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Social Powers Exploiting and Regulating the Resources of the "Four Wastes" is a Good Way for the Leap-Over Development of Water and Soil Conservation

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Abstract: The government of Panzhihua attracted social investment to exploit the resources of the "four wastes", regulate water loss and soil erosion, and set up "green enterprises" through various ways like making favorable polices, perfecting laws and regulations, supporting social powers to exploit and regulate the "four wastes", inviting cooperation from nonstate-owned enterprises, individual personnels, company peasant households, and joint peasant households. The exploiters not only benefited themselves, but provided employment for the rural surplus labor, settled the responsibility issue of managing and protecting, and encouraged the peasants to contract to bring water loss and soil erosion under control. Therefore, the government found a good way for the leap-over development of water and soil conservation.

Keywords: social powers, water and soil conservation, the "four wastes", leap-over development

The "four wastes" area that can be exploited covers 193,000 hectare in panzhihua and takes 26% of the total area of this city. The project of development and regulation began in 1995. Nonstate-owned enterprises, like Shengshi Joint Company, Zhongheng Joint Company, Tianxiang Joint Company, and Meiziqing Ecological Agricultural Exploration Company in the Waste District first invested to exploit and regulate the waste mountains and slopes under lease contracts in our city. They received economic benefit from planting subtropical fruits like mangoes, Australian nuts, and bananas. To follow their suit, many rural individual personnels, governmental in situations and enterprises; urban off-duty personnels took part in this project, and a lot of social investment were drawn into the regulation of water loss and soil erosion. Thus, the "four wastes" became a key point for increase in agricultural economy in this city. At the same time, money got from the lease and auction of the "four wastes" was put into the rural infrastructure, and the basis status of agriculture was thus strengthened. The economic and social benefit was remarkable. Up to now, there are over 200 individual enterprises to regulate the wastes, and the management right of 350 hectare area will be kept by nonstate-owned enterprises for 30 years. The area contracted by the rural individual households to develop covers 5,000 hectare. About 120 million yuan has been drawn into this project. Subtropical fruits of high quality reach 150 million kilogram, achieving 200 million yuan each year. A good way has been found for the leap-over development of Water and Soil conservation.

1 Main experiences and practices

1.1 Policy-supporting

Panzhihua city is richly endowed by nature with light and heat energies and rich, exploitable "four wastes" soil resources. The municipal Party Committee and the municipal government pay much attention and the municipal government pay much attention to the development of the "four wastes" and the project of changing slopes into terraced fields, thus promote the development of agricultural

industrialization, accelerate the speed from being poor to getting rich in the countryside, and increase urban supplies to enrich markets. As early as in 1994, the munipal government made some relevant policies concerning regulating and exploiting waste mountains and slopes. The main policies are the following: (1) Favorable policies as "the one who regulates benefits" and "the one who exploits takes control" are put into practice; (2) The government sells the management right of land for 30 (or 50) years at favorable prices, with the right inheritable; (3) The government makes use of the lease payment and extra financial subsidies to solve the problem of hydraulic infrastructure and provide water and power; (4) The government subsidizes those enterprises which exploit and regulate the wastes, and help to get financial support from the upper departments concerned according to the enterprises' efforts involved; (5) Agriculture specialties are exempt from taxes within 5 years and the taxes will be paid according to the beneficial results 5 years later; (6) The government protects the benefits of those enterprises and firmly punishes those offenders who hurt the benefits of those enterprises that exploit and regulate the wastes. Favorable policies and good public order provide good environment for exploiting and regulating the "four wastes". After the release of the State Council's No.23 papers "On Exploiting and Regulating the rural 'Four Wastes' and Farther Strengthening Water and Soil Conservation", the maniacal government transferred those relevant policies, regulations and papers from the State Council and the provincial government in order to publicize the project of exploiting and regulating the "four wastes" and to encourage lease and contracted management. Relevant reports appeared on the newspapers, radio broadcasting and TV programmers, which further encouraged the project and supported those relevant enterprises. Thus, in exploiting and utilizing the "four wastes", those enterprises not only liberated their minds and broadened their visions, but also strictly followed our national policies and laws as well.

