

LOGISTICS STRATEGY, TRENDS AND CHALLENGES IN THE WESTERN REGIONS OF CHINA

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Bachelor's Thesis
June 2010

Degree Programme in Logistics Engineering
School of Technology



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Author(s) TAO, Lanting	Type of publication Bachelor´s Thesis	Date 02.06.2010
	Pages 53+15	Language English
	Confidential <input type="checkbox"/> Until	Permission for web publication <input checked="" type="checkbox"/> (X)
Title TITLE LOGISTICS STRATEGY, TRENDS, CHALLENGES IN THE WESTEN REGIONS OF CHINA		
Degree Programme Degree Programme in Logistics Engineering		
Tutor(s) KESKINEN, Mikko, Senior&Lecture		
Assigned by		
Abstract <p>The purpose of the thesis was to research the relationship between regional economy and logistics, and logistics and information development in China. The focus was on finding out how both of these relationships are involved in the Western Development strategy. The final target of the Western Development strategy is to solve the disparity between the eastern and the western regions of China. The issues are interlocked.</p> <p>The western regions are rich in resources and there are many advantages. But due to the disparity between the east and the west, the most important steps are to attract foreign direct investment and sustain industries. Considering these two factors, there should be enough markets in the west. Supposing that telecom companies and architecture companies want to transfer industries to the west, for those small and middle size companies, the main problem is the transfer itself and finding enough support for transferring.</p> <p>From the western point of view, the western regions want to develop their economy, and what they have now is specific products. They need to bring them into the local market and promote in the country.</p> <p>Obviously, it is only through the 3rd party logistics and complete information system can help those companies and the western business can be helped. And like this step by step, the economy in the west can be developed.</p>		
Keywords Logistics Strategy, Logistics Trends in China, Logistics Centre, Logistics and Information		
Miscellaneous		

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1. INTRODUCTION

“Wanna be rich ? Build roads first! ”

Deng Xiaoping

Due to the policy by Deng Xiaopeng, China develops the coastal cities to drive the whole country's economics. The policy made the economic development unbalanced between the eastern and western regions. In 1999, the Chinese government began the Western Development Program in an effort to attract Foreign Direct Investment (FDI) to the western regions of the country, as the income disparity between the eastern and western half of the country was growing acute.

We always say “no pains, no gains”. What do we gain from the past ten years? How can we keep on developing the western part of China? What kind of industry should we focus on? How to readjust industrial structure?

As the base and "artery" of national economy, logistics plays a role of a lubricant and propeller in the development of regional economy. Smooth and friction-free logistics can lower the operating cost of regional economy so as to improve the pattern of economic growth; characterized by its capital and technology-intensive attribution, logistics can restructure and upgrade regional industries through generating and boosting new forms of industries. On the basis of analyzing various logistics definitions and theories, logistics is virtually a return to its true purpose of economic growth, namely, a return to human-oriented wealth. Logistics puts emphasis not only on the dynamic and static objects literally, but also on human beings for which the objects serve. Emerging from functions and activities related to "traditional" logistics,

adopting advanced concepts of modern science, technology and management, logistics takes the demands of vendors, producers and consumers exquisitely and comprehensively in the process during which goods flow from the site of provider to the site of need. By means of efficient combination, process coordination, scientific organization and lean management upon such activities as storage, transportation, etc, the target of logistics would be hit for lower cost, higher efficiency and finally the essence of economic development, i.e. the welfare of human being. As the major constituent of regional economic network, logistics is not only an important matter of regional industrial activities but also a carrier through which regional economic elements function their special agglomeration and diffusion. Logistics can restructure and upgrade the regional industries by means of the effect of industrial relevancy when it serves for the social production and residents' living, engenders new industries and enhances the internal proportions of the third industry. By integrating related functional operations, logistics is able to change the links between the knots and lines from random and loose connection to a kind of spatial structure of smoothness and steadiness, with which block and friction would be lessened and the function of regional economic constituents amplified while the regional income and the strength would be improved as a whole. Through intensifying the advantage of allocation of the centers of region, logistics induces regional elements of development to move towards advantageous locations while bringing key urban cities effects of scale economy and agglomeration economy, it then can be regarded as an operational platform for potentiating the growing polar of urban cities and boosting up the developing level of hinterlands, and an effective measure to balance urban and rural development and development among regions.

2. BRIEF INTRODUCTION TO CHINA'S WESTERN REGION

中国西部大开发区域地图

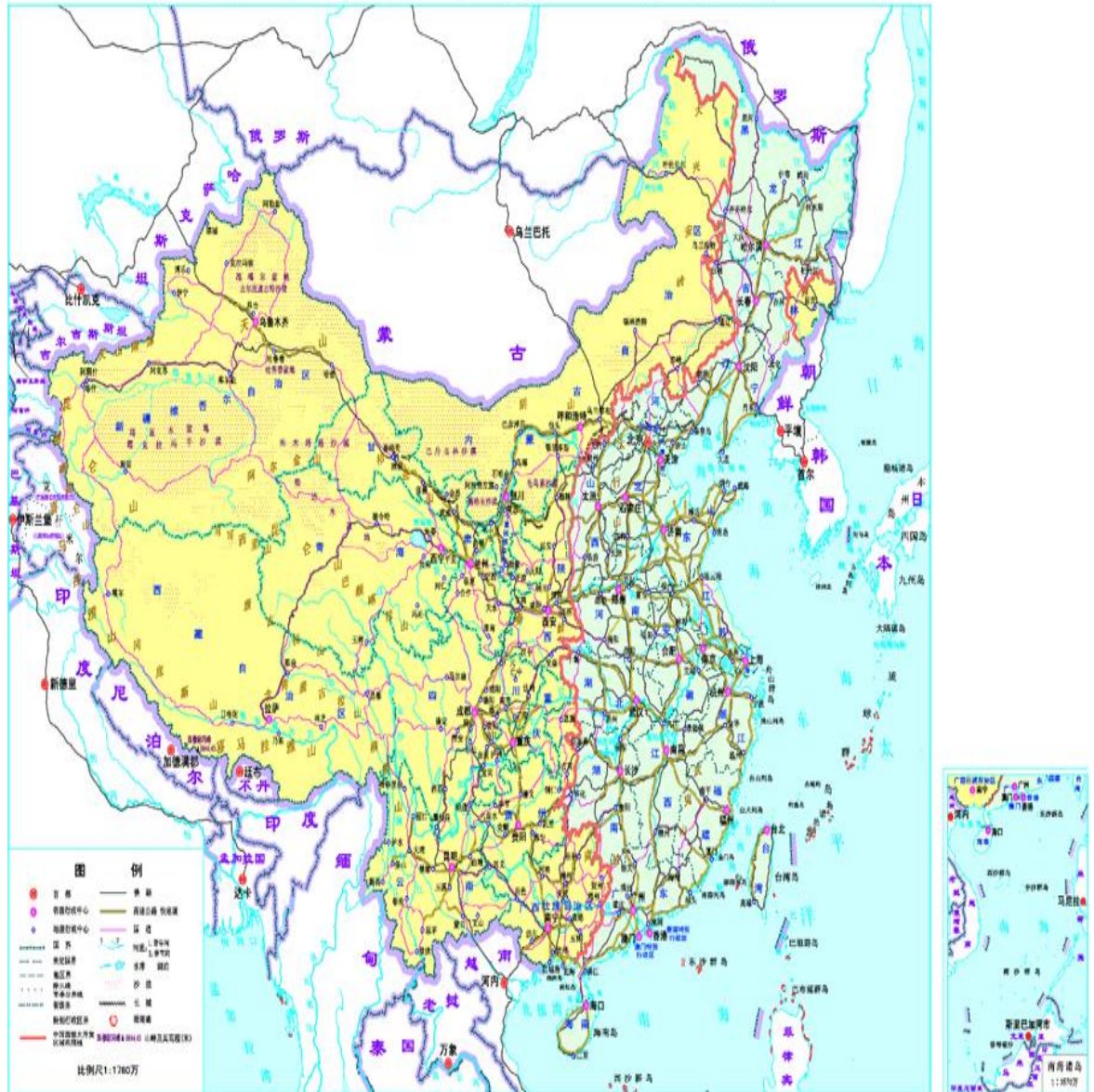


FIGURE 1. Chinese map

China Western, also China's Western Development, Western China Development, Great Western Development Strategy, or the Open Up the

West Program is a policy adopted by the People's Republic of China to boost its less developed western regions.

