

THOUGHTS ON CONSTRUCTING THE DEMONSTRATING AREAS OF THE ECOLOGICAL REBUILDING AND ECONOMIC SUSTAINABLE DEVELOPMENT IN HEXI REGION

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ABSTRACT: Based on the field investigations, this paper analyzes systematically the achievements and problems of constructing the demonstrating areas of the ecological rebuilding and economic sustainable development in Hexi, Gansu Province, and then the thoughts on constructing the demonstrating areas are brought forward. It is considered that all kinds of ecological demonstrating areas should be merged in order to construct large-scale characterized demonstrating areas which go beyond the district. In other words, in Hexi Region, Zhangye District should be constructed as the largest ecoagriculture demonstrating area of high technology; Wuwei District should be constructed as the largest ecological demonstrating area of agricultural comprehensive exploitation; JiuJia District, which is the shortened form of Jiuquan and Jiayuguan, should be constructed as the largest ecotourism demonstrating area; and Jinchang City should be constructed as the largest ecoindustry demonstrating area. At the same time, the constructing pattern should be selected according to the actual circumstances; science and technology should be applied to construct the demonstrating areas and accelerate the industrialization in the big market. Additionally, it is important to smooth the constructing system and implement the flexible and efficacious running mechanism, and it is suggested that the committee should be organized to administer the ecological demonstrating areas in Hexi Region.

KEY WORDS : ecological rebuilding; economic sustainable development; demonstrating areas; constructing thoughts; Hexi Region

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1 THE MOTIVE, RUNNING MECHANISM AND FUNCTIONS OF CONSTRUCTING THE DEMONSTRATING AREAS

The demonstrating area of regional ecological rebuilding and economic sustainable development (called “demonstrating area” for short in the following) belongs to a comprehensive system of district production which works efficiently and concordantly. This system takes the principles of regional economics and ecological economics as its guidance, considers the assemblage and installation of science and technology and the new trails of a region as its pivot, and recognizes ecological rebuilding, resources economization, economic development, environmental beautification and social advance as its united target. Demonstrating area has many advantages such as small scope of district, powerful ability

of brazing new trails, high content of science and technology, big market of production, excellent equipments, flexible mechanism, and so on. It is a new kind of demonstrating model concerning the development of modern industry and agriculture. Besides, it is also a practical model which can be operated to promote regional sustainable development(REN, 1999). In Hexi Region, Gansu Province, all kinds of demonstrating areas have been constructed. The main motive is to apply advanced and practical technology comprehensively, accelerate the popularization of scientific and technological integrations, harmonize the relationship between ecological construction and economic development, carry out the economic growth pattern of intensive type, explore the intensive management model suitable to the actual circumstances, and seek the macroscopic management means suitable to market economy. Ac-

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According to this, some principles should be followed to construct the demonstrating areas of Hexi Region, such as the principle of “high starting point—high standard—high benefit”, the principle of ecological priority and sustainable development, the principle of suiting measures to local conditions and specializing the management, the principle of doing one’s best and constructing few but excellent, and so on. Based on these principles, the running mechanism should be such a benign circle as “introduction and absorption—assembly and installation of technology—integrated experiments—appraisal and commentary—comprehensive demonstration—blazing new trails collectively—pioneering popularization—service at the whole course—getting benefits—supporting the demonstrating area by itself—introduction and absorption”. According to this running mechanism, some main functions that can be described by “swallow—digest and absorb—spit—serve at the whole course” should be given free rein to. First, more technology, funds, information, persons of talent, etc. should be introduced from other places. Secondly, they should be absorbed and changed into advanced productive force by integrated experiments. Thirdly, this method can be popularized outside the demonstrating area. Lastly, the service at the whole course should be improved (Fig. 1).

2 FEATURES OF THE PRESENT CONDITIONS AND MAIN PROBLEMS CONCERNING THE CONSTRUCTION OF THE DEMONSTRATING AREAS

In order to change economic growth pattern from the roughwrought type to the intensive type, and change traditional agriculture into modern agriculture, since 1990, Hexi Region, taking ecological rebuilding and economic development as her dual targets, has set up a batch of demonstrating areas of different features and scales in different districts, where there are gravel deserts, sandy beaches or oasis, where ecological environment has been seriously destroyed, or where agriculture and animal husbandry mingle. And striking results have been obtained.

