



Research Article

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The Current Problems of Urban Ecological Construction and Counter Measures

Xiuxia LI

School of Art and Design, Xinxiang University, Henan, China, 453000

ABSTRACT

The paper presents problems of eco-environmental construction on municipal virescence, water environment, water ecology, and landscape as well as urban ecological system of quantity, quality and capacity in our country, and analysis the causes of these problems. Measures are proposed, such as knowing the meaning of municipal eco-environmental construction, increasing the environmental protect consciousness of managers and enhancing the municipal eco-systemic construction.

Keywords: ecological destroy; sustainable development; country

INTRODUCTION

This paper discusses the current of Zhengzhou city's virescence, water environment and aquatic ecology, urban landscape and ecological construction, such as quantity, quality and capacity problems in ecological environment construction, analyses the cause of the problems, and puts forward the scientific understanding of the connotation of urban ecological environment construction, raises awareness of the environment protection of city management and urban planning and technical personnel's professional quality, strengthening the construction of urban ecological engineering and urban sustainable development system of several countermeasures. According to the characteristics and laws of ecological environment in the coastal areas, this article researches the evaluation methods of eco-environment in the coastal areas. Through the investigation and monitoring of ecological environment of Zhengzhou city, it assesses the quality and eco-environmental security in Henan Province and analyze the ecological environment and ecological environment vulnerable area in the coastal areas. A clear ecological functional area is formulated. Eco-industry construction environmental protection programmers and resources of the system are developed.

At the end of the century, Zhengzhou city has carried out large-scale urban ecological environment construction and residential environment construction, urban ecological environment improved rapidly[1]. During three years, 200000 big trees were transferred, the urban ecological environment construction steps onto a stage quickly, but the tree into the city to bring the negative impact of severe: Firstly, it is a large-scale ecological migration rural ecosystem seriously damage; secondly, the trunk of the greening effect is comparable to a young trees, green efficiency is not high; thirdly it is to lead to a lot of trees to injury and death. Big tree transplanting, due to habitat changes, even survival, growth is not too good, even death, big tree transplanting that year survival rate 94%, but years of survival rate is less than 90%. Fourth ecological protection is difficult.

The number of urban green space is not enough, during 950, Zhengzhou despite the afforest money surpassed the sum of the past 45 years, but in 2000 the per capita public green land area of 4.6 m², and the basic requirements of the ministry of construction issued 7m² there is still a large gap. Forest coverage rate is 10.4%, and the global forest coverage rate is 31.7% on average, the forest coverage rate is 16.5%, Beijing forest coverage is 38.5%, forest

coverage rate is 50% in Tokyo, Zhengzhou is much lower than Beijing and Tokyo, and much lower than the national and global average. According to the characteristics of urban thermal field is calculated, as high heat load balanced urbanization area, Zhengzhou need is greater than 2300 km² of forest, the forest coverage rate is 36% [2]. Based on aerobic capacity per unit area and forest carbon and oxygen balance estimation, forest area demand for 1, 900 km², forest coverage rate is 30%. Measure according to the ecological environment quality and living demand, Zhengzhou forest area will need at least 2, 200 km², forest coverage 34%, urban ecological capacity are still inadequate.

THE QUALITY OF URBAN GREEN SPACE IS NOT HIGH.

Urban public green space is relatively single, species is given priority to with grass, with a small amount of flowers and plants and sparse trees, low proportion of Joe, irrigation, grass not harmonious [3]. This way of afforestation improving space visual effect, but low ecological benefits. In addition, the public green space distribution, large green space are mainly distributed in the central plaza and park, and a small piece of green space mostly located in the traffic circle and mainline, the green space is an island, the lack of green corridor, patch heterogeneity is poor. Because of the green space ecological effect is not high, push air flow dynamics is insufficient, and the urban heat island effect will also strengthen, high frequency heat island phenomena. In recent years, zhengzhou city heat-island frequencies as high as 85.13%, heat island daily average amplitude of 0.65 degrees, the largest heat island 1.72 degrees, is relatively stable. From the annual 1999 annual heat island magnitude 1.63 degrees, has risen 0.32 degrees in 1998. Maximum heat island in the winter of 1999 was 7.17 degrees, 0.37 degrees higher than in 1984, the summer of 5.07 degrees, 0.27 degrees higher than in 1984.

URBAN STREET TREES DEVELOP TO THE DEGREE OF BEAUTY AND LUXURY.

local suitable tree species disappeared. Ginkgo, Osman thus flowers, camphor, yulan, cedar etc become urban street trees and communities select tree species, the aesthetic value of urban greening raised, the grade of the greening trees increased, but single tree species and local green features disappear, urban ecosystem is fragile.