The picture shows above, the western areas are in yellow. The policy covers 6 provinces (Gansu, Guizhou, Qinghai, Shaanxi, Sichuan, and Yunnan), 5 autonomous regions (Guangxi, Inner Mongolia, Ningxia, Tibet, and Xinjiang), and 1 municipality (Chongqing). These regions contain 71.4% of Chinese area, but only 28.8% of total Chinese population

The territory of the western region is vast, its population sparse, and its undeveloped economic resources need to be strengthened and exploited. The Chinese poor who are lack of food and clothing, the majority live in this region. It is also the region in which most of China's minority nationalities live.

Natural resources in the western region are very rich. Total water resource account for 82.5% of the nation's total, and utilized water reserves account for 77% of the total, though only 1% of these reserves has been used. The region's mineral reserves are also huge. According to statistics, the region holds 36% of the nation's coal reserves, 12% of its petroleum and 53% of its natural gas reserves. 120 out of 140 categories of verified natural mineral resources are found in the western region, with some rare metal reserves among the richest in the nation. Its tourist and cultural resources are also rich. In these regions we find the clay warriors and horses of the First Emperor's tomb, the Mogao Caves, Jiuzhaigou, etc.

The western region has more than 10 neighboring countries with borders extending over a distance of 12747 kilometers. With such extensive borders, there is no doubt that the region presents an attractive outlook for international trade with the border countries.

There are four opportunities of China western development:

1. The expansion of domestic demand
2. Construction of modern logistics industrial system
3. Opening to the west
4. Facing to urbanization and regionalization

The main components of the strategy include the development of infrastructure (transport, hydropower plants, energy, and telecommunications), enticement of foreign investment, increased efforts on ecological protection (such as reforestation), promotion of education, and retention of talent flowing to richer provinces. The strategy is segmented into the three stages:

- Foundation stage: 2001-2010, restructuring of investment and the economy, develop infrastructure, ecological protection, setting up and improving market system.
- Acceleration stage: 2010-2030, improving the development of infrastructure, based on strategic adjustment and achievements made in the system, fostering distinctive industries and make them marketable, ecology to realize economic growth.
- Modernization stage: 2031-2050, enhancing structure and economic strength in development area, integrating domestic and international economic system, improving the production of the western regions and the living standards of the people, and reduce the gap.

Table1 shows past ten years' achievement in economic growth. As a good result, Great Western Development Strategy does not become "heavy excavation",

TABLE 1. Economic growth

Economic growth	Year 2000	Year 2008	Average annual increas %
GDP of western regions	¥ 1665.5 billion	¥ 5825.7 billion	11.7 %
Industrial added value	¥ 594.6 billion	¥ 2400.0 billion	/
Investment in the fixed asset	¥ 6111 billion	¥ 3583.9 billion	22.9 %
The total retail sales of consumer goods	¥ 595.4 billion	¥ 1923.9 billion	14.9 %
The total Value of Import- export	¥ 17.2 billion	¥ 106.8 billion	25.6 %

3. STRATEGY RESEARCH

3.1 The 1st Strategy: Adjusting and Optimizing the Agricultural Structure

Now we step into the 2nd stage, according to the plan, this period should improve the development of infrastructure, based on strategic adjustment and achievements made in the system, foster distinctive industries and bring them into the market, considering also ecology to realize economic growth. And in the past ten years, with sustained economic development of the west, the degradation of eco-environment is under preliminary control; forest coverage was improved from 10.32% to 17.05%. Improved ecological environment brings up better agriculture environment, it helps people in the west of China made the first pot of gold. Inner Mongolia is rich in cotton. Yunnan and Guizhou are rich in medicine, etc. Based on these, the 1st strategy should adjust and optimize the agricultural structure.

3.1.1 Agricultural Structure

Optimizing the agricultural structure is an important way to improve economic efficiency of agriculture, and its essence is to optimize the configuration of agricultural production factors. Due to different national conditions, differences in resource endowments differ, there is no fixed pattern of agricultural structure. Evaluation of the agricultural structure is reasonable, mainly to depend on whether it can fully utilize local resources to meet the market needs, and promote sustainable agriculture and rural economy, fast, stable and healthy development.

3.1.2 History of Adjusting Agricultural Structure

The irrational industrial structure of agriculture is the main problem in China's agricultural development; the main performance can be summarized as follows:

1. Among the industrial structure of agriculture, forestry, animal husbandry and fishery, agriculture share large proportion, animal husbandry share too small, the share of forestry and fishery is too low.
2. Agricultural structure, the share of major food crops; cash crops, the proportion of small; feed crops is nearly blank.
3. Animal husbandry structure, pork shares a lot.
4. Fishery structure, a significant proportion of water products, the proportion of fresh products is small; the proportion of natural production is large, small proportion of artificial breeding.

3.1.3 Main Problems of Agricultural Structure

With the arrival of a new stage of agricultural development, the adjustment of China agricultural structure has made great achievements; the configuration of food and cash crops tends to be reasonable. However, the current agricultural structure and consumption structure of agricultural products still have many problems.

The quality of agricultural products, product structure and market demand have become prominent. In the past 20 years, through the adjustment of agricultural structure, it is solved the numbers question between demand and supply. With the increasing of people's income, the demand of the quality of agricultural products becomes higher and higher. At present, the situation of

China agricultural products: more and more low-end products, general product and raw materials, less high-end products, special products and deep processing products.

Unreasonable distribution of large agricultural areas is one of problems. The distribution is affected by price and market factors, besides it is influenced by climate and geography, resources and environment constraints.

Another problem is low economic efficiency of agricultural production.

- High production costs. Farmers increase revenue by increasing production and the price, but according to related information, the cost increases, which offset some or most of the benefits from increasing price, resulting high cost of agricultural production, low achievement. This is because a relatively backward agricultural technology, scientific of farmers; in the production of water, with species, drugs, electricity, oil, feed and other aspects, the lack of scientific guidance.
- Lag of agricultural products processing, preservation technology, a large number of agricultural products only have a rough or as a fresh product and product sales; preservation time is short, low value.

Uneducated farmers are constraints to optimize the agricultural structure. Agricultural restructuring is a resource for agricultural production, namely labor, land, capital and other production elements rearranged, and ultimately increase agricultural efficiency and structural optimization. Farmers in the agricultural structure adjustment play an important role. The higher the quality of the farmers, the higher income, and the adjustment of agricultural production capacity will increase. According to World Bank studies show that the average time of labor education increased by 1 year, gross domestic product (GDP) will increase by 9%.

3.1.4 Agricultural Adjustment in China's Strategic Direction

1. Correctly handle the relations between the planting, forestry, animal husbandry and fishery.

The basic idea of optimal relations between planting, forestry, animal husbandry and fishery is: with continued development of farming, accelerate development of animal husbandry, forestry development and use of natural resources and fishery to meet the requirements of national economic development.

2. Adjusting the internal structure of farming

At present, the internal structure of farming has always been regardless of grain and feed, which is neither scientific nor economic; it is a waste to agricultural resources. Therefore, future planting structure we should gradually from the dual cultivation of food crops and cash crops to three-dimensional planting a structural change in feed crop production to achieve the independence and the formation of regionalization, specialization production, increase agricultural crop production efficiency. Continue to develop other economic crops, to further optimize the structure through crop varieties.

3. Adjusting the internal structure of animal husbandry

With the animal husbandry dependent on farming situation, pig farming industry provides large amounts of organic fertilizer; in rural household sideline production mode, as opposed to poultry and cattle, sheep, the pig can be better save labor, not only meet the main needs of the labor force, but also absorb the production life of farmers residues. Therefore, it forms pig production as the main structure of consumption of grain-based animal husbandry. Taking into account the food consumption of Chinese residents at

the present stage, the heat has been meet the need, but inadequate protein intake, the structure of animal husbandry should be directed to saving food, high protein conversion rate, and high feed conversion rate.

4. Adjusting the internal structure of fishery

The basic direction of restructuring of China's fishery production is to speed up the development of marine aquaculture. It is estimated that Chinese coastal waters allow catching of about 3.5 million tons per year, currently has more than the allowable catch. Therefore, the marine fishery structural adjustment direction is changed to artificial.

5. Adjusting the internal structure of forestry

Forestry development is to increase the total amount in the adjustment based on the ecological system of forestry and forestry industry system, and actively create a variety of forest, protection forest to make forest structure more reasonable.

6. Optimizing regional distribution of agriculture

Adjusting the regional distribution of agricultural production must be adjusted according to regional comparative advantage of agriculture variety structure.