2.1 Features of the Present Conditions Concerning the Construction of the Demonstrating Areas

(1) The demonstrating areas are of many kinds, and the demonstrating substances are comprehensive, concerning each economic and social department.

According to incomplete investigation and statistic, Hexi Region has about 251 ecological demonstrating

areas of different kinds and levels, including the demonstrating areas that are being constructed (Table 1). Among all kinds of ecological demonstrating areas, over 56% are ecoagriculture demonstrating areas. They have the largest quantity. Then ecoindustry and ecotourism demonstrating areas take the second. From the distribution of all kinds of industrial demonstrating areas, it can be seen that Wuwei District has the most. The quantity is 48 and the proportion is 27.43%. Jiuquan District takes the second. The quantity is 45 and the proportion is 25.71%. Zhangye District takes the third. The quantity is 40 and the proportion is 22.86%. Jinchang and Jiayuguan have less industrial demonstrating areas, and the proportion of them amounts to 24%. From the demonstrating substances of all kinds of demonstrating areas, it can be seen that they concern each industrial department of national economy, such as agriculture, forestry, animal husbandry, fishery, industry, tourism, and so on. The substances include the following such as the exploitation and utilization of new advanced agricultural technology, agricultural exploitation of high efficiency, economical irrigation, seepage irrigation, drop irrigation, sprinkle irrigation, warm shed cultivation, sunshine greenhouse, seeds breeding, jujube industry, animal husbandry of high efficiency, unification of “product—machining—sale”, installation agriculture, comprehensive exploitation of sand industry, complete field sets, land arrangement, exploitation of edible fungi, exploitation of grass industry, special animal breeding, big attached sheds, fighting against calamities and protecting animals, new and famous economic forest, webs of ecological forest, green zones around city, attracting hawks to kill mice, top quality orchards, ecoindustry, cooperation of town and township enterprises in East China and West China, the development which doesn’t belong to public ownership, ecological factories of garden type, industry areas, ecological and natural preservation, ecotourism, agricultural tourism, ecological cities and towns, ecological economy of courtyard, ecological village, ecological residence, and so on. The comprehensive demonstrating substances contain demonstration, popularization and utilization, which include technology, breed, model, ownership, ecology, economy, city, community and resources.

(2) Ecological rebuilding is generally regarded as the gap of constructing the demonstrating areas and the safety ensure of economic sustainable development.

From constructions of all kinds of demonstrating areas, it can be seen that almost all demonstrating areas take ecological rebuilding and ecological environmental

