

## Problems in the Construction of Urban Ecological Area in Anshan City and Discussion on Countermeasures

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### Abstract

As a resource-based city, Anshan is also facing more severe ecological environment problems than other cities while providing a large amount of mineral products to the society. These problems have severely constrained the city's sustainable development. In order to better coordinate the relationship between resources and the environment and sustainable development, and respond to the theme of green development, to complete the construction goals of beautiful Anshan, this paper will build the ecological forest system, the construction of the agricultural ecosystem, and the construction of the urban living environment system. Three dimensions to discuss the construction of Anshan ecological area.

### Keywords

Urban ecological area construction, problem analysis, countermeasures.

### 1. Introduction

The environment is people's livelihood, Castle Peak is beautiful, and the blue sky is also happiness. In April of last year, the city issued the "Program for the Construction of Da'anshan Ecological Area", which clearly defined the future green development orientation of Anshan City. The Party's Nineteenth Congress also emphasized the need to establish and improve the economic system of green and low carbon cycle development. These undoubtedly pointed out the direction of work development for the construction of our urban ecological area. As a typical resource-based heavy industrial city, Anshan is very different from other cities in terms of geographical environment and resource distribution. Anshan Iron & Steel, a pillar steel industry company, is located in the urban area, and the city is surrounded by many mines. surround. The exploitation of mineral resources has caused serious damage to the ecological environment. To do a good job in the construction of urban ecological areas, we must first solve the problem of pollution prevention in mining areas.

Looking ahead to 2018, in order to further implement the green water mountain is the development theme of Jinshan Yinshan, improve the environmental quality, and complete the goal of building a beautiful ecological Anshan, this paper will build from the ecological forest system, the construction of the agricultural ecosystem, and the construction of the urban living environment system. Dimensions to Explore the Construction of Anshan Ecological District.

### 2. Problem Analysis

#### 2.1 Ecological Forest System Construction

Ecological forests have the functions of regulating climate, conserving water resources, maintaining water and soil, and preventing wind and sand fixation, which mainly include shelter forests and special-purpose forests. The construction of ecological forests can effectively reduce the dust and water and soil erosion caused by mining. Although, in the past two years, the city has achieved certain scale benefits in ecological forest construction, the problems are still outstanding.

- (1) The quality of ecological forests is poor. It is mainly manifested in single tree species and few new varieties; the structure of closing mountains and forests is unreasonable, and mixed forests are few; the productivity of forests is low, and the proportion of mature forests is small; forest diseases, pests and rodents occur frequently.
- (2) Ecological forest management measures are not in place. The expected ecological, economic and social benefits cannot be stably played, and soil erosion is still serious. Soil and water loss causes the deterioration of the ecological environment and living conditions. It is a cause and effect cycle of economic development, which severely restricts and affects people's daily life.
- (3) There is a serious deviation in the ecological forest construction ideology, which ignores the ecological and social benefits of forestry.
- (4) The government and residents do not have a deep understanding of the awareness of the ecological environment and the concept of the rule of law.
- (5) The lack of a set of policies to protect the development of forestry ecological environment.

## 2.2 Agricultural Ecosystem Construction

While the agricultural and rural economy of our city has made great achievements, problems such as agricultural arable land pollution, ecosystem degradation, and lack of ecological carrying capacity have become increasingly prominent. The sustainable development of agriculture faces major challenges. Specifically:

- (1) The agricultural cultivated land pollution source still exists, the fertilizer application amount is still too large, the fertilizer structure is not reasonable; the pest control is still excessively dependent on chemical pesticides; the phenomenon of open burning of straw occurs from time to time, the comprehensive utilization of straw resources needs to be improved; pesticide use exceeds the standard Excessive pesticide residues in vegetables, fruits, etc. still exist; the waste management rate of livestock and poultry farms needs to be improved.
- (2) The decline of arable land quality, the thinning of black soil layer, acidification of soil, and the shallowness of the tillage layer are highlighted. The problem of soil desertification in the northwestern part of Taian County is still outstanding.
- (3) The institutional mechanism is not yet sound. Water and land and other resource asset management system mechanisms have not yet been established, and there is a lack of unified protection and restoration of landscape and forest lands. The incentive mechanism for recycling agricultural development is not perfect, and the development of planting and breeding industry is not coordinated, and the utilization rate of agricultural waste resources is low.
- (4) The number and types of natural wildlife are decreasing.

## 2.3 Construction of Urban Human Settlements Environment System

In the past two years, Anshan City has been actively building urban ecological areas. Although it has achieved certain achievements, it still faces many problems, such as serious environmental pollution, unreasonable industrial structure, etc., all of which are affecting in varying degrees. The effectiveness of the construction of Anshan urban ecological area has seriously affected people's healthy life. Among them, the ecological and environmental problems brought about by mining have spread over all aspects of urban human settlements.