7. Developing the processing industry of agricultural products

Chinese agricultural product processing industry faces good prospects, but there are still some constraints. First, the low level of agricultural products, the adequate of processing, a single product structure, lack of competitiveness; Second, the backward technology of agricultural products processing, preservation, packaging, storage and other aspects inhibits the processing industry's technological progress and upgrading of the product structure; the

agricultural products of poor quality restricts the improvement of the quality of agricultural products processing industry. Here we need through the third party logistics to develop the processing industry of agricultural products.

The western regional ecological system is fragile. We should integrate the grasslands to develop water saving agriculture, ecological agriculture, and specialty agriculture. Recently, the focus is to construction professional, large-scale features of agricultural production.

3.2 The 2nd Strategy: Accelerating the Process of Information

3.2.1 Relationship between Information and Logistics

Information is the world's manufacturing development trend. Since the first industrial revolution, the global manufacturing industry has gone through the mechanization and electrification, and the three stages of information. The emergence and development of information technology, not only created a new electronic information product manufacturing industry, but also by infiltration and radiation, so that the machinery, metallurgy, chemicals, textiles, garments and other traditional manufacturing methods and business philosophy have produced a series of revolutionary changes. Since entering the 21st century, with the increasing of new economy, production, circulation and consumption through the use of network and organizational models are in significant changing. Traditional logistics approach to the modern way, strengthening of logistics information technology building and promoting not only conducive to the logistics enterprises' management concepts and structural reform, but also other traditional logistics warehousing, transportation and other business transformation has a revelation and exemplary.

Western regions are rich in resources, so it helps to implement the western development strategy; in time collection, delivery and integrated approach of information can help to promote the healthy development of market economy and reasonably allocate energy and material resources. According to internal conditions, external environments, development and use of information resources in the western regions enables the right development of strategy and management policy and market, and significantly improve the utilization of material resources, and increases the value-added production.

3.2.2 Purpose of Acceleration

Firstly, the new industrialization needs the information construction in the western regions. To push on the process of industrialization in western region must rely on information to build the information infrastructure, personnel training; apply information technology, development and use of information resources.

Secondly, information can narrow the east-west development of digital divide. Digital divide shows not only network access problem or differences of different groups master and use computer, net, etc; but also shows different groups face to opportunity differences in information age, the performance that individual, group in the network economy and society access to knowledge, ability to grasp the innovative ideas and the ability to create wealth gap. Information can help logistics to achieve efficiency, save costs of the foreign investors. Speed up the process of information is also the needs of the information development in Western. Since the Western Development implemented, although the government suggested the tasks and goals of the information, none of steps was detailed before.

With the widely use of communications, computer software and other information technology, and the increasing popularity of the Internet, information has become the general credit characteristics of the logistics,

information operations and management of the logistics are necessary requirements for development.

3.3 The 3rd Strategy: Developing Sub-regional Economic Cooperation

Due to the target of the strategy, until 2030, it should help to improve the development of infrastructure, based on strategic adjustment, and achievements made in the system, fostering distinctive industries and bring them into the market, considering also ecology to realize economic growth. And development of sub-regional economic cooperation can help to promote an economic growth.

3.3.1 Definition of the Sub-regional Cooperation

Sub-regional economic cooperation is the same as regional economic cooperation, it points the natural persons and legal persons who are living across the borders, base on equality and mutual benefit, in production the area, develop long-term economic cooperation activity through different factors of the production flow. From economic development point of view, it is essential that production f flows freely in sub regions to improve efficient distribution of factors of production and effective production.

3.3.2 Characteristic of Sub-regional Cooperation

1. Usually it involves parts of territories of member countries; thus, political risks can be reduced.

2. Sub-regional cooperation is flexible, one country can join several sub-regional economic cooperation projects.
3. Different from other trade organizations, its product market and investment mainly rely on other regions, except this sub-region, no discrimination of non-member countries.
4. Different from export processing industry, it has widely cooperation; it includes trade, investment, travelling, infrastructure, human resources, and environment protection etc.
5. Cross-border flow of the factors of production depends on members' cooperation.
6. Local government is the subject of sub-regional cooperation. The economist Lipsey according to mobility of factors of production divides into six increasing status: preferential tariffs, free trade area, customs union, common market, economic union and complete economic integration

3.3.3 Types of Sub-regional Cooperation

From space view, it can be divided into vertical cooperation and horizontal cooperation. From cooperation contents, it can be divided into investment cooperation, technical cooperation, service cooperation, labor cooperation, project cooperation and economic policy.

The sub-regional cooperation is related to materials flow and information flow between each country. So at the same time, to develop the sub-regional economic cooperation, we need more logistics.

4. ANALYSIS OF LOGISTICS TRENDS IN CHINA

4.1 Current Logistics Situation

Recently, although logistics develops in the western, it is still at beginning phase. It mainly acts: the western enterprises are lack of knowledge about the demand of logistics service. Logistics service level is low, the companies who support logistics service, most of these companies can just offer single or one section of logistics service, they didn't use of the advantage of transportation net, it causes the incompletely the supply chain.

4.2 Location Theory and Decision Analysis

Through the Western Development strategy, it's not difficult to find that logistics is ubiquitous. Below is one module to analysis logistics trends of China.

The key of development in one area doesn't lie in how many resources it has, but lies in whether it has complete factors and industries which have enough market. The advantage factors of the western regions did not attract enough national resources to promote development of the western. So the basic problem is how to sustain industry.

For foreign investors view, capital is just one of production factors, they need investment to achieve capital transfer, also to get more desired rewards. The decision process of invest location; actually it is capital transfer process and

the distribution of resources process. At the same time, it is the process of spatial structure and spatial distribution of different production factors.

Consider the simplified module which just includes labor and capital, the two production factors, both of them are independent production factors, their spatial transfer and combination process decides the location selection. When foreign capital enters China and combines with the Chinese labor factors, it forms a foreign investment. If these combinations happen in the western part of China, we call it foreign investment in the western part.

Due to labor transfer having many obstacles, for international market, it is impossible to export cheap labor aboard to combine with foreign capital, usually only foreign direct investment enters China, it forms the production capacity. This combination is the result through allocation resources by markets to seek maximum efficiency of capital.

When foreign capital enters China, the barrier of labor between each region becomes smaller and smaller, labor factor is no more the restraint. Thus, capital settlement in the west or in the east depends on the investment environment of different regions.

Due to the investment environment of the eastern is obviously better than the investment environment of the western, the situation must appear that a lot of labor under the market force flows to the eastern, and it forms a higher efficiency of production capacity. Foreign investment priority is in the east and talents shift to the east from the west. All of these factors are objective laws of market economy, and the result reflects the capital nature.

So how can we reserve the talents and labors shift to the eastern? It seems that, besides information system support, a warm and stable family is what everyone wants. Everyone more or less is homesick, especially in China; we

have a long history to extol. If foreign investors decide to set up industry in the west, also living conditions should be changed to be the same as in the eastern regions have; even better. Will most of talents leave their native place then? May be the answer is no. So first we must suppose is that both of the eastern and the western regions having the same living conditions. To balance the living conditions between the eastern and the western, in the past ten years, from the eastern to the Midwestern areas already a lot of high ways and railways have been set up. So it is much easier for foreign construction companies originally to “stay” in the west. So now we face to the capital ‘import’ to the western.

Consider the strategy research, in the 1st strategy: to adjust and optimize the agricultural structure. There it is mentioned that one direction of adjustment is to develop the processing industry of agricultural products. For the western people, it is the most economic and new way to launch their products in the market and to export to the Midwestern regions or the eastern regions.

The small and middle size western industries do not have enough ability and capital to open up logistics inside the company. So the green agricultural products and featured products need export to the Midwestern region and the eastern region. The most efficient way is through a logistics centre (the third party logistics), but all that we have now are highways and railways. We need a detailed design and decision on how to achieve efficiency. Where is the best place for a logistics centre? Where is the most economical place? Where is the most convenient place? If we need the answers to these questions, firstly we need the determinants of location.