1.2 Specific practices

In the autumn of 1995, because of the proper policies and their wide publicities, in each county and district, there appeared an active movement joined by nonstate-owned enterprises, individual personnels, off-duty workers. All of them devoted to exploiting and regulating the "four wastes" and establishing "green enterprises"; (1) Chengdu-based Shengshi Joint Company, business and trade oriented, bought 100 hectare of waste mountains in Mahaida ,Renhe in 1997, and dug fish-scale pits and terraced fields to plant 50,000 high-quality mangoes. The company invested 1 million yuan altogether and successfully brought 1 km² of water and soil erosion area under control; (2) Chengdu-based Zhongheng Joint Company, also business and trade oriented, bought 50 hectare of waste mountains and slopes in Zhongfa ,Renhe in 1998. It directly invested over 2 million yuan, changing the slopes into terraced fields to plant Australian nuts; (3) Chengdu-based Tianxiang Ecological Exploration Company, also business and trade oriented, bought 300 hectare of waste mountains in Jinjiang Town, Renhe in 1997, to establish a subtropical botanical garden. Now it has invested over 10 million yuan to change the former slopes into 50 hectare of terraced fields in the garden, and make the waste mountains into fish-scale pits to plant trees, including over 20kinds of subtropical fruits and flowers. There are still some individual enterprise owners who joined in the project: (1) Luo-Zeping, a peasant from the No.9 Group in Renhe Town, bought 20 hectare of waste mountains and slopes in 1998. He invested 1.2 million yuan to change the slopes into terraced fields, make the waste mountains into fish-scale pits, and plant 12,000 high-quality fruit trees like longans, mangoes, and lychees; (2) Yang-Jingui, an individual enterprise owner, bought 35 hectare of exploited terraced fields in Renhe Town in 1999, to plant bananas, with private investment of 1.4 million yuan; (3) Ten people, including Zhu-Qunguo, an off-duty worker from Miyi Country, established Xinhe Fruit Exploration Company. They bought 40 hectare of waste mountains and slopes in Xinhe and invested 1.2 million yuan to change slopes into terraced fields to plant fruit trees like mangoes, longans, lychees and loquats; (4) Dao Hong ,an official from Honge ,Yanbian County, contracted to exploit and regulate 50hectare of waste mountains and planted high-quality fruits like oranges ,mangoes ,longans and lychees; (5) Han-Daxiang, a rich peasant from the west District, contracted to exploit and regulate 100 hectare of waste mountains ,planted late-maturing mangoes ,lychees ,longans and other fruits ,and cultivated high-quality nursery stocks; (6) Liu Xin, a construction-oriented boss, contracted to regulate 40 hectare of waste mountains to plant Taiwan jujube trees ,mangoes ,etc . And cultivate nursery stocks; (7) Meiziqing

Ecological Agricultural Exploration Company in the west District practiced the regulating model of "Company peasant households (The company makes overall planning ,builds water conservancy facilities ,and provides water and power . After regulating the area, the company makes contracts with peasants and lets them do the management, then the company and the peasants share their benefits)."The company exploited and regulated 200 hectare of waste mountains and slopes .Due to the favorable governmental policies, led by those big enterprises and the model of "Company peasant households", an active movement grous vigorously in our city with nonstate-owned enterprises, individual personnels, joint peasants buying or contracting for waste mountains and slopes, and changing slopes into terraced fields to regulate water loss and soil erosion.