### (1) Air Quality Problems

The air quality in the urban areas has improved slowly because of the large amount of exhaust from motor vehicles and the emission of large industrial waste gas around. In particular, most of the winter heating in urban areas still rely on boiler operations, and the elimination of small boilers is slow. Haze and haze often occur.

The ecological environment of the Anshan mine has been severely damaged. The mining of mineral resources has been lacking in effective control. Mine dumps still exist, and there is dust pollution in the material yard. In particular, the Antai Iron and Steel Company's major tailings reservoirs around

the city have once again encountered dusty days and windy days. The resulting damage has seriously affected the health of urban residents. Dust pollution has seriously damaged the surrounding ecological environment, resulting in dust pollution in most of the surrounding areas, and 1/4 of the cultivated land has completely lost its agricultural productivity.

#### (2) Problems of water pollution

Anshan has insufficient urban sewage treatment capacity, sewage treatment facilities are not perfect, and some sewage treatment plants exceed the standard. The specific problem is that the problem of uncontrolled discharge of domestic sewage in urban areas is prominent. The problem of industrial wastewater treatment and environmental violations are prominent.

Mining produces large amounts of waste slag and tailings. Due to random dumping and discharge, fine particles in tailings and waste slag will flow downstream along the surface to the surface and rivers in the rainy season. This will greatly increase the To reduce the ability of reservoirs to flood control and water storage, especially during the flood season, it is very prone to floods and floods. What is even more serious is that some of the waste slag and tailings contain large amounts of substances harmful to the human body and plants and animals. This will cause serious water pollution, including surface water and groundwater sources, and even loss of use of these water resources.

#### (3) Soil erosion, urban greening

Soil erosion mainly comes from mining sites, abandoned slag yards, rowed rock farms and Angang tailings bank. As most of the soil erosion caused by mining is extremely aggressive and severely corroded, the original landforms of these areas are almost completely destroyed, leaving only bare rocks and waste slag. They do not have plant growth conditions at all. The land surrounding the mine is completely Loss of production capacity, desertification, salinization, and lack of production, has been completely unable to restore governance. These have seriously threatened people's property safety issues.

#### (4) Insufficient green area in urban areas

Anshan has achieved remarkable results in the greening of the famous scenic spots and main roads, but the greening construction in other places is still not in place. For example, the planning and afforesting of small urban roads in the urban areas and the planning greening in the communities.

### 3. Countermeasures and Suggestions

In view of the ecological environment and urban economic development in Anshan City, this paper starts with the following six aspects and proposes the related strategies for the construction of Anshan City's urban ecological area.

#### 3.1 Cultivating the Concept of Ecological Civilization and Strengthening Citizen Participation

The construction of an urban ecological area in Anshan City requires the support and efforts of each and every person in the city. It is necessary to strengthen the education on ecological culture, guide the people to actively participate in environmental protection work, and promote broad participation of the general public to create an urban ecology in Anshan. The atmosphere of the co-construction and sharing of the districts.

##### (1) Establishing a Green Consumption Concept

The construction of urban ecological areas needs to establish the concept of green consumption and change the traditional mode of production and consumption at the expense of destroying the ecological environment and ecosystem. In the selection of consumer goods and consumables, we must choose green products, encourage and support clean production and green production, and form the best ideal mode for positive interaction between production and consumption.

##### (2) Promote green travel

In the construction of urban ecological areas, public transport is actively promoted, green traffic is developed, and citizens are encouraged to walk, ride or take buses. This will not only ensure the convenience of residents' lives, but also effectively protect the ecological environment.

(3) The government introduced incentive policies

The government should also issue some good incentive policies to encourage enterprises, non-governmental organizations and individuals to actively participate in the construction of an ecological city in Anshan, and effectively promote the construction process.

### **3.2 Strengthening Pollution Source Management**

(1) Strictly control the emission of industrial pollution, intensify inspection and on-line inspection of key pollution sources, and vigorously eliminate coal-fired boilers. Prepare high-standard standards for air quality within the time limit for Anshan City, and complete key steel and thermal power, cement, petrochemical, and other key industries and coal-fired boilers.

(2) Strengthen the construction of urban sewage and waste treatment facilities, further increase the capacity of urban sewage treatment, expand the scope of sewage collection, start the construction of a chemical industrial park sewage treatment plant, strengthen the operation supervision of the sewage treatment plant, and strive to achieve stable discharge standards.

(3) Industrial and mining environment improvement. It is necessary to perpetuate the idea of recycling economy in the whole process of production of mineral resources and eliminate random waste dumping.

(4) Utilization of resources and energy conservation. We will vigorously promote recycling and increase the use of clean energy to ensure that the total amount of major pollutants is substantially reduced and the number of heavy pollution days is reduced.

(5) Internal inspections should be conducted for problems where production, sewage, and other supervision are not in place. If enforcement is in place, punishment and rectification should be made public.