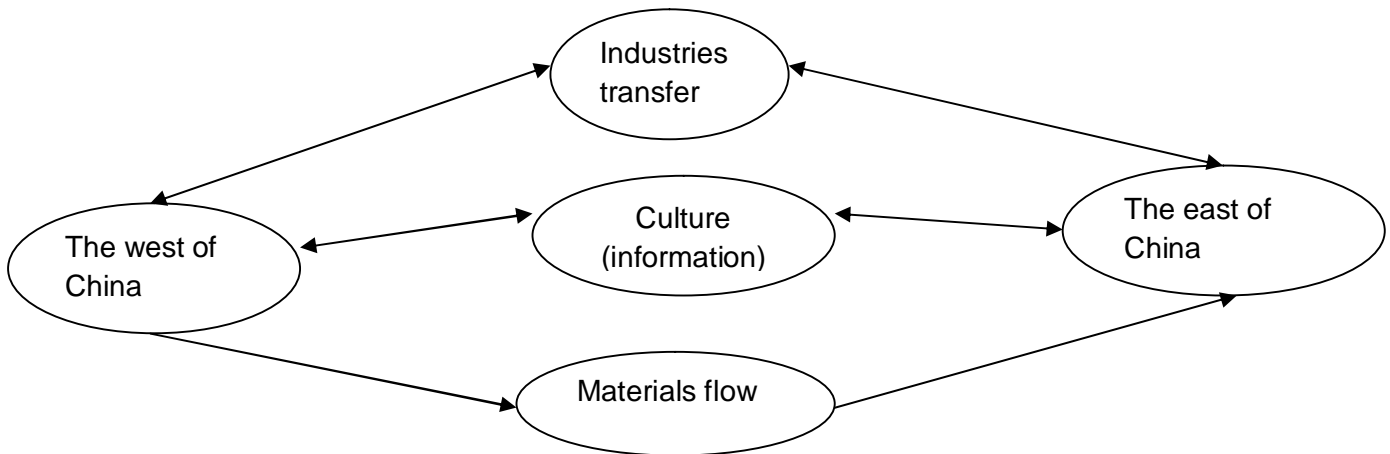


FIGURE 2. Materials flow, information flow between the east and the west

4.2.1 Determinants of Location

Determinants of location are decided by the following four factors.

Technological factors: the first determinant refers to physical principles that govern location and infrastructural supports such as highways, airports, railroads, power supply, sewers, and irrigation. These supports make the functioning of the facility possible. These go beyond the availability of transportation and utilities. Satellite tracking stations must be where visibility is at its best to observe the desired orbits most of the year. It stands to reason that a station too far north in the Northern Hemisphere will be unsuitable to track satellite orbits around the equator, not to mention that infrastructural support such as roadways and utilities will be scanty in these arctic regions. When the American West was developed, the railroad was the key instrument. Today, in the Midwest of the United States, one can still trace the location of towns in regular intervals along the rail lines on the prairie. They were apparently developed from water refilling stations required for the steam locomotives of the day. The separation represents the length during which all the water carried on a train evaporated—a technological factor in its truest sense.

Economic and geographic factors: a person lives at a location convenient for carrying out daily activities, both work and non-work, commensurate with the ability and willingness to pay for the corresponding residential cost. For those who cannot afford the prime locations, housing a little bit further away is the only choice. A host of theories exists to explain this phenomenon, including land rent and location theories. On a historical basis, cities have located on trade routes, perhaps due to accessibility to markets. To command a competitive edge in today's retail market, warehouses are often situated in the midst of the demand, where consumers have easy access to stored goods through the retail outlets. The most graphic example may be in emergency planning. Quick, efficient medical evacuation of the wounded dictates a judicious placement of hubs through which the injured can be quickly transported and eventually delivered to hospitals for medical care.

Political factors: zoning represents an institutionalized consensus in the community regarding the legitimate use of the land. Fiscal and jurisdictional considerations are also quite common. During the latter part of the 20th century, there have been free enterprise zones designated by China to manufacture and conduct business with the free world. Some of these are located across the border from Hong Kong and Macao. These zones enjoy special jurisdictional and fiscal privileges-incentives for investment and workers. Finally, there are eminent political decisions for location as well. On a larger scale, many guidelines are enacted as legislation. The location of airports, for example, is subject to numerous environmental regulations. Brewer and Alter (1988) and Chapin and Kaiser (1979), among others, have a good review of the national, state, and local legislation that governs land use in general.

Social factors: dominance, gradient, and segregation, centralization and decentralization, and invasion and succession are social factors that determine location. Humans tend to congregate into communities. On the other hand, they tend to segregate themselves for certain other reasons, which results in the reservation of certain land accessible only by selected

groups. Thus there are segregated regions reserved for colonial citizens in a newly discovered land to the exclusion of natives of the land. Certain public facilities are segregated between women and men for privacy reasons. Between the phenomenon of togetherness and separation, all the shades exist in between. This explains to some extent the myriad of development patterns that we see through recorded history. These social and behavioral factors vary depending on the values of the time and the context of the culture.

According to location theory, also the determination factors, the place where we can set up logistics centre should be close to the market, and there are infrastructural supports. Since the end of last year, Chengdu decides to build the western logistics centre in 3 years. And in Guangxi Province, there is a large logistics centre. But from the map, we can find both of the logistics centre are in the Midwest. So how about the deeper western regions? Now we focus on Qinghai Province. Below is one picture of Qinghai Province. The eastern part of Qinghai has more infrastructural supports than the western part of Qinghai. There are three airports in the province. One is 29 km far away from the centre of the provincial capital—Xining.



FIGURE 3. Qinghai Province

From the picture of China rail network and the picture of China highway network, if we build one logistics centre in Xining, it is possible to connect Xinjiang, Tibet and Qinghai. Also there are connections between Xining and Chengdu. So the next place where we can consider building a logistics centre is in Xining. Three years later, until the Chengdu logistics centre grows mature, the materials will flow more easily and more conveniently than the present situation.

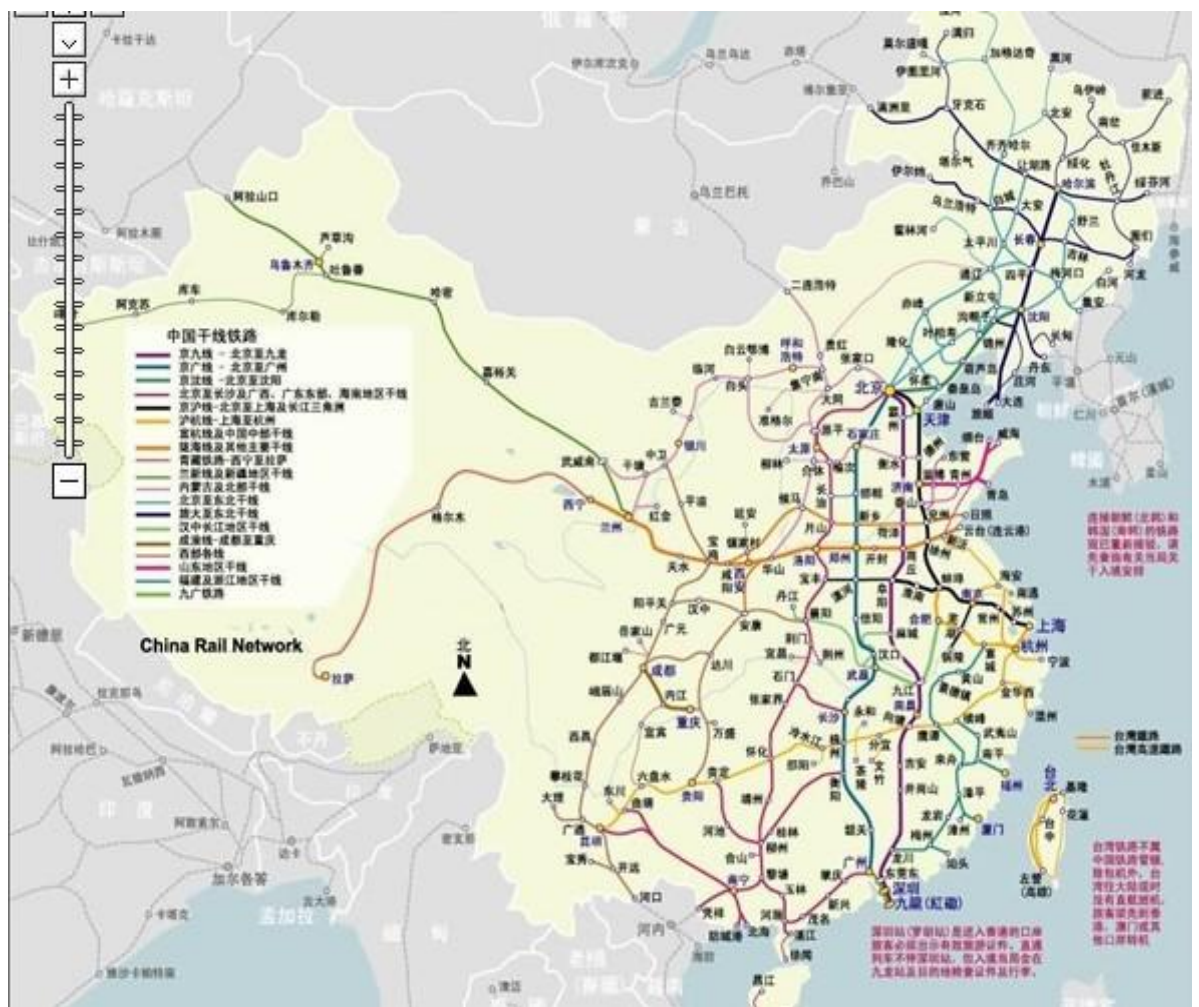


FIGURE 4. China rail network



FIGURE 5. China highway network

4.2.2 Requirements of Logistics Center

In current situation, I mentioned that most of logistics companies can just offer single or one section of logistics service, they didn't use of the advantage of transportation net, it causes the incompletely the supply chain. So if we build the logistics centre, what kind of logistics centre it should be? And which functions it should have?