DEGENERATION OF BIODIVERSITY.

Due to the rapid change of the urban environment and a large number of trees being cut down, plant genetic information transmission, wild plant degradation, urban ecological self-sustaining, self-renewal, self-adjusting ability. Because of the lack of "green channel", birds, amphibians, almost extinct; The center of the city environment sensitive indicator plant, the lichen plant diversity, evenness and far below the city on the edge of the forest, a significant reduction in the urban environment natural degrees. IN the suburbs of sheshan, the stones for fried mountains, road building, tourism development, economic development, bamboo and other activities, logging, deforestation, removal of understory plants such as 119 species of angiosperms die or endangered [4]. Fern was 16 families, 28 genera and 38 species, now only 15 species, frogs, snakes, rabbits and other animals almost extinct.

THE ECOLOGICAL ENVIRONMENT DESTRUCTION

it brings species invasion. Outstanding performance to a large number of breeding of water hyacinth can cause local aquatic plants disappear, every year need to spend a lot of manpower and salvage.

THE PAPER ANALYZES THE CAUSES OF THE PROBLEM

Understanding is not enough to comprehensive and thorough connotation of urban ecological construction.

Urban ecological environment construction is an important content of urban planning and construction. According to the theory of urban planning design, modern urban design closely integrated into the architecture and principle of ecology [9], the stage of city planning and construction need to stand on a larger scale space or height for urban sustainable development. Due to modern urban planning theory and research on the theory of city ecological construction is still in the exploratory stage, in the field of urban planning and the builders of this new connotation, the fusion of urban planning and urban ecological environment, a series of ecological engineering technology application and integration of the lack of scientific, reasonable, comprehensive and thorough understanding and grasp. The urban ecological environment construction and greening, landscaping construction, to pursue the city visual beautification, the green space construction, building square, green space, connect fully, brightness on engineering and so on, the green rate, the green coverage, the per capita green area such as afforestation, environmental indicators, or the number as the qualitative standard of urban ecological construction. Urban ecological environment planning theory lag is an important cause of the ecological environment deterioration in Shanghai.

URBAN ECOLOGICAL ENVIRONMENT CONSTRUCTION GETS RICHER QUICKLY

A new round of urban construction has become the government short-term behavior, governments at all levels to urban ecological construction as a record, image engineering to grasp, the big better bitten, the grade of building the higher the better artificial landscape overseas, At that time the city center square engineering, commercial pedestrian

street, exhibition center project, water city on engineering, connect fully, streets free engineering and so on are built, the result of natural landscape was destroyed, and humanistic landscape being polluted.

FRAGMENTED GOVERNMENT DEPARTMENT

Urban planning, municipal construction, landscape, environmental protection, water conservancy and so on various departments communication, information not free enough, overall coordination and response ability is not very desirable, form a complete set of scientific decision of urban ecological environment construction and the series of project implementation difficulties. In the process of a new round of urban ecological environment construction, the botanical garden department is not only the management institution, and "green" company, caused the urban ecological environment construction blindly, wait, to rely on, and the natural productivity for the construction of urban ecological and social productivity of labor market productivity put aside. Green nursery industry doesn't satisfy the need of the construction of the urban ecological environment, "follow" the tree into the city, in the end, caused the rise in the cost of urban ecological environment construction, ecological environment destroyed in areas surrounding the cities.

RESEARCH ON THE THEORY OF CITY ECOLOGICAL CONSTRUCTION AND THE PLANNING AND CONSTRUCTION PRACTICE IS NOT ENOUGH

There are very few in the current urban planning and construction in China the content of the special ecological environment research and planning, urban planning and construction scale and the scheme is more for the development of social economy and the demand of the city image, rather than on the ecological resources quantity and quality, water resources and water environmental capacity, landscape resources and scenic area (spot) tourism environmental capacity, the humanities landscape and architecture and greening characteristics as the basis. One-sided pursuit of economic and development, and constantly to urban sprawl, inevitably lead to urban ecological environmental capacity not enough generally, ecological quality is poor. City water environmental capacity is not enough, the tension of water resources and water pollution seriously. Landform change, natural landscape is polluted, native tree species have been cut down and destroyed ecosystem.

ECOLOGICAL ENGINEERING TECHNOLOGY DEVELOPMENT AND REPAIR RESEARCH AND INVESTMENT ARE NOT ENOUGH

Due to lack of necessary funds, urban ecological engineering practical technology development, the ecological restoration research progress is slow, the related theory and technology to support the development of the urban ecological construction. Do not take the ecological environment of scientific research, don't respect ecological engineering technology has become the biggest obstacle in the development of urban ecological construction.