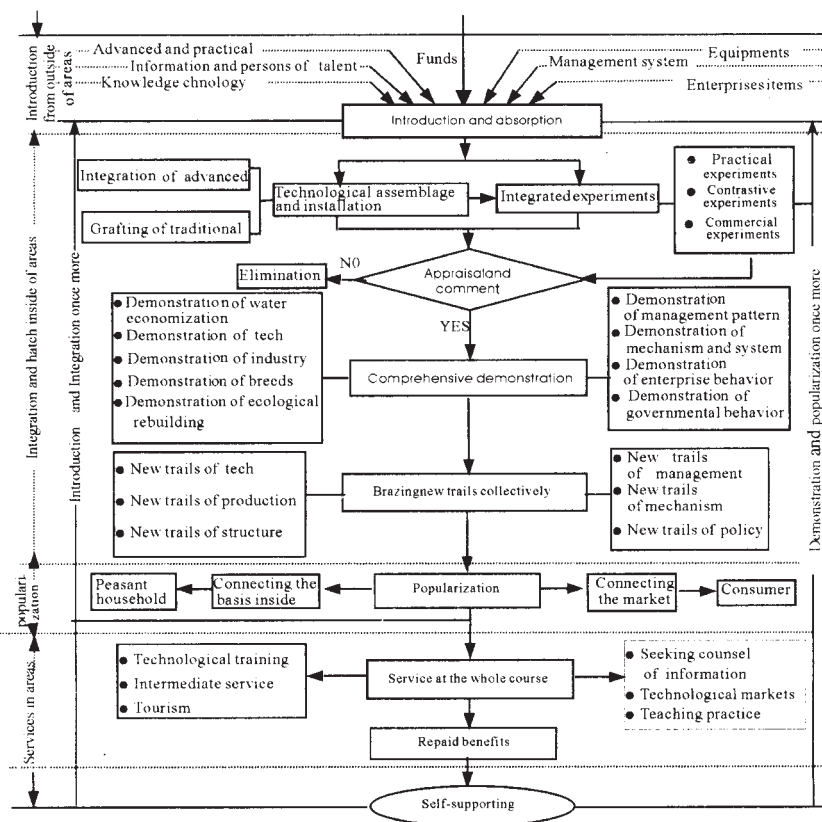


Fig. 1 The sketch map of running mechanism of demonstration area of ecological reconstruction and sustainable economic development in Hexi region

Table 1 The statistics on the quantity of all kinds of demonstrating areas

Prefecture Name	A	B	C	D	E	F	G	Sum
Wuwei Prefecture	11	9	9	11	4	4	35	83
Zhangye Prefecture	16	4	4	8	3	5	17	57
Jiuquan Prefecture	10	4	4	6	12	9	14	59
Jinchang City	6	7	7	7	0	1	8	36
Jiayuguan City	3	1	1	1	0	6	2	16
Sum	46	25	25	33	19	25	76	251

Note: A—Ecoagricultural demonstrating areas of high technology; B—Demonstrating areas of agricultural comprehensive exploitation; C—Demonstrating areas of ecological forestry and animal husbandry; D—Ecoindustry demonstrating areas; E—Demonstrating areas of ecological natural protection; F—Ecotourism demonstrating areas; G—Demonstrating areas of constructing town and township

protection as their chief targets. In the construction planning of all demonstrating areas, the ecological planning and the economic development planning are of the same importance, and ecological construction is to be carried out first. In other words, before the demonstration, much work should be done inside and outside the demonstrating area, such as planting trees, building windbreaks to fix dunes, increasing other vegetations, and so on. And 30% – 35% of the total investments are used for ecological construction. In Hexi Region, many demonstrating areas are set up at the edge of deserts or directly in gravel deserts and sandy beaches. According to the thoughts on exploitation and demonstration which

can be described by “more sunshine, less water, new technology, high benefit”, exploitation and protection are regarded as the two sides of one problem. Then the benign circle of ecological construction and economic development is improved. Hexi Region is in the way of sustainable development. For example, the ecoagricultural true demonstrating areas of high technology in Shigangdun, Zhangye (one of the seven technological demonstrating areas in China), the ecological demonstrating area in Sandun, Jiuquan, the land arrangement demonstrating area of national level in Huishui, Jinta, Jiuquan, the demonstrating area of sand industry in Beigedatan, Jiuquan, the demonstrating area of American planting

in Malutan, Gulang, Wuwei, the demonstrating area of agricultural comprehensive exploitation in Dengmaying, Minqin, Wuwei, the demonstrating area of irrigating afforestation in Dongshawo, Wuwei, the demonstrating area of agricultural comprehensive exploitation in Hua-jiantan and Changeaotan, Jinchang, the demonstrating area of grasslands construction in Huacaitan, Jinchang, the demonstrating area of forage and fodder in Haotanpo, Jinchang, the demonstrating area of protecting vegetations growing up in sand in Xiaohongquan, Jiayuguan, are all set up in gravel deserts and sandy beaches to improve the ecological environment. And by the successful experiences of these ecological demonstrating areas, Hexi Region has made great progress in the protection of ecological environment, and her economy will be in the sustainable development.

(3) The demonstrating areas cooperate closely with universities, colleges and organizations of scientific research. They have introduced, demonstrated and popularized a batch of new breeds and technology.