“Logistics Centre” this word is used mostly in Asia area, the western country always uses “Distribution Centre”.

Logistics centre is a node of logistics network with series of logistics function. At the same time, logistics centre is the infrastructure of the logistics system.

From theory, logistics centre can have basic functions like below:

1. Transportation function. Logistics centre should have its own or rent certain standard transportation tools. A competitive advantage logistics center is not only a point but a nationwide network. Thus, logistics centre should have responsibility for customers to select a satisfied transportation way.
2. Warehouse functions. Logistics centre should storage infrastructure, what customers needs is not to save products in warehouse, but by carrying out distribution activities to ensure market. At same time reduce capital as low as possible. So public logistics centre needs high efficiency equipment to pick and pack.
3. Load and unload functions. Handling is to speed up the flow of goods in the logistics centre.
4. Package function.
5. Distribution processing functions.
6. Logistics information processing. Logistics centre is now inseparable from the computer, so all the logistics chain in a variety of logistics operations in real-time logistics information generated by the collection, analysis. Transfer; provide various operational details to the owner of the information and consultation of information.
7. Settling charge. It is an extension of the logistics function.
8. Demand function.
9. Functional logistics system design and consultation.
10. Logistics education and training function.

Consider of building a logistics center, there is one example of the biggest logistics center Semmaris in the centre market in France, Paris is under construction, state funding accounted for the largest share of 53,21%,

investment accounted for Paris is 2%, Val de Marne state funds 6.87%, bank financing 5.5%, SAGAMRIS state invests 3,7%, and other logistics enterprises invest 14.2%. So from this example, China should take to avoid short-long, fully explore and utilize the existing, high efficiency the logistics resources.

4.3 Information Support

And how can we monitor materials flow? How the foreign investors survey the local market? I mentioned information as the 2nd strategy. From the definition of logistics, it is not difficult to find that information is the basic and essential element. To develop the western regions, we have to build information systems that help to seize opportunities.

Logistics information that is widely used in all aspects of logistics information technology, embodied in the business of logistics information, information data digitization and computerization, standardization and implementation of information transmission, information storage and so on.

Based on the 2nd strategy: accelerate the process of information, combine information itself with other industries; it can be divided into several steps:

1. Connection with the key point of the Western Development strategy, and form industrial information support. In the Western Development strategy, information is considered as an infrastructural construction, it includes information infrastructural construction, information channel and information service construction, and it becomes leading industry.

From ecology protection and construction view, we need advanced and suitable information technology and information service way to suit and satisfied with monitoring data, data research, census data, and resources data. For examples, adopt the combination of RS and GIS to achieve fast, accurate, and just-in-time in information collection.

From adjustment of industrial structure view, we need adopt advanced information technology to improve and promote traditional industries.

From development of sciences and education view, advanced information technology can foster advantage of a late comer. And from the 1st strategy view, industrial support needs strategic information systems. With advanced information technology and information services enable external resources quickly to gather to the western regions.

2. Focus on the core regions. As I mentioned above, information need find the breach. According to growth pole theory, concentrate on limited resources in a region or industry configuration advantages, these advantages through regional or priority to the development of key industries form regional economic growth and stimulate growth in related areas or related industries. The development of information is closely to the focused regions, consistent with the layout, with matching speed up the process of information as a breakthrough. So that people, relatively abundant financial resources, demand is relatively focused regions as breakthrough. Firstly in the key areas use of information technology to achieve development process, then by the kinds of regional economic development focus combined with achieving a leap forward.

The key areas mainly have the good existing economic base, good location, and a relatively dense population, along roads and in some parts of the city hub. Xi-Long-Hai Lanxin railway economic zone focus on development regions of Shaanxi, Gansu Lanzhou Baiyin economic zones, economic zones of North Slope, as well as Shaanxi, Shanxi, Inner Mongolia, energy and heavy chemical industry based in the west, along the Yellow River in Ningxia region, the eastern regions and Golmud in Qinghai, Xinjiang Korla area, Inner Mongolia Loop etc.

The key development areas of Yangtze River economic belt include: Chengdu-Chongqing region, Panzhihua, Chengdu, Mianyang. Three Gorges areas: Nanning, Guiyang, Kunming economic zones. The key development areas include: capital and the regional capital cities in the

surrounding areas, as well as some important port cities, strong resource development, tourism development zone.

The economic development levels and different structure of these key areas, which determines the aspect of information technology, information content requirement are also different, this distinction we have to take corresponding measures to select priority as a fully open information, which is the most important core area of the economy, consider these few areas in Central Shaanxi Province, Lanzhou Baiyin economic zone, economic zone of Tianshan Mountains, Chengdu, Mianyang district, Chongqing, Kunming Region as an economic core area, expanding urban economy and urban economic belt, the most important area as the construction object of MANs, IDC and information harbor, for other areas regard information infrastructure as an object, such as building a number of information channels, access to services.

In this experience and success achieved in several areas after the promotion, through the most important of Harbor Construction for information on the economic level of the core area, thereby, enhancing the level of economic development in these areas.

3. Focus on the characteristics economy and competitive industries in the west; strengthen information technology and information technology involvement. Based on the principle of uneven development, quicken the process, we must firmly grasp the key industries and key development opportunities for the leading industry in close connection with the development of economy, with local characteristics and competitive industries. That needs to strengthen the information technology integration and information technology involvement. Making these features and advantages of economic development of the industry rely on advanced information technology and services, access to the maximum of the drive and push, enable the information to promote industrialization, use of information technology development

and form new industries with comparative advantages to become a reality.

Characteristics economy is able to play some of the regional Bennett geography, climate and resource conditions in the relative competitive advantage, which is built up with the development of industrial or economic system of the future. This industrial structure and economic system, vitality embody in dominant industries.

The question now is no one calling feature economic, county similar characteristics. Feature is what you have, but another area or company does not have, or what you have is better. But how should we do? You have the priorities, that the advantages of establishing a scientific basis of the analysis, which use bio-analysis system suitable habitat. This refers to China and the world, for the various biological species, in particular varieties find a place for its growth and development and a range of computing systems. It has a large capacity of light, heat, water, wet climate data and the shape of the country's earth various ecological conditions data, through calculation and processing, can be calculated by the degree of species in the appropriate parts of the country or around the world, in order to find and identify the biological species adaptive region. It is an information consulting system, is calculated for each species, accurate to the county, to the season, not only reflects the level of the regional differences, but also reflect regional differences in the vertical; not only the first factor were compared, but also a variety of factors comprehensive comparison with this system, we can solve where to most easily introduced in the success of local biodiversity. Local biological species can also be extended to where further development and use of endemic natural resources, development of agricultural products with distinctive features and how to expand the scale of advantage and so on.

Hence, in the Western Development, the characteristics and dominant economy have the most competitive industries with significant economic benefits, a strong development potential. Characteristics

economic and competitive industries with information technology and information services will produce strong-strong effect. On the one hand by strengthening information technology and information service enable these characteristics economy and competitive industries to achieve maximize the driving and driven; the other hand, the development of the characteristics economy and competitive industries brings new demands of information technologies and services, it forms comparative advantage of the relative time.

The characteristic agriculture and agricultural processing industry, whether it is tobacco in Yunnan, Sichuan wine and feed, or cotton in Xinjiang, Shaanxi's fruit, Gansu's potatoes, or other features of ecological agriculture, there exists a search market problem, not only to find the domestic market, but also to find foreign markets; not only to find product markets, but also to find the price market. Only through information channels, identify the market will enable farmers to become rich.