2 The characteristics of exploiting and regulating the "four wastes" by social powers

2.1 Attracting social investment, quickening the step to prevent water loss and soil erosion

Through favorable policies, about 120 million yuan has been drawn from social investment to exploit the "four wastes" and regulate water loss and soil erosion. It is 12 times as much as the corresponding investment put by the government to regulate water loss and soil erosion. With the exploitation and regulation of the "four wastes", 23,000 hectare of water-keeping trees, 5,000 hectare of economic fruit trees, 10,000 hectare of grass has appeared, and 200,000 hectare has been closed to be regulated, and the terraced fields Changed from slopes reach 20,000 hectare. The "four wastes" are mostly thinly-soiled, with little vegetation and serious water loss and soil erosion. In order to get concentrated production from exploiters to voluntarily invest large amount of money to renovate the local surroundings, plant trees, refrain the rainfall draw water to build roads, regulate water loss and soil erosion, and improve the basic conditions. Nowadays ,several years after the relevant enterprises' management through contracts ,leases ,or joint stocks ,most of the "four wastes" area has become tree-covered mountains ,taking a new look of being green. The reformed terraced fields which conserve soil, water and fertilizer, have steadily provided high production and greatly improved the local natural scenery and climate. The fields have also played an important role in refraining, keeping and making use of the rainfall thus effectively weakened water loss and soil erosion caused by the surface runoff.

2.2 Providing job employment for surplus labor and off-duty workers

To develop the "four wastes" can not only take advantage of the surplus laborers in rural areas, but provide employment for the unemployed and the surplus workers in urban areas. According to the statistics, it has attracted about 25,000 the surplus laborers in rural area, the unemployed and the surplus workers

2.3 It's the best pattern to strengthen the achievements

Some funds from the society have been used to develop the "four wastes" and it has solved the problems of centralized control, scope control, part control and continuous control. The investors will put more money into the development, which will help to guarantee the achievements, and strengthen the administration. In order to insure the continuity of yielding on the development of the "four wastes" which has already made some elementary achievements, the investors will take some money from the profit to keep on developing, and it will cycle in a healthy way. For example, Dao Hong, a leader of Hongge town, Yanbian county, spends 1,800 workday and more than 200,000 yuan on production and management.

2.4 It's a new way to increase the economy in rural areas

A remarkable profit has been made in the "four wastes" after being developed, and it's a new increase in rural economy, because of the preferential policy, money insurance, the investor's free idea, and the activity and creativity of the self-employed laborers and the "company+peasant-households". The

income of the peasants in the developing area has increased a lot, and the investors and the companies have made a great profit. For example, the trees planted by the Zhong Hen Group Company in the "four wastes" areas have born fruit; Yang Jin'gui, the self-employed laborers, has an annual net income more than 600,000 yuan; Xing He Fruit Ltd. Corp. In Miyi, 200,000 yuan; Dao Hong, the "king of fruit" in Yanbian, 400,000 yuan, and Liu Xin, the manager of a private enterprise, 200,000 yuan.

2.5 It has a remarkable exemplary role

The great profit made by the investors and the "company+peasant" in the "four wastes" areas has encouraged the nearby peasants to take part in the development. The wastes, developed by Dao Hong at Pugeda village, Hongge town, Yanbian county, are covered with flowers and fruit trees. Now he can get more annual net income with less investment, higher profit and less risk than those who do transportation or build factories. Following his example, more than 300 families in his village have joined in developing the "four wastes" area. Now in Pugeda village, the mountains turn green, and water becomes clean. Before 1990s, this village is the poorest one, but now, it's a well-know rich one in Panzhihua city. The annual net income on average person is more than 3,500, and most families have bought mini-bus, motorcycle or tractor. Dao Hong, the leader of this village has been entitled "the king of fruit" by Panzhihua government.

3 The problems, which should be taken seriously

3.1 We should strengthen the leadership

It's important to strengthen the leadership because the investor's development of the "four wastes" involves many offices and strong policies. For one thing, we should teach the cadres at the basic level in rural areas to change the ideas and working methods, to know that the investors' development of the "four wastes" and the change of mountain slopes into terrace can make the villages richer, build a good ecology environment in rural areas, make good use of the funds from society, and speed up avoiding the loss of water and erosion of soil. Only after the cadres at the basic level in rural areas have changed the ideas, another upsurge of developing the "four wastes" can be set off. For another, we should teach the peasants that to develop the "four wastes" is to change the ecological environment and production condition, to make the peasant rich, to benefit the descendants, and to make our own life glorious.

