , Desertification Process degree aggravated . Although our grassland area is larger than woodland ,farmland area and large , but statistics 90% The grasslands of have been degraded , and have 50% The is in a severely degraded state .

4. densely populated

expanding city size , Increasing population , A large number of Rural population to city , Rural areas fast to small towns Development , This leads to urban infrastructure ,Social security system , The Environmental protection system has been tested as never before .. City Big Lifting extension , makes human beings use natural resources without restraint , eco- ring violations , Environmental damage is hard to human society Healthy development , also threaten the survival of many other organisms . traffic congestion , green space Construction , Education and health lag and so on To the loss of ecological assets , eco-Service degradation .

three, The development of cities is the cause of ecological problems

_, Results of the rapid development of industrialization and urbanization . with rapid development of industrialization and urbanization , causes current base The level of infrastructure construction and management is



difficult to adapt to the needs of urban development To . in recent years , State active fiscal policy , enlarges funding for municipal sewage and waste disposal facilities , But because of historical profligacy , infrastructure lag problem still highlighting , City environmental pollution remains grim . statistics , i Country 2015 year of urban sewage treatment rate up to 85%, City pollution water untreated directly into water ; Contaminated underground water sources city up to 90%, in a severely polluted state 60% is not harmless garbage up to 40%, These rubbish not only account for with lots of land , also on water , , soil , atmosphere causes serious pollution , And it will become the vector of the pathogen ..

The rapid development of urbanization leads to the quality of urban ecological environment No to meet the growing needs of urban residents , Town space Distribution and Scale is unreasonable , City's resource environment is severely damaged [3] . person people 's lives are getting narrower. , everywhere is tall buildings , city with The green Environment of the suite is also far from sufficient to carry a growing population . missing planning or planning unreasonable , Lead to urban greening usually take a see seam pin construction layout , green space is unevenly distributed , All kinds of city construction Project Green does not match , Urban construction crowding planning green space as commercial Street , The parking and service facilities are often the same. ; worse ,- Some developers to develop and build wanton deforestation destruction Habitat , Guide Increase the extinction of species , resource severely damaged .

Second , The destruction of the ecological environment by Urban development is also "First Build Set governance, First pollution protection, first destroy after Restore "error The result of the development policy is as a developing country China, policy House very long one time taken "First build after governance, first pollution after security protect, first destroy after Restore "Development Strategy, at the expense of the environment price, one-sided pursuit of economic development and material benefits, gross National product values as the sole yardstick for measuring urban development and Civilization, cause loop border pollution and resource waste, led to the development and ecology of economic and social law. Environment Improvement contradictions are on the rise, eco-degradation, environmental pollution, city "Heat island effect," issues highlighting, for China's future The development of all presents a huge challenge...

Third, "which pain to cure [6] The remedy for is City the direct cause of the destruction of the ecological environment by the development of the city, city City sewage, Industrial production effluent, Auto Exhaust emission" three

Waste, makes the city's development a lot of waste gas, Waste water, dust Waste, These polluters are stranded above the city, pending with workaround. However, the policy specified by the Government is not scientific enough, who dirty who governs the, the typical headache where pollution governs where the medical head,, - The palliative treatment is not dealt with by the solution. The main reason for The result in this behavior is the : Enterprise pursues profit maximization concept, This idea increases local revenue, expands the employment machine to, Cause ecological environment to appear insignificant; On the other hand, Method Law Latency, Weak environmental Compliance, The regulatory system is not sound. for eco-environmental protection, The main measures taken by our government are to enact laws and regulations on polluting enterprises to take a turn off, Stop, and, Go, Internal corrective actions and control pollution, however cut pollution The enterprise has changed its name after being ordered to shut down in other names with its the his name reopened, _ Some enterprises to meet environmental protection standards After inspection continue to intensify the emission of pollutants . Therefore the government to the The rate of environmental pollution processing is significantly lower than the resulting speed, Long this previous, Large number of contaminants stranded over cities, cumulative ", " "", "" " creates today's environmental crisis The also eventually led to the global treat crisis " takes a " Post-remediation " policy is governing environmental crisis failure, So that people have to explore again . Find new Directions to solve ecological problems .