The western state-owned enterprises that rich in resources in industrial processing industry are large, such as nickel, aluminum, lead, zinc, and iron and steel, petrochemical, and other. On the one hand, sales of its products should bridge with major international companies and the international market spot price at any time, enterprise information technology become an inevitable requirement; on the other hand, the western region are rich in mineral resources, but the base accounts are unclear. The Great Western Development strategy needs data, rely on traditional means, we can't get accurately, quickly and dynamically information to develop in the process of monitoring. So we have to use information technology, network technology and its services to survey resource and monitor dynamic tracking.

Tourism is one of the western edge industries, in addition to the development of new tourist routes, providing international standards of tourism services; we need information technology and services.

4. With the extension of industrial supply chain, e-commerce must be developed. Since the strategy was implemented, with the acceleration of history, from industrialization trends, in fact it is a transverse process of industrial structure adjustment and optimization, also the vertical process of continuously extended the production chain. The process speed, efficiency, drive effect are all dependent on the development of e-commerce information technology. Therefore, effective development of e-commerce should be extended through the supply chain.

E-commerce consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks. E-commerce is a new form of business activity; it is through the use of the Internet and information technology to replace the traditional trading by paper as the information carrier, in order to achieve the management of goods and services trading activities without paper, and to achieve high efficiency, low cost, digital, network, and globalization. Because in the western region has lagged effect of the economic and social development, e-commerce development has been relatively slow. The fundamental reason is that the low level constraints of corporate social information. In Gansu Province, although there are nearly 70% medium-sized and large enterprises established on the Internet, enterprise images, product's websites, web. Some companies also set up an internal information network; the company is only on the net to publish on the production supply, sales low-level e-commerce. The B 2 B, B 2 C e-commerce is still not used the key development are in the following areas:

- Enterprise, business, community awareness of e-commerce needs to be improved.
- Certification process through e-commerce, distribution, billing and other intermediate links are still no complete solution. Current, China is no reliable national sales network, the lack of reliable payment systems.
- Enterprises consider web site construction as the core implementation of e-commerce to establish unilaterally through

their own distribution system, contact the financial institutions to establish clearing system.

We can base on reality, break new ground by extending the existing supply chain, and enhance industrial connection, and like this step by step to develop e-commerce. For example the post can use the traditional distribution system, supported by advanced information and network environment, and it will enable delivery to be extended to consumer goods and so on. It cannot only broaden the market for postal delivery services, but also solve e-commerce distribution, e-Business billing problems. It can help to find out an efficient way. From here, for those traditional supply and marketing goods industries, agricultural supply and marketing cooperatives and other systems, to take a similar transformation, cultivate e-commerce distribution system.

With the optimization process in the industry, the emphasis should be placed on using advanced technologies to transform traditional industries, to promote information technology permeate every aspect of social and economic life, starting from the final demand, integrated supply chain to realize the combination of business model and technology integration model. Through the promotion of e-commerce, the advantages enjoyed by the formation of new professional and industrial restructuring advantage, creating new supply chain, the new supply chain and form new relations of production and thus promote the mechanism innovation and thus to speed up the process of industrialization.

Information in modern logistics is the first element, which replaces the traditional logistics "capacity", therefore the development of logistics information system is now the bottleneck of the logistics.

5. SWOT ANALYSIS

SWOT analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture. I will use SWOT to analyze the key to the problems.

5.1 Analysis of Building Logistics Centre

For the first idea of building logistics centre in Qinghai Province to achieve the flow of materials and information between the western and the eastern, the analysis shows below:

TABLE 2. SWOT analysis of building Logistics Centre

<p>Strengths: Good situation, railway and national roads approach to.</p>	<p>Weakness: There are no enough infrastructures to build and logistics centre.</p>
<p>Opportunities: The Western Development strategy encourage.</p>	<p>Threats: Except government, no investors, not too much users.</p>

From the analysis, it is not difficult to find that building logistics centre in Qinghai Province exist weakness and threats.

5.2 Analysis of Information Support

For the second idea—logistics information, use information to develop the western logistics.

Table 3 shows the information support in strengths, weakness, opportunities and threats. The advantages outweigh the disadvantages.

TABLE 3. SWOT analysis of information support

<p>Strengths: The Western Development emphasis on information construction. Also regional economics itself needs it</p>	<p>Weakness: No enough experience and no expert. Logistics information is still at an early stage of exploration</p>
<p>Opportunities: There are investors IBM, Lenovo and other company to support.</p>	<p>Threats: Cross culture problem</p>

6. SOLUTION

Through the SWOT analysis, both results are available. But we have to improve weakness and avoid the threats. The 3rd party logistics will be mainly developed in the future. Building logistics centre will be one of the logistics trends in the western part of China. Mainly targets of the logistics centre are those small and middle-size companies. According to different location, market size to develop suitable logistics centre. Using of it will increase mobility of products, more business contact between each company. Thus, it is not difficult to find that there is a close relationship between logistics and regional economy.

From information view, we are just at the beginning stage. Adequate equipment, adequate media communication, uncompleted net coverage, limited information technology, all of these causes the lagged development of information. So to achieve logistics information, we still have a long way.

7. CHALLENGES

To solve the disparity between the eastern and the western in China, the government announced to implement Western China Development strategy. Ten years past, except industrial sustainability, there are still a lot of problems.

7.1 Cross Cultural Problem

As I mentioned before, for the western people, this is opportunity, also challenge. China's western region is commonly referred to as the ethnic minority areas. How can both of traditional culture and sciences exist together? We do not want to and we cannot destroy cultural/handicraft industries, but we want to improve economic by sciences. Keep or leave? It is a challenge.

7.2 Ecology Problem

The enemies are gods? Recently, earthquake, draught happened frequently in the west. These natural phenomena bring the western regions great economic losses. Although in the development, Chinese government has implemented ecology protection strategy, but nature is one thing we cannot control and avoid.

REFERENCES

Zhang Hongyu, The Development in The west and the adjustment of agricultural structure. http://seekspace.resip.ac.cn/bitstream/2239/16841/1/File_02326.pdf

Supervisor, Lin Kentang, 16.03. 2007 A Research on Logistics and Regional Economic Development http://www.lw23.com/lunwen_552333822/

Fang Yun , Yunnan Social Science news, 2000, Protection of various cultures in the Western Development strategy.

http://seekspace.resip.ac.cn/bitstream/2239/22095/1/File_07580.pdf

GENERAL INFORMATION, from 2000 <http://www.chinawest.gov.cn/web/index.asp>

Sub-regional <http://baike.baidu.com/view/1395331.htm>

BUSINEES.SOHU.COM 11.07.2004 Strategic adjustment of agricultural structure <http://business.sohu.com/20040711/n220950947.shtml>

Achievements in 10 years 02.09.2009 <http://60.sei.gov.cn/999.asp?ArticleID=183999>

Mao Guangxi, 06.2002 Consideration of regional information construction and the west development <http://www.docin.com/p-11664868.html>

Wei Liqiao Researching the way to accelerate information process in the western development. <http://www.docin.com/p-514514.html>

Yin Hongwei, 2010 Concerned on industries transfer and development in the west of China <http://blog.clzg.cn/space.php?uid=25397&do=blog&id=27987>

Yupo Chan, 2001.Location Theory and Decision Analysis, p3

APPENDICES

APPENDIX 1. Municipality of Chongqing

Area: 82,402.95 square kilometer

Population: 32 million Yuan

Climatic conditions: subtropical monsoon humid climate

Position: Chongqing is located in west-south of China. The total area is 2.39 times of total area of Beijing, Tianjin and Shanghai city.

Economics: Chongqing is China's major economic growth pole in the western region. The retail turnover of goods is just after Shanghai. Calculated by total economy, Chongqing is the fifth in the west 12 provincial regions. While Chongqing is a city with a large combination of rural, the city's urbanization is still a long way.

Transportation:

- Railroad: Chongqing has 5 electric railways, Cheng-Yu, Chuan-Qian, Xiang-Yu, Yu-Huai, Sui-Yu and Da Wan. Besides there are two branch: San Wan railway, Wan Nan railway
- Water transportation: Chongqing has a unique golden waterway-the Yangtze River. Chongqing's water along the Yangtze River eastbound ships can arrive at Wuhan, Nanjing, Shanghai and coastal cities. Inverse Yangtze westbound, about 1,000 can ship to Yibin in Sichuan Province
- Air transportation: Chongqing has two airports, and a new one is under construction.

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重庆市



APPENDIX 2. Sichuan Province

Sichuan is major supply province of agricultural products.