Based on the principle of “exploitation by opening to the world and development by union”, all kinds of demonstrating areas cooperate closely with universities, colleges and organizations of scientific research to get new technology. They also cooperate with economic entities to develop economy. Many organizations of scientific research bring their research achievements into the demonstrating areas and change them into advanced productive force. Then the method is popularized outside of the demonstrating areas. Correspondingly, many economic entities cooperate with the demonstrating areas as shareholders of technology or investments. According to the investigation, all kinds of demonstrating areas in Hexi Region have cooperated with more than 200 universities, colleges and organizations of scientific research and more than 100 economic entities inside and outside China. During the cooperation, the principle of “advancement, new trails, feature, high benefit, experiments, demonstration, and popularization” has been kept to from beginning to end. The introduction and demonstration of new breeds, technology and achievements have been combined with the assemblage and installation of conventional practical technology to form high technological industry. During the demonstration and popularization of new technology and breeds in large areas, the content of technological production goes highly up, the seed resources of Hexi Region becomes richer, the construction of agricultural breed optimization is greatly improved, and the agricultural structure of Hexi Region is adjusted and optimized. This is the substantial base of material and technology to develop

high technological industry.

(4) Scientific and technological construction and training are carried out at the same time; the governmental behavior and the enterprise behavior have effect on each other.

According to the purpose of “high standard starting point—high technological assemblage and installation—high efficiency running”, and based on the policy of “constructing the demonstrating areas by technology, learning technology by man himself”, all kinds of demonstrating areas try all means to push on technological popularization and training, so as to improve the quality of laborers. What’s more, all kinds of demonstrating areas attach much importance to local technicians’ training and knowledge renewal. They send local technicians to learn new technology or invite specialists to train them, so as to make their local technicians stand in the forward position of technology all the time. In order to construct the demonstrating areas very well, all the governments of each city and district in Hexi Region take the construction of demonstrating areas as one of the strategic measures to realize economic sustainable development. By all means such as planning formulation, industrial location, policy support, funds input, and technology introduction, they strengthen governmental behavior, improve the adjustment, control and harmony of leaders, standardize and encourage enterprise behavior. In order to accelerate the construction of demonstrating areas, the double-track system of job responsibility including administration and technology is set up. It means that all items must be in the charge of specialists and technicians, and under the leadership of the government, and that a major item must be directed on the spot by service organizations of special technology. Besides, a series of preferential policies concerning items introduction, funds input and technicians’ recruitment are carried out.

2.2 The Main Problems During the Construction of the Demonstrating Areas

By the accelerative constructions of almost ten years, all kinds of ecological demonstrating areas in Hexi Region succeed in technology introduction, demonstration and popularization, persons of talent training, breeding, etc. Besides, the economic and ecological environmental benefits are obvious obtained. However, a series of actual problems are to be immediately solved.

(1) Too many demonstrating areas are set up, their distribution is not completely rational, and phenomenon

of building duplicating demonstrating areas at low levels still exists.

From the present conditions, it can be seen that 175 ecological demonstrating areas of different kinds have been set up in Hexi Region, which has an area of 27.6km². That's to say, 6.34 demonstrating areas have been set up in an area of 1km²(Fig. 2). To some ecological demonstrating areas, the scopes are not clear, the constructions are uneven, and the demonstrating items are of the same. That's to say, phenomenon of building duplicating demonstrating areas at low levels still exists. So, not only manual labor, material resources, financial resources and grounds are all wasted, but also ecological protection and economic efficiency can't be greatly improved. During the construction of the demonstrating areas, some leaders of local governments only pay attention to visual projects and the ceremonies of hanging plaques in order to pursue their governmental achievements, but don't attach importance to the demonstrating, ecological, economic and social benefits of constructing demonstrating areas. They pursue so large and fashionable, multiple and comprehensive demonstrating areas that too many are set up, the distributions are not completely rational, and improper competitions of blind invidious comparisons are formed.

(2) The demonstrating targets are to be made clear; the radiate and driving functions are to be strengthened.

The main target of constructing a demonstrating area is to introduce advanced practical technology, demonstrate and popularize it, rebuild and improve local ecological environment, and increase the technological content of industrial and agricultural production, so that regional sustainable development can be realized. In common words, to construct a demonstrating area is to let peasants see it and do it by themselves, and help them become rich. However, the demonstrating targets of some ecological demonstrating areas in Hexi Region are not clear. The features and keys are not emphasized, and top quality articles are short of. Besides, a great deal of conventional work is to be done during the construction of demonstrating areas, so that the demonstrating substances are weakened. For example, some greenhouses of high standard still plant vegetables of old breed, and some demonstrating areas still have flood irrigation after spending a lot of funds in forming a complete set of high technological water economization. Some other demonstrating areas have exploited some items with large markets in the future, but the popularization in area is very weak, and prop industry can't be formed, so that there are many bonsais but few gar-

