

# **Building a Humanism Circumstance of Sustainable Using of Water and Soil Resources**

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**Abstract:** Soil and water resources is the dependence for people to live and development, and the essential component of the ecosystem. In most developing countries (including China), the soil and water losses was very serious, and was strongly restricted the sustainable economical development in these countries. In the economy construction, the resources and environment was aggravate destroyed by artificial unreasonable economical activities such as cultivating in steep land, abusing farmland, demolishing the vegetation arbitrarily, dumping abandon dust and clinker to river, lake and reservoir. It resulted in the ecosystem more deteriorated, and affected the people's living and development. Therefore, a lot of preventive and curing objectives and countermeasure was constituted in every country to keep the degeneration trend of ecosystem within limits.

**Keywords:** humanism, circumstance, sustainable use, water and soil resources

## **1 Stratagem adjustment and preventive & curing idea and for soil and water losses**

In most countries, lawmaking and law-execute was emphasized to beaten ruined action. It is a suppress measure, and it is a passive stratagem. It neglected the preventive actions in advance, the consciousness and strength of collectivity, the important affection of preserving ecosystem by humanism circumstance. It is impossible to defend the damages effectively. It is occurred as a result that administration by one-side while destruction by multi-side, ruining after curing, even more ruining as the same time of curing. So the strategy study on prevention and curing was prompted that turning passive obliging to active defending. We believe that building a humanism circumstance of prevention and curing soil & water losses is the basis and assurance to achieve the sustainable development, and it would get twice the result with half the effort

## **2 Building the humanism circumstance of prevention and curing soil & water losses**

### **2.1 Enhancing the quality of populace, especially the environmental consciousness of the community**

In the third world (including China), there are more excessive people relatively while the integral quality of the public is no high. They paid more attention to extort from the nature in productive activities to get more economical benefit, and was not aware of the impact of the environment which could do fatal harm to our sustainable development. The best way to solve the problem is to enhance the consciousness of people so that preserving water and soil resources can become the self-conscious actions for people. The main measure as follows:

#### **2.1.1 Regular propagandas and instructions in public news agency**

The purpose and urgency of the protection of environment should be pay close attention by the television, broadcast, newspaper and publications. Self-conscious to protect the survive circumstance should be established. In the nowadays information era, the Internet resources can be more exploited to expand the propagandist scale and to accelerate the quickness.

### **2.1.2 Establishing the environmental consciousness for adolescent**

Soil and water losses and conservation can be added to the textbooks for elementary and middle school. Students can inspect the loss site, take part in the ecosystem reconstruction, and watch the science and educational film about it to form a new thinking concept.

### **2.1.3 The support of advanced education**

One of the most important assurable factor is the training of ability person to build a humanism circumstance for prevention and curing soil and water losses. In those institute such as water conservancy, forestry, agricultural, natural resources, the lessons of soil and water conservation can be expanded to more students. Further more, the trained person was to be teacher more than as staff, so the human resources for construction ecosystem can be long standing.

## **2.2 Enhancing the public's consciousness to preserve their rights especially environmental rights**

### **2.2.1 Guaranteed rights of the surviving environmental quality**

With the improvement of living quality, the community's demand and pursuit of the living circumstance was even more high and high. In the legal rights and interests, the knowing right, the supervision right, the assurance right would be raised and defined. No matter the town inhabitant, peasant, cadre, employee or the private, has the same rights.

### **2.2.2 Impeaching and supervision rights to irregularity affairs**

The understanding of their rights was more and more clear with the raising demand of environment. The community would impeach and report those construction activities that caused the soil and water losses, such as cultivation in steep land, over-depasturing, and water works. For example, the Impeaching of soil and water losses was enrolled in calling of police (110) in Sanming City, Fujian Province.

### **2.2.3 Public participation, propaganda, education, and administration rights**

Each citizen has the right to protect the ecosystem, and to participate in the ecosystem construction. In the site inspecting, effect estimating of the integrative management or the preventive supervision, the public can be involved. They can do a lot of works in propaganda and training jobs. Every government and the soil and water conservation institution should support the citizen to participate.

## **2.3 The restraining and control for construct enterprise**

The main reason of the continued degeneration of the ecosystem is the un-reasonable economical activities, in which the building of railway, highway and electric power etc. was the most outstanding. In future, besides the administration according to law, the restraining and control for construct enterprise was to be done in the construction system, so active prevention and curing the soil and water losses can be carried out.

### **2.3.1 The duty and rights of protecting environments for legal person**

According to the Chinese law, each person and unit has the duty to protect soil and water resources and to avoid the losses. In the feasibility stage of a project, the legal person's duty to protect soil and water resources and to avoid the losses was defined. The legal person was in charge of the soil and water losses in the construction and production. It is the legal person that raise the specific demand to the relative unit and the contractor to carry out the specific measure.