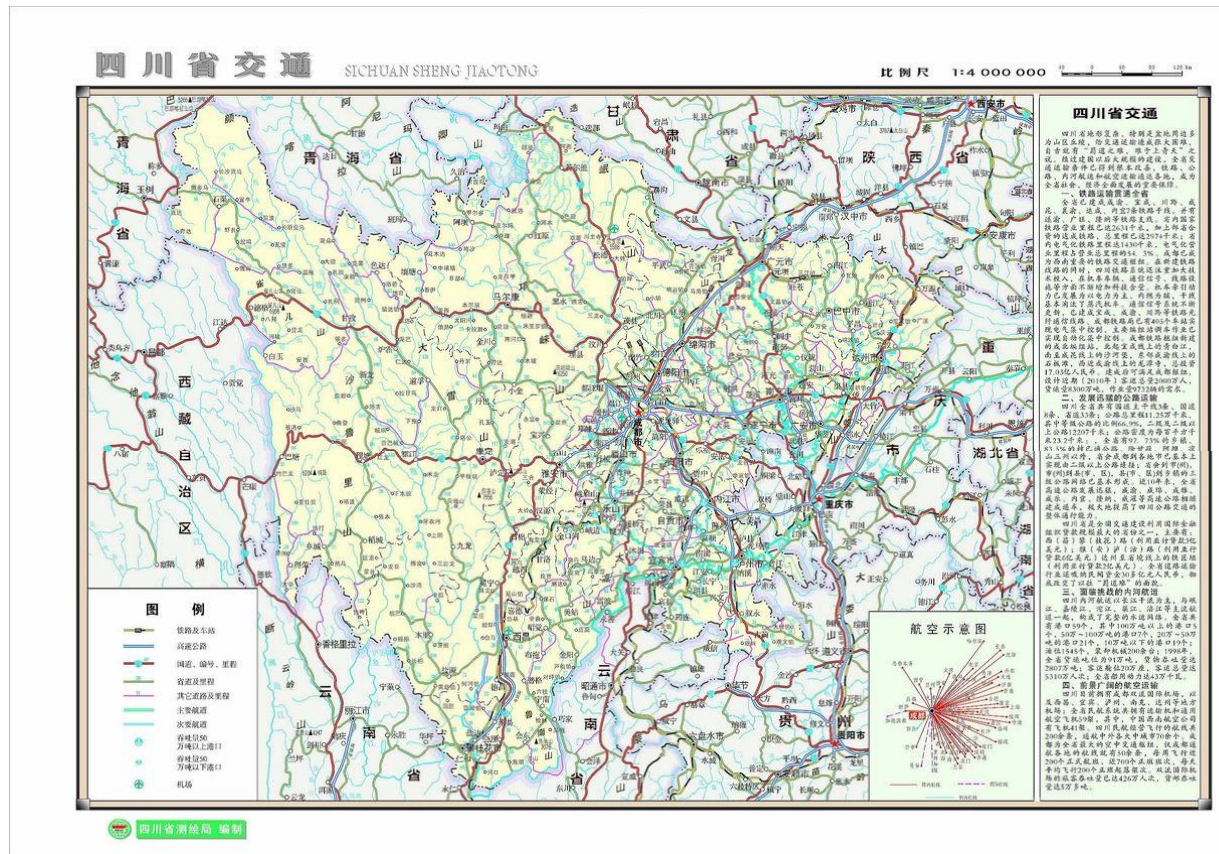
Area: 48, 5600 square meters

Population: 81, 38 million Yuan

Economics: 2009, GDP of Sichuan is 1415, 13 billion.

Transportation:

- picture shows air transportation situation, harbor situation, highway and railroads below



APPENDIX 4. Shaanxi Province

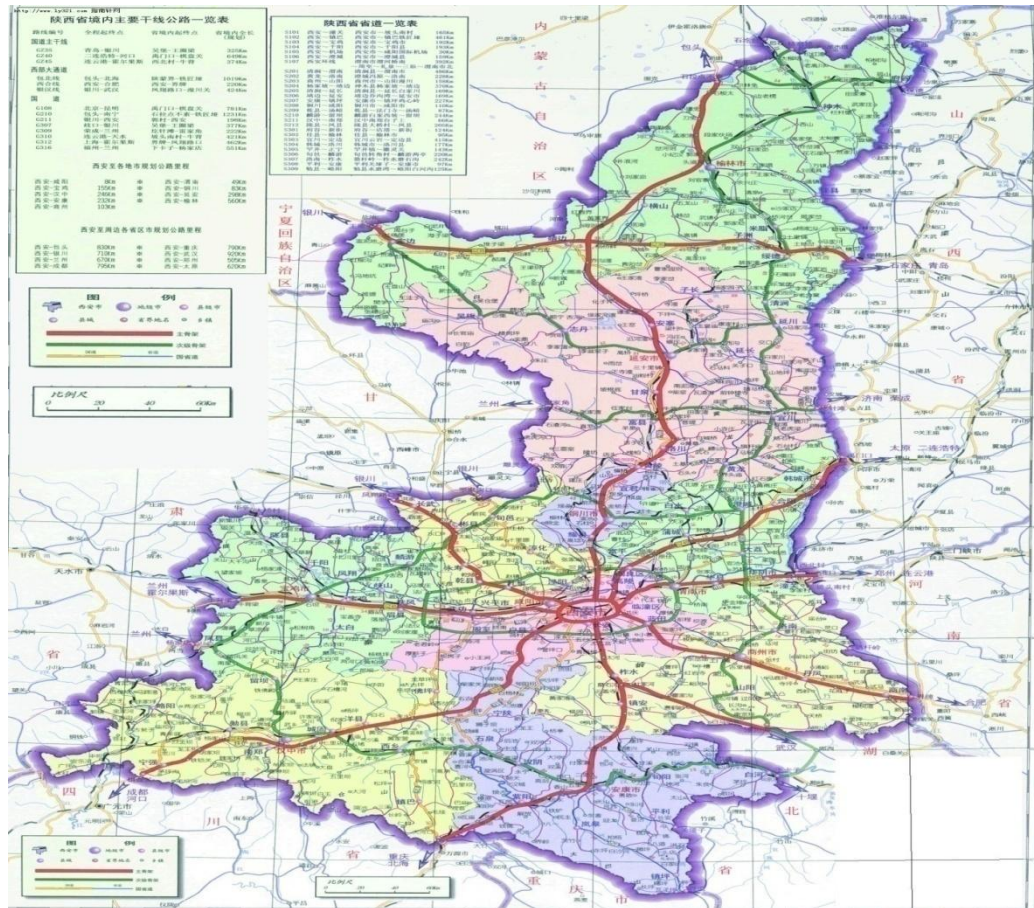
Area: 205,800 square meters

Population: 37 million Yuan

Position: Shaanxi is located in the geographical center of China, belonging to the upper reaches of the Yellow River and Yangtze River

Economics: Year 2009, Shaanxi Province's GDP is 818.665 billion. Car consumption becomes a new bright spot.

Transportation: there are five airports in Shaanxi Province.



APPENDIX 5. Guangxi Zhuang Autonomous Region

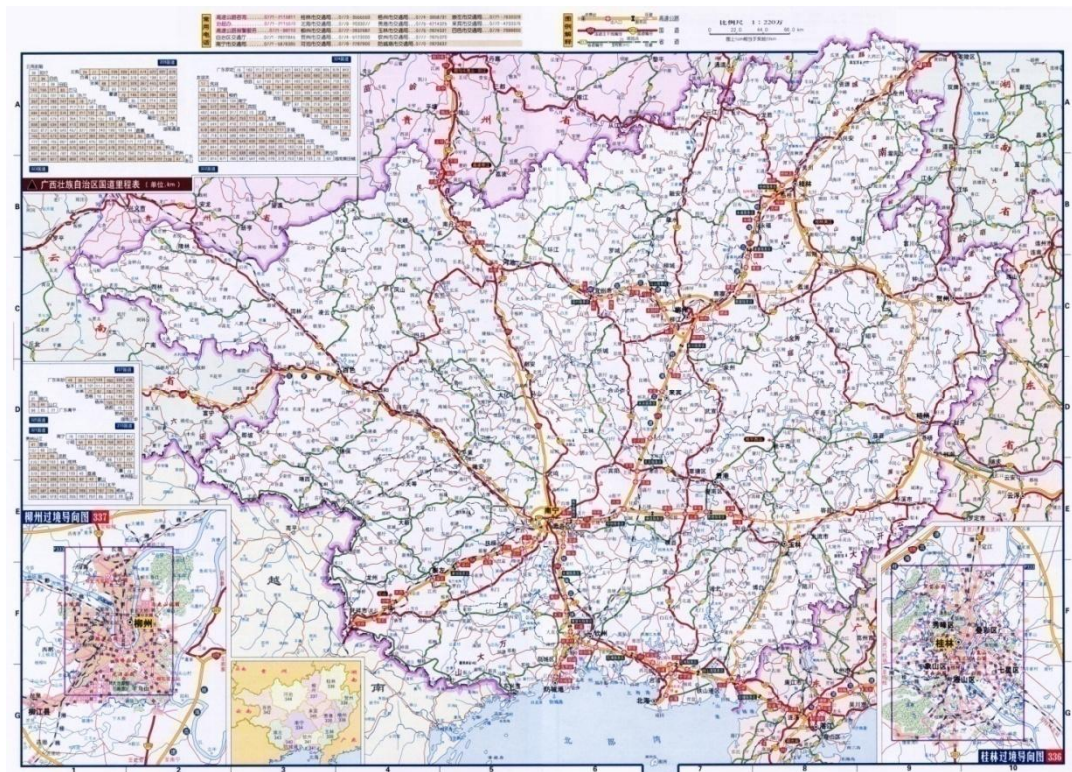
Area: 236, 700 square kilometers

Population: 50.02 million Yuan

Position: Guangxi is face to Southwest Asia. The south of Guangxi is North Bay, Southwest of Guangxi is connected to Vietnam.