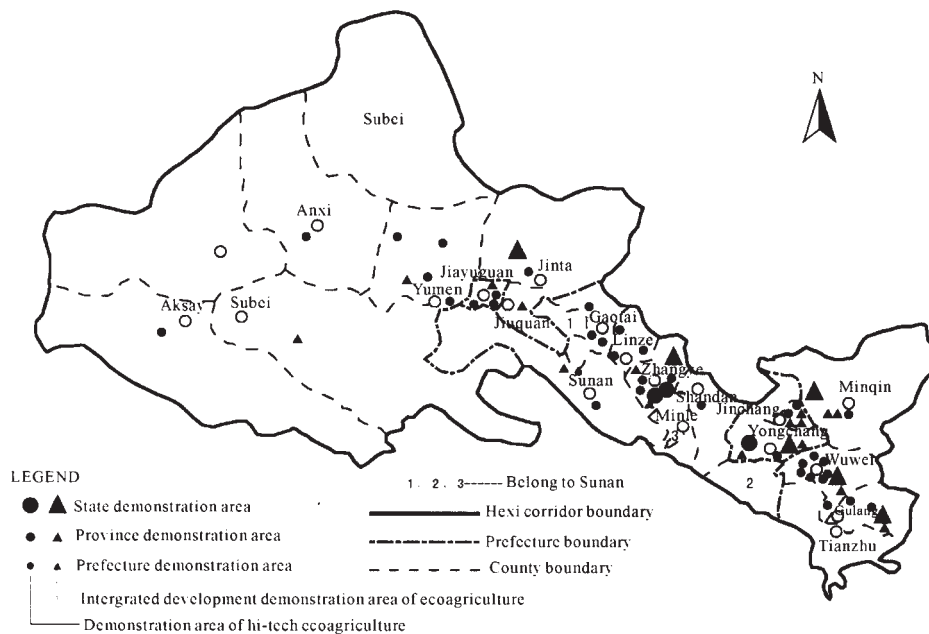


Fig. 2 The spatial layout of eco-agricultural demonstration area in Hexi region

dens, large items but small scales, and many presents but few commodities. Then, the scale benefits are very low; the radiate and driving functions are very weak in

these demonstrating areas.

(3) The management system should be improved and the management mechanism should be more flexible

in the demonstrating areas.

Some certain ecological demonstrating areas haven't set up the mechanism of enterprise managements and factory operations. So the responsibilities, rights and benefits are not clear, the managements are confused, and the man-made properties run off. Some demonstrating areas take contracts as managements, so that the management mechanisms exist only in name, and the leaderships are weakened. As the system is not smooth and the mechanism is inflexible, enterprises, peasants and individual entrepreneurs of industry and commerce show no interest in the investments of high scientific and technological industry. This leads to the government-operated phenomenon. And the problem that governments get money and peasants still land can't be solved at all. So, the funds of constructing the demonstrating areas are great short of. No money can be spent in introducing and developing the items of high technological contents and powerful demonstrating functions. These demonstrating areas can only introduce the items of low technological contents or the items which have been popularized in large areas of other regions, even the items which have been eliminated. This leads to low technological content of the whole demonstrating areas in Hexi Region, and the original intention of constructing the demonstrating areas is changed.