### **2.3.2 The duty of design, construction and supervisor**

The duty and demand of design. the design institute and the designer must carry out the soil and water conservation engineering design, construction files and drawings on the basis of authorized water and soil conservation programme in order to reduce the soil and water losses and to be in good motion.

The duty and demand of construction. The legal person should raise the specific demand to the contractor to carry out the duty and load of prevention and curing the soil and water losses in the bidding

script and the construction contract. The prevention and curing duty should be declared for each construction unit, working group and worker in every stage including preparing stage, constructing procedure and the afforesting stage after termination.

The duty and demand of Supervision. It is directly correlated with supervision that the quality of the works of soil and water conservation, schedule, and approbation of the use of investment. In the construction project, the supervision of the soil and water conservation engineering should be conducted with special aptitude.

### **2.3.3 The check and accept both of project and environment**

It is claimed in China that the design, construction, and putting into production of the soil and water conservation engineering must keep pace with the principal part in order to ensure the execution of soil and water conservation works. All the water conservancy department should fulfil his duty to supervise and urge the construction legal person to conduct the soil and water conservation works in construction, and check the soil and water measures when completion.

## **2.4 The Co-process between farming and ecosystem preserving**

In the third world and China, the main reason of the soil and water conservation is cultivation, especially cultivating in steep land, demolishing the vegetation, etc. The vicious spiral of the more poor the more cultivation and the more cultivation the more poor has occurred in a lot of area. To solve this problem, a humanism circumstance of the prevention and curing the soil and water losses has to be built, and to do as follows:

### **2.4.1 To adjust the construction and pattern of manufacture by science**

The root source that make the soil and water losses is the unreasonable structure of land-use. The peasant opened up wasteland in large area to pursue or keeping the profit, so a lot of vegetation was ruined. So the enhancing the efficiency and benefit of agriculture, and promotion the returning cultivation to forest and grass can rely on the adjusting of land-use structure and the changing the manufacture pattern.

### **2.4.2 Introducing, demonstrating and extending of the new high-tech of agriculture**

The prevention and curing soil and water losses of the peasant's own accord can not come true without the participation of the farmhouses. It is very useful that some demonstrating engineering in different patterns were constructed.

### **2.4.3 Devoting into integrate curing by profit**

The curing of largest farmland is relied on the peasants and farmhouses. To encourage the peasants to cure the farmland, some marketing measure can be used, such as auction of the using rights of barren areas, contracting, joint-stock company, etc.

## **2.5 Supporting advice of government**

To build a humanism circumstance of prevent the soil and water losses, the support advice is needed. In the near future, the follows can be done:

### **2.5.1 Protecting the public ecosystem rights by law-making**

With the developing of the economical level in Chinese, the demand of public ecosystem rights was more high. It is necessary to revise and perfect the relative laws, to define clearly the rights and duty. Those should be punished who aggrieved the public ecosystem.

### **2.5.2 Encouraging the participation of social and stratum**

It is needed that all the citizen to take part in the building of humanism circumstance. The nation and all the government should encourage the enterprise and people to participated the protection of soil and water resources and the ecosystem.

### **2.5.3 The guidance of building the humanism circumstance**

In the building the humanism circumstance of soil and water conservation, the government should do some guidance, organize and harmonize the relationships between each behalf, and force it developed rapidly.

## **3 International corporation**

### **3.1 The introducing, demonstrating and extending of the new high-tech of agriculture**

To build a humanism circumstance of prevention and curing the soil and water losses in rural areas, the support of advanced and high-tech agriculture is needed, the extending of some demonstrated area can be also conducted.

### **3.2 The learning and applying of high-tech of watershed curing**

The more advanced technology (such as curing the bare limestone, vegetation recovery in steep slope, vegetation regeneration in sand land), equipment and material is required in China to cure the soil and water losses. It can be accelerated through international cooperation.

### **3.3 The learning and instructed of each farmer, employee and social member**

In China, the training and education is very weighty with a long-term. The international organizations and developed countries was able to support and help China and the third world in building a outdoors classroom, editing science dissemination books, organizing regional training, inspecting and practice abroad, technology study and interchange, etc.

### **3.4 The establishing of preserve fund of soil and water resources in the third world**

A lot of people have to participate the protecting business of soil and water resources and ecosystem. To do this, a mount of funds is needed. It is recommended that a special preserving fund of soil and water resources was to be sponsored by some international organizations or countries.

The main supporting projects maybe public's participation, voluntary activity, and training of science popularization or human resources.

## **Reference**

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