THE ECOLOGICAL CITY CONSTRUCTION PROCESS SYSTEM STRUCTURE

In the ecological urban construction coordination mechanism in the process of building the system structure, always revolve around the relationship between human and nature, between people the two lines. According to the construction of ecological city as the total target, on the premise of space-time unified, affinity is symmetrical, enables each subsystem in the logical relationship between self-consistent, orderly organization structure, adjustable on functional performance, the overall sustainable development, and be able to achieve the combination of qualitative and quantitative, to form a is the general principles of universality, finally realizes the ecological city construction to improve ability and level of synchronization.

The core of the ecological city construction, in the premise of sustainable utilization of resources and environmental protection, make a city and the regional resources, environment, economy, population and social coordination between each subsystem, such as reasonable structure, function, and thereby forms a benign circle of urban and regional and sustainable development. Therefore, construction of modern ecological city, must to structural adjustment as the main line, supported by modern science and technology, based on the bearing capacity of resources, conform to the environment of binding and BaoZhangLi, improve the economic competitiveness and support, increase of population and the control force of the society, the economic construction, ecological environment construction, social construction organically combined, relying on excellent resources environment promote the rapid and sound development of economy, society, increasingly enhanced rely on economic strength and the increasing of social civilization provide care and support for the improvement of the ecological environment.

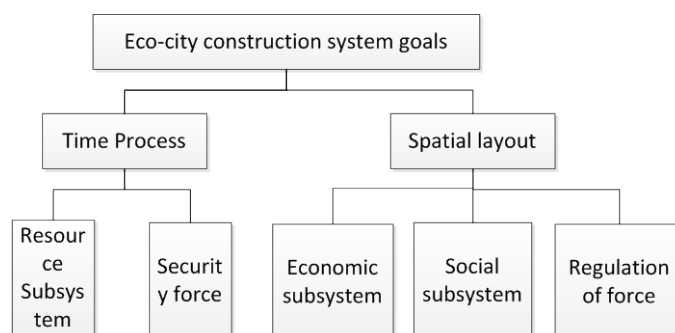


Fig.1Flow chart of eco-city construction system

COUNTERMEASURES

(1) Scientific understanding of the connotation of urban ecological environment construction, strengthen the construction of the series of urban ecological engineering.

Urban construction in our country is in the midst of the fierce of ecological transition, in urgent need of urban ecological construction in the life space requirements to the quality of life, from the ecological greening requirements to ecological function requirements, from the environmental governance needs to environmental health demand, from the city beautification to urban sustainable development. Urban ecological environment construction is facing a from concept, theory, technology, engineering, materials, a profound change in the comprehensive management, require the system to learn and understand.

(2) Actively promote system reform, efforts to improve the ecological environment protection consciousness of administrators

Streamlining, separate government functions from enterprise management, the leaders from the achievements of engineering as well as the subordinate enterprise welfare projects contracting, do more investigation and study, transform government functions. Streamlining, separate government functions from enterprise management, the leaders from the achievements of engineering as well as the subordinate enterprise welfare projects contracting, do more investigation and study, transform government functions. Implementation of urban ecological environment construction bidding system, forbidden government functional departments and affiliated enterprises to participate in the bidding project, administrative justice law enforcement. Garden department should according to the urban ecological environment construction and urban construction planning, flowers, nursery stock ahead of the urban construction need, sod quantity and varieties, such as forecasts, make full use of the huge potential of market of social labor productivity, to eliminate the phenomenon of "tree city". To the government administrative personnel on a regular basis knowledge popularization education of urban ecological environment construction, improve the ecological environment of government functional departments and management staff awareness, make scientific decision and management.

(3) Restore the characteristics of "water", build the waterfront landscape, construction of ecological city

Protect the existing urban water bodies, through comprehensive environmental control to improve the water quality, and restore its coastal ecological landscape; "Water", and restore the characteristics of "water"; Dredging or restore partially fill river, in densely inhabited areas, appropriate excavation water bodies, and along the coast build large-scale green space, improve urban living environment; Make full use of the coastal tidal flats, ecological garden construction of oversize, and strive to improve the quality of ecological environment construction of Zhengzhou.

CONCLUSION

The study selects many factors such as land marine ecological against index, and land and marine ecological protection index and land and marine natural environment index and pollution load, and people home life, and industrial governance, and land resources, and environmental investment, and forest green, and marine resources, and city governance, related index, Division for target layer, and guidelines layer, and area layer and index layer four a level. Constructing coastal areas under ecological environment based on quality evaluation index system.

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