3 THE BASIC THOUGHTS OF CONSTRUCTING THE DEMONSTRATING AREAS

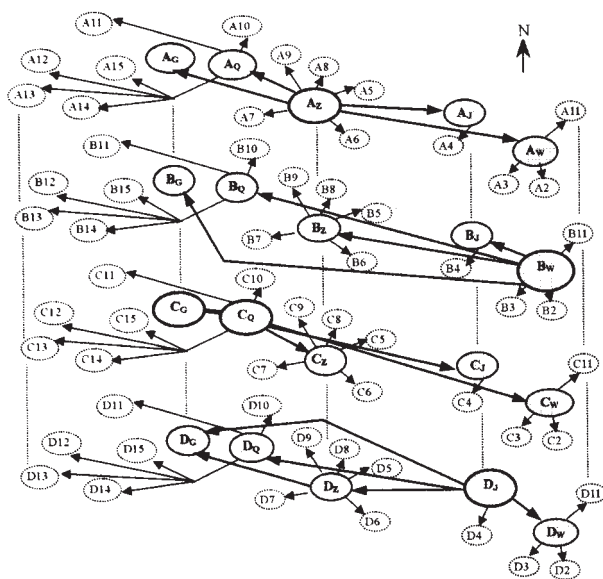
Based on the main achievements and problems of constructing all kinds of ecological demonstrating areas in Hexi Region, the principle of ecological priority must be kept to during the construction of ecological demonstrating areas in new era. According to the total development thoughts which can be described by "start of high standard, assemblage and installation of high technology, operation of new mechanism, intensive management, unified construction, scientific governance, and high benefits running" (Leading Group of the Experimental Units on Constructing National Ecological Demonstrating Areas, 1997), all kinds of ecological demonstrating areas can be really developed. That's to say, the content of technology, the utilization ratio of resources, the degree of industrialization, the ratio of input and output, and the level of modern administration, will all go highly up, and multiple functions such as technological introduction, integrated experiments, demonstration and popularization, industrial exploitation, technological inquiry, persons of talent's training, and information service, will have effects. The

concrete thoughts on the construction and development are put forward as follows.

3.1 All Kinds of Ecological Demonstrating Areas Should be Merged in Order to Construct Large-scale Characterized Demonstrating Areas Which Go Beyond the District

In order to change the present conditions such as quantity expansion, building duplicating demonstrating areas, weak radiate and driving functions and so on during the construction of the ecological demonstrating areas in Hexi Region, and based on the demand of the industrial structure's strategic adjustment in the new century(LIU, 1998), it is suggested that all kinds of ecological demonstrating areas should be properly merged. So, it is encouraged that all districts and cities construct the demonstrating areas by union, and that all kinds of demonstrating areas go beyond the district to realize free combinations according to some certain connections of economy and technology. The scale demonstration and unified management should be given prominence to. The destiny community which introduce technology, do integrated experiments, demonstrate and popularize technology, and capture exterior markets with unification, should be formed. Only by this means, intensive and sufficient funds can be put into the construction of the demonstrating areas; the introduction, demonstration, new brails, popularization, and benefits can be continually obtained; the prop industry with good prospect can be developed step by step; and the powerful radiate driving force can be formed in the ecological demonstrating areas. According to the thoughts which can be described by "emergence, union and joint construction", it is suggested that a batch of large-scale ecological demonstrating areas at national or provincial level which go beyond the district should be constructed as focal points and taken as the ecological demonstrating areas of the first grade in Hexi Region. Based on this, a batch of middle-scale ecological demonstrating areas at district or city level can be correspondingly constructed as the second grade. Finally, based on the ecological demonstrating areas of the second grade, a batch of small-scale ecological demonstrating areas at county level can be constructed, too. So the web system of constructing modern ecological demonstrating areas, which includes large, middle and small scale demonstrating areas and has distinct administrative levels, orderly demonstrations and efficacious popularizations, can be formed. According to the present conditions of the constructions and development, the superiority of

the competition, the ability of the effects, and the prospect of the constructions, the following large-scale characterized demonstrating areas which go beyond the district, should be constructed in the near future (Fig. 3).



A—Ecoagricultural demonstrating areas of high technology; B—Demonstrating areas of agricultural comprehensive exploitation; C—Demonstrating areas of ecological forestry and animal husbandry; D—Ecoindustry demonstrating areas; W—Wuwei District Z—Zhangye District Q—Jiuquan District J—Jinchang City G—Jiayuguan City 1—Minqin 2—Gulang 3—Tianzhu 4—Yongchang 5—Shandan 6—Minle 7—Sunan 8—Linze 9—Gaotai 10—Jinta 11—Anxi 12—Dunhuang 13—Akesai 14—Subei 15—Yumen

Fig. 3 The planning map of scale-grade net-system construction about all of the eco-demonstration area in Hexi region

(1) Taking the agricultural demonstrating area of high technology in Shigangdun as the core, and supported by the central Party's finance for the agricultural demonstrating area of technological popularization and the national agricultural demonstrating area of sustainable and high efficacious technology, Zhangye District should be constructed as the largest ecoagricultural demonstrating area of high technology in Hexi Region and the second agricultural exploitation area of new high technological industry throughout the country. Its main demonstrating substances include water economization of high efficiency, breed industry, cultivation of large scale, ecological rebuilding, agricultural industrialization, machining of agricultural or sideline products, and technological training.