### **3.3 Promote the Development and Protection of Agricultural Resources**

(1) Development of agro-ecological industry chain

Establish a recycling eco-industrial chain with the core of "planting - organic feed industry - livestock and poultry breeding - organic fertilizer bio-fertilizer industry - planting industry" to make the best use of it.

(2) Reduce chemical use and eliminate drug residues

Reducing the use of chemicals can greatly increase the food safety of major crops such as vegetables and food, strengthen quality certification, and help build high-quality brands and enjoy brand benefits.

(3) Reuse straw

Straw can be used as animal feed ingredients after processing; returning straw can not only increase the soil's fertilizer, but also avoid the air pollution caused by previous burning.

### **3.4 Carry out Large-scale Greening**

(1) Actively guide the search for third-party governance

Actively guide the search for third-party governance methods, and guide social capital, resources, and asset factors to form a green industry system. Scientific management of forest lands, scientific planning of the distribution pattern of forest lands, improvement of the functional structure of forest lands, and giving full play to its ecological role in improving the ecological environment and resisting natural disasters.

(2) Consolidate the ecological construction of forestry cities

Greening barren hills, carrying out ecological reclamation and afforestation management work, strengthening the ecological restoration of mine rock-reserve fields and tailings ponds, strengthening

the management and protection of closed-pit mines, and rationally protecting the existing woodland vegetation.

(3) Promote ecological restoration of river wetlands. We will carry out comprehensive river rehabilitation and improve the quality of the water environment.

(4) Strengthen the restoration and restoration of ecologically damaged areas such as the loss of water and damaged mountains, restore the natural ecological functions of the region, and speed up the construction of a natural ecological system based on forest ecosystems.

(5) Implementing road landscape engineering and constructing urban greenland ecological network. Make full use of the original landforms, and use different forms of green plants such as trees, flowers and grasses to form beautiful decorations such as forests, green spaces, squares, and parks, and focus on forming "micro landscapes" with high and low undulations, effective savings, rich tree species, and distinct layers. And the ecological landscape corridor makes it an important symbol of the city.

### **3.5 Promoting New Ecological Development Mode**

As a resource-based heavy industrial city, Anshan should transform its economic development approach to closely integrate industrial layout adjustment, economic structure optimization, and environmental protection. Strictly limit all kinds of resource consumption standards, strictly control the amount of pollutants generated, and vigorously cultivate and develop green and ecological industries and eco-agriculture to form a virtuous circle development model for saving energy resources and protecting the ecological environment.

#### **(1) Development of Ecological Industry**

Build ecological industrial clusters, transform production processes, and promote the optimal use of traditional industries. Focus on the clean production and energy conservation construction of Anshan Iron and Steel Group, adjust the product structure, and summarize the advanced experience of resource recycling. As soon as possible to improve the electricity industry clean production and waste conversion and utilization of supporting construction, and achieve zero emissions.

#### **(2) Development of resource recovery, reprocessing and reuse industries**

We should learn from Japan's advanced experience in resource recycling, recycling, and reuse. The storage, discarding and disposal of wastes should be classified one by one to facilitate the reprocessing and processing of resources. Establish waste separation and recycling, treatment system and harmless waste harmless treatment plant - waste materials and renewable resources trading market, Promote the development of the venous industry and promote the recycling management of resources.

#### **(3) Developing Ecological Services**

Develop various forms of eco-services and promote exchanges and openness and green consumption. Extend species of aquaculture, a tourism industry, a service industry chain, with tourism as the main service object, and organic farming, forestry, animal husbandry and fishery products as the main production purposes. It is necessary to effectively manage the construction and production of wild resources, catering, accommodation, etc., strictly control domestic garbage and domestic sewage, and prevent damage to the ecological environment.

### **3.6 Improve the Operational Mechanism and Legal Safeguard System of Eco-city Construction**

The construction of urban ecological areas is a complex social project. It has close relationships with various groups of society. Therefore, in the process of promoting the construction of ecological cities, it is necessary to take government forces as the leading factor, and to give full play to the main bodies of enterprises and the masses. The role of mobilization of their enthusiasm. The government itself must also constantly improve the management system, enhance the coordination ability of the ministry, and promote the construction of an eco-city in Anshan City with all the groups contributing to the city's efforts.

At present, the policies, laws and regulations in the field of ecological civilization are still not perfect. Therefore, in order to promote the construction of ecological cities, more effective and effective local policies and regulations should be formulated, and the management of the legalization of ecological cities should be continuously strengthened to manage the urban ecological areas. Into the legal track.

The construction of urban ecological areas is not an overnight task, but it is a long-term and complicated systematic project. It cannot rely solely on the strength of the government and requires the participation of various groups of organizations and the general public.

Strengthening the construction of urban ecological areas is an inevitable way to speed up the transformation of industrial structure. It is a strategic choice for building beautiful Anshan, and it is also a major livelihood project to improve the urban human settlement environment and improve the quality of life of people. After ecological construction in the past two years, the city has successfully started the transformation and development of the city.

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