Five, countermeasures for urban ecological construction and protection

- 1. National cadres damage the ecological environment requires lifelong accountability
- 2015 Year, President Xi Jinping is presiding over the central government's comprehensive reform of

Important provisions in the 14th meeting of the leather leading group: "Live State Environmental protection to adhere to according to law, Objective Fair, scientifically recognize set, Accountability _ To, principle of lifetime accountability, Clear leaders at all levels Accountability for cadres, is responsible for causing environmental damagefor leading cadres, Whether the has been removed or not, Promote or retire, must be seriously accountable, and the concept of eco-environmental damage and not only major environmental emergencies, also includes perennial tiredness Environment Issues. This strengthens the government's efforts to enforce the regulations of the the environment, has played a government in the ecological environment Leading role in supervision and governance.

2. relies on advanced technology, Improve eco-environmental monitoring and regulation effective linkage

relies on technological progress and innovation , Improve eco-environment monitoring measured smart , Automation and cubism level , To develop the eco-ringMonitoring Large data analysis , Implementation of national eco-environmental monitoring resource sharing , Effective implementation of eco-environmental monitoring and supervision move . by increasing the intensity of technology development , Research and introduction of advanced setting prepare , environmental legislation , policy guidance and many other means combination , implementation benign cycle of urban ecological environment .

3. Establish a correct view of economic development and environmental awareness, vigorously developing green industry

Government plays a leading role , mobilize the community to participate in the Ecological Protection . _ aspect , All levels of government should strongly support folk ring Security Association and associated groups Force , through environmental remembrance Activities Arouse citizens ' awareness of environmental protection , Cultivating ecological Environment Moral awareness . environmental pollution and sabotage of government and Enterprise for effective supervision , Form Social supervision pressure . on the other hand , Publicize the concept of environmental protection through the news media , Universal Environmental Awareness " recognizes , Improve citizens ' awareness of environmental protection , to establish an ecologically protected Self-discipline awareness and ecological responsibility .

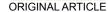
Learn from foreign advanced technology and pipeline, Accelerate our environmental protection Technology and industry development, current, Western countries have become world World Environmental Industry power, They're very focused on the environmental industry for national pillar industry, Many high-tech has been referenced to ring warranty, Green technology products have become the international market competition

Hold up

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4. strictly implement the Planning environment evaluation Environmental Protection Department at central and local levels, implement national environmental policies and regulations, through on society Eco-environment protection and management implemented by macro-decision of economic development, in making town planning, Land use planning, intersection plan, Energy planning, Travel planning, Natural Resources development Planning and other works, agriculture, Livestock, Forest and other aspects of the specific planning, to strict enforcement rows Environmental Impact Assessment Act of the People's Republic of China, Implementation PlanEnvironment Review, All levels of environmental protection to play a regulatory role.

Our country is currently in a period of accelerated urbanization and development, City development process, City's ecological problems are becoming more and more obvious. This requires us to rely on advanced technology to build the right economic development Concept and eco-environmental awareness, establishing a sound





environmental protection Law System , to launch all aspects of the city's environmental construction process monitoring and monitoring , to Improve urban environmental problems in China , early implementing Green Framework for urban environment .

Reference:

- [1] Guo Yaqi . The impact of urbanization on urban ecological environment [D]. Changsha: Hunan College ,2007.
- [2] Li Hongjie , Shenton . Study on the cultivation of Taxus chinensis seedlings and its production techniques to point [J]. Economic Forest Research , 2014,32 (2): 136-143.
- [3] Li Zijun . How to make eco-city construction in China [J]. Environment Protection , 2002, : 27-29.
- [4] Zhaobaojiang, Strengthening urban ecological environment construction to achieve sustainable development [A]. First Ring border and Development China Forum proceedings, China Environmental Federation, 2009;41-44.
- [5] Chen Wan , To hear . A preliminary study on green technology innovation in urban construction J]. Zhongnan Journal of Forestry University of Science and Technology(Social Science edition) , 2015,9 (3): 40-43.
- [6] Zhou Hong Spring . Some thoughts on China's environmental problems [J]. Economic Research reference , , (6): 2-9.

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