(2) Taking the demonstrating area of agricultural comprehensive exploitation in Wuwei City as the core, based on the principle of "governing fields, forests,

roads and canals comprehensively, and developing agriculture, forestry, animal husbandry, sideline and fishery in full scale", and fitting in with the constructions as national item areas of agricultural comprehensive exploitation in Wuwei City, Gulang County and Minqin County, Wuwei Prefecture should be constructed as the largest ecological demonstrating area of agricultural comprehensive exploitation in Hexi Region.

(3) Based on the rich resources of tourism in Jiuguang - Jiayuguan Prefecture, taking Dunhuang as the head, the key cities and towns along Silk Road such as Jiayuguan, Jiuquan, Yumen, Zhangye and Wuwei as the core of the second level, Silk Road as the tie, and supported by numerous cultural objects, historic sites, natural landscape, cultural installations, national styles and conditions, and basis of modern most advanced sciences such as Space Flight City, Steel City and Oil City, Jiuguang - Jiayuguan Prefecture should be constructed as the largest ecotourism demonstrating area in Hexi Region.

(4) Taking the industrial demonstrating areas in Jinchuan, Hexibao and Yongchang as the core, supported by the largest productive basis of nickel and cobalt, the largest refinement center of platinum, and the experimental unit of ecological demonstrating area in our country, and fitting in with the constructions of the ecological demonstrating area in East Jiayuguan, the economic and technological exploitation area in Yumen and the demonstrating areas of town and township industries' cooperation between East China and West China, Jinchang City should be constructed as the largest ecoindustry demonstrating area in Hexi Region.

3.2 The Constructing Pattern Should be Selected According to the Actual Circumstances, and the Demonstrating Effects Should be Given Free Rein to

Hexi Region has a large area, so the differences of natural conditions and social economic basis in each district are very great. However, all kinds of ecological demonstrating areas have much communality in scale, technology, benefit, demonstrating substance, direction and prospect of the development, and so on. So each city and each district should select the constructing pattern according to the actual circumstances, introduce, demonstrate and popularize what are suitable to and what the peasants are in great need of. The concrete developing thoughts go as follows.

(1) Science and technology should be applied to construct the demonstrating areas and accelerate the industrialization in the big market, so as to support them

by themselves.

Ecological demonstrating areas are good carriers which can introduce and popularize advanced and practical technology, increase the technological contents of products, popularize scientific and technological knowledge and obtain comprehensive demonstrating benefits (FANG, 1996). In order to construct them, correct directions and thoughts should be set up. First, the industrialization of constructing the demonstrating areas should be carried out. According to the demand of market economy, referring to the management pattern of modern enterprises, taking markets as the direction and considering benefits as the center, regional distribution, specialized production, unified administration, socialized service and enterprise management should be all put into practice, so that the management pattern can be the unification of trade, industry and agriculture, and the industrial organizational form can be a connected sequence of production, machining and sale. Then the pattern which can be described by "market leading head of the demonstrating areas—head of the demonstrating areas driving the basis—the basis connecting peasant households—peasant households heading for comparatively good living standard" can be formed. Secondly, science and technology should be applied to construct the demonstrating areas. All kinds of ecological demonstrating areas should take science and technology as the most essential factor of production, and regard demonstration and popularization as the main means, so as to promote the development of productive force in rural area. Thirdly, the construction of the demonstrating areas should be suitable to the big market. According to the demand of the running mechanism concerning market economy and based on the principle of "favoring each other and benefiting each other, voluntary combination, self-raising funds, self-assuming gain and loss, self-restraint and self-improvement", all kinds of demonstrating areas should set up different kinds of technological group corporations, demonstration and service, which undertake risks and share benefits together. Lastly, the demonstrating areas should be supported by themselves. They should not only popularize science and technology, but also improve the paid service to increase their income, so as to form a benign circle, which can be described by "introduction—experiment—demonstration—blazing new trails—popularization—earning income—introduction" (FANG, 2001).