3.2 The government should be in charge of the construction of the water conservancy facility

There are high mountains and steep slopes in Panzhihua. It's on the southern subtropical zone, and has the lowest sea level 937 meters, the highest, 4,195 meters, and 2,700 hours' sunshine. The temperature is high here, and there is a great difference of it. For many years the change of the average temperature is between 12°C to 20.3°C as the sea level increases, the change of the average rainfall, 700mm to 1,200mm, and the water evaporated decreases about 2,500mm to 2,000mm. There are storms among June to September. The rainfall is less than 30mm among November to next May. Because of the unique climate, the difference between the rainy season and dry season is distinct, drought in spring and winter, flood in summer and autumn. Some investors ignore building the water conservancy facility in developing the "four wastes", and this sets back making more achievements. Take the Agricultural Science Academy of Sichuan Province as an example. They have bought barren hills 50 hectares at Renhe Town. Because they can't solve the irrigation problem, the mango trees they planted are too old to bear fruit now. Thus, in order to make profit normally, we should also build the water conservancy facility, especially the source of water, as we develop the "four wastes". When developing the "four wastes", we should build the water conservancy facility to insure the irrigation first. The administration in charge of water should make no approval of the plan which can't solve the problem of water in the "four wastes". Otherwise, it may not only dampen the investors' enthusiasm, but make the land desert. To build the water conservancy facility involves the whole society, and need a large amount of money, and the investors can't do these by themselves. Therefore, the government should make unified plan to build the water conservancy facility, especially the source of water.

3.3 The administration in charge of water and soil conservation should provide technical assistance

The administration in charge of water and soil conservation should free itself from the old ideas and provide technical assistance for the investors on its own initiative to help them design the water conservancy facility. On one hand, we should spend manpower, material resources and the financial resources on the most important thing, and use less money, but do more things. On the other hand, we should make the water system, road and planting system reasonable in the "four wastes", and insure the irrigation in dry season, storing floodwater in flood season, not only to conserve water and soil, but to make a good profit.

3.4 Finance support

Finance should ensure the large household starting on control and exploitation of "Four Wastes". Fiance shall be supplied by the government according to the situation, due to needing a large amount of investment but the limited investment of the large households. The government should give more financial supply to those who make an-out effort than those who work less by discount or lower interest loans in proportion as well.

3.5 Strengthen publicity and extend influence

As newborn things, the large household controlling and developing "Four Wastes" need to be understood and supported by the whole society. They have lots of experiences worthy of concluding and declaring: (1) publicizing their positive contribution towards ecology environment; (2) disseminating their spirit of self-reliance and hard struggle as well as the style of becoming rich through sweat and toil; (3) publicizing their advanced management experience of controlling and exploitation. (4) disseminating the ideas of opening blazing new trails or the should offer an easy social circumstances by giving wide publicity, guiding, and creating a favorable atmosphere in the media to the large households for their leading to conserve water and prevent soil erosion and improve ecology environment.

3.6 Formulate and improve preferential policies

The experiences of the large households and "enterprise+farm-household" patterns are worth spreading, such as, clear and definite property right, nice system, and scientific management, advanced technology. A series of preferential policies need continuously improving and formulating. The government should encourage the large households to devote to conserving water and preventing soil erosion, furthermore, the government should introduce more social finance into controlling soil erosion.

- (1) State finance should formulate appropriate policy so as to award to the large households who achieve a high degree of performance according to their controlling scale and inverstment figures.
- (2) The government should carry out a system affirming in legal for the achievement of the exploitation of the large households.
- (3) Water and Soil Conservation is a class-A project. The bank should grant interest free or lower interest to them.
- (4) Agiculture and forest special products tax shall be returned to the large households so that they may invest more money in the project, and speed up the pace of the project.