(2) The demonstrating, service and driving effects should be completely given free rein to. According to the total running mechanism and constructing direction

of all kinds of ecological demonstrating areas, it is the demonstrating, service and driving effects that should be attached much importance to. First, the comprehensive demonstrating and guiding effects should be really given free rein to. Taking market as the guidance, the demonstrating areas should vigorously introduce new special famous and excellent items which have great latent capacity of development and good prospect of markets. New products should first be tested and new technology should be first popularized in the basis. Living facts should be brought forward to make peasants liberate their ideology, and literal benefits should be created to lead peasants to take steps bravely. Second, the comprehensive service effects should also be vigorously given free rein to. The demonstrating areas should be constructed as the announcement and interchange center of agricultural technological information, the center of technological training and service, and the "field school" which popularize new practical technology in rural areas. Finally, the radiate and driving effects should also be given free rein to. The ecological demonstrating areas should be constructed as the heads that connect peasant households inside and connect markets outside (CHENG, 2000). During the popularization of new agricultural technology and breeds, the demonstrating areas should cooperate with the enterprises of production and machining in various places, enlarge sale markets vigorously, and serve the peasants before, during and after the production comprehensively.

3.3 The Running System of the Demonstrating Areas Should be Set up and Strengthened, and the Scientific Management of the Demonstrating Areas Should be Intensified

According to the problems of all kinds of ecological demonstrating areas in Hexi Region, such as duplicate building, confused distribution, unclear directions, weak leadership, hindered system, inflexible mechanism and so on, the running system of the demonstrating areas should be set up and strengthened, and the scientific management of the demonstrating areas should be intensified in the future.

(1) It is important to smooth the constructing system and implement the flexible and efficacious running mechanism.

First, flexible and efficacious mechanism of floating land should be set up. The limits of district and trade should be broken, and moderate scale management of land should be improved. It is encouraged that individual entrepreneurs contract, rent or buy the rights

of land use during the construction of the demonstrating areas. Secondly, the ownership of economic accounting should be set up (LI, 1998). Enterprise management system of job responsibilities, whose main substances is to decide items, targets, task, costs, benefits and rewards, should be implemented to improve the ecological and economic benefits of constructing the demonstrating areas. Thirdly, the guarantee mechanism of investments should be set up. The funds can be raised by the central Party, investors, the local governments and peasants, and they should be used to work on the items such as agricultural comprehensive exploitation, ecological environmental construction, water and soil maintenance, water conservancy projects, and so on. The system of items' proprietor and joint-stock company should be implemented (FAN, 1997). Lastly, the encouraging and opening mechanism of policy should be set up. Economic means should be used to encourage and lead the public to construct the demonstrating areas, and it is important to cooperate with universities and colleges, organizations of scientific research, large industrial and commercial enterprises, large groups, and famous trademarks, so as to enlarge the demonstrating areas and open them to the national and international markets.

(2) It is suggested that the committee should be organized to construct the ecological demonstrating areas in Hexi Region.

It is suggested that the governor of Gansu Province who is in charge of the construction of the demonstrating areas should hold concurrent head of the committee, and that the leaders of provincial government departments and bureaus such as the provincial government departments of agriculture, animal husbandry and finance, the committee of science and technology, and the bureau of tourism, and the leaders of the five districts and cities in Hexi Region should be the main members of the committee (FANG, 2000; 2001). Then, the demonstrating areas in Hexi Region can be planned, led and located with unification. The standard and the policy can be also unified, so that the construction of the demonstrating areas can be greatly improved. The committee should formulate a complete set of standard and feasible system of policies, concerning the management pattern, management system, benefits distri-

bution, land expropriation and tax revenue levy, so as to ensure the ecological demonstrating areas to set up a systematic and standardized management. The demonstrating areas of joint-stock cooperation should especially distinguish the property rights, make the responsibilities clear, and perfect the mechanism of benefits distribution according to some relevant policies and laws, so that the responsibilities, rights and benefits can be closely combined.

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