Economics: GDP in year 2009 is 96 billion. It's the first time that total value added products of industry are more than 200 billion.

Transportation: Guangxi has 5 airports for civil aviation, and two new airports are under construction



APPENDIX 6. Gansu Province

Area: 455,000 square meters

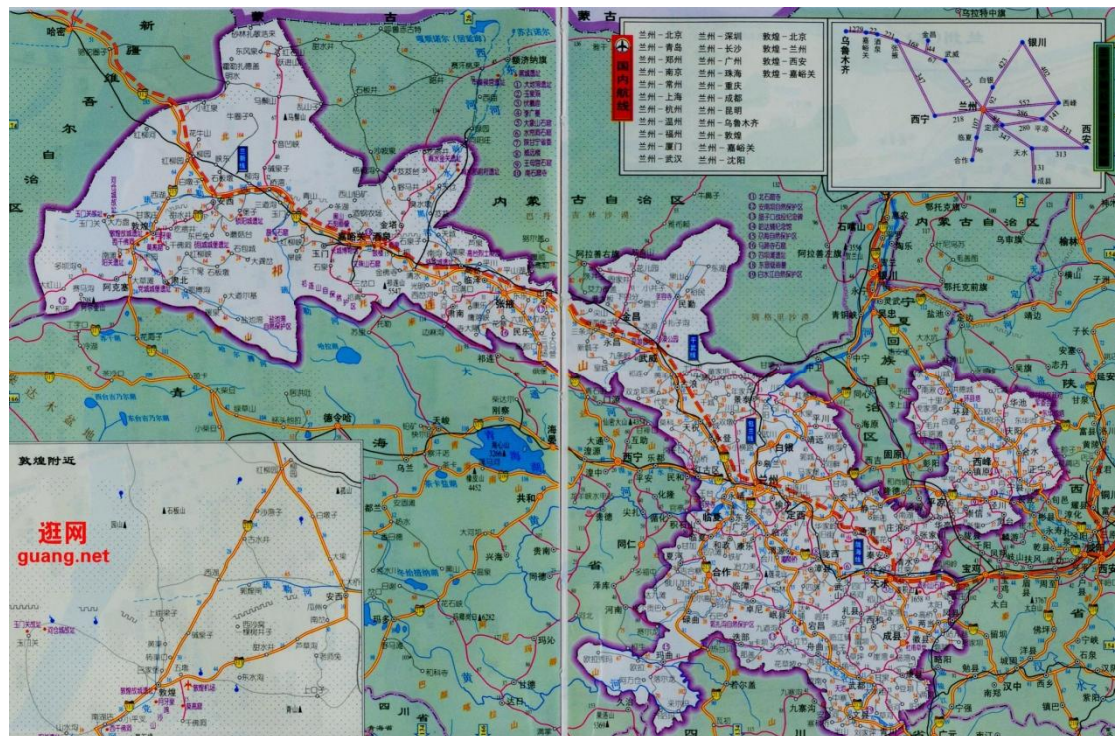
Population: 26.17 million Yuan

Position: west north of China.

Economics: GDP in 2009 was 60.4 billion, increased 36.3%.

Transportation:

- Major railroads: Long-Hai railway, Lan-Xin railway, Bao-Lan railway, Lan-Qing railway, Gan-Wu railway, Bao-Zhong railway, Tian-Bao railway
- Major roads: Xi-Lan roads, Gan-Xin road, Gan-Chuan road, Jing-Zang road etc.
- Airports: 5 airports for civil aviation. 10 airports are under construction



APPENDIX 8. Ningxia Hui Autonomous Region

Area: 66,400 square meters

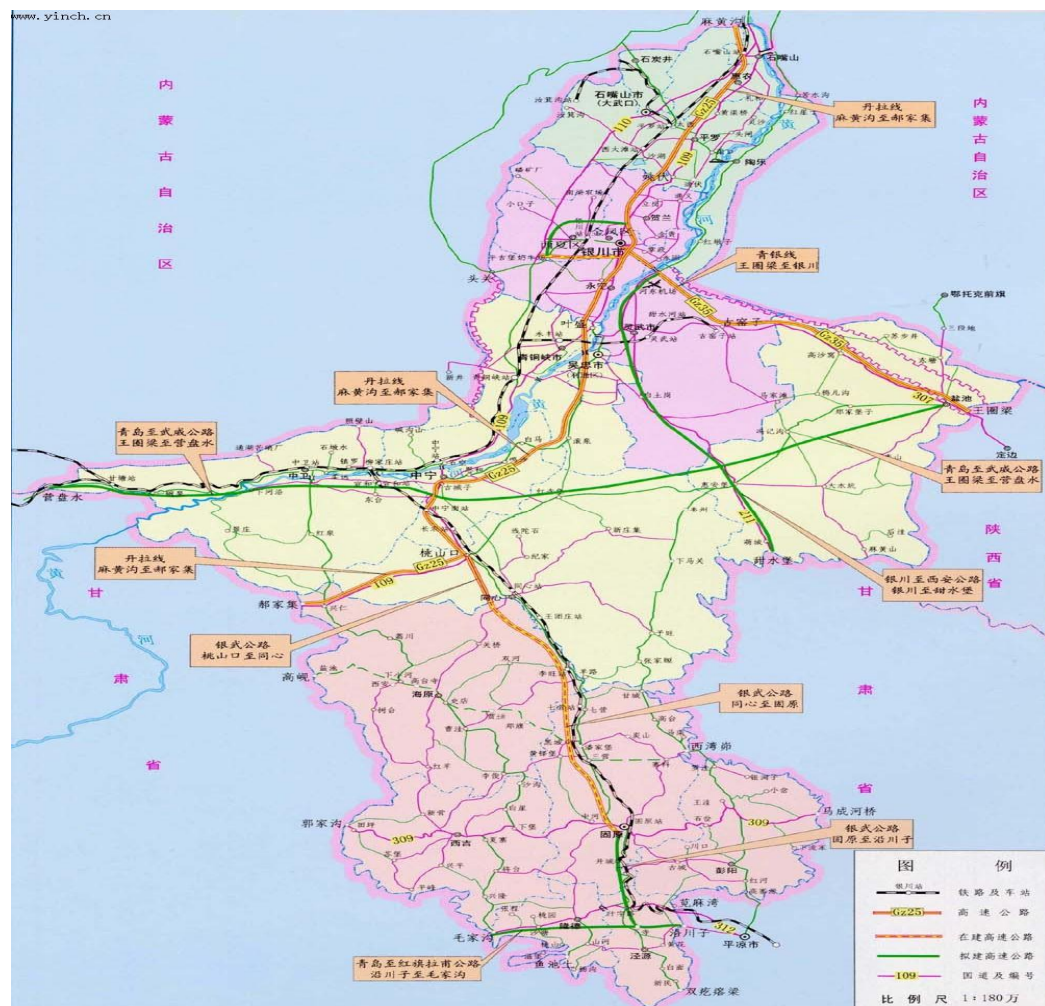
Population: 5.62 million Yuan

Position: It is located in the upstream of Yellow River.

Economics: Year 2009, GDP of Ningxia was 133.4 billion

Transportation:

- Railway: Bao-Lan railway, Jing-Bao railway, Bao-Zhong railway
- Airports: Ningxia just has one airport—Yinchuan hedong airport
- Road: there are 6 national route



APPENDIX 9. Xinjiang Uygur Autonomous Region

Area: 1, 660, 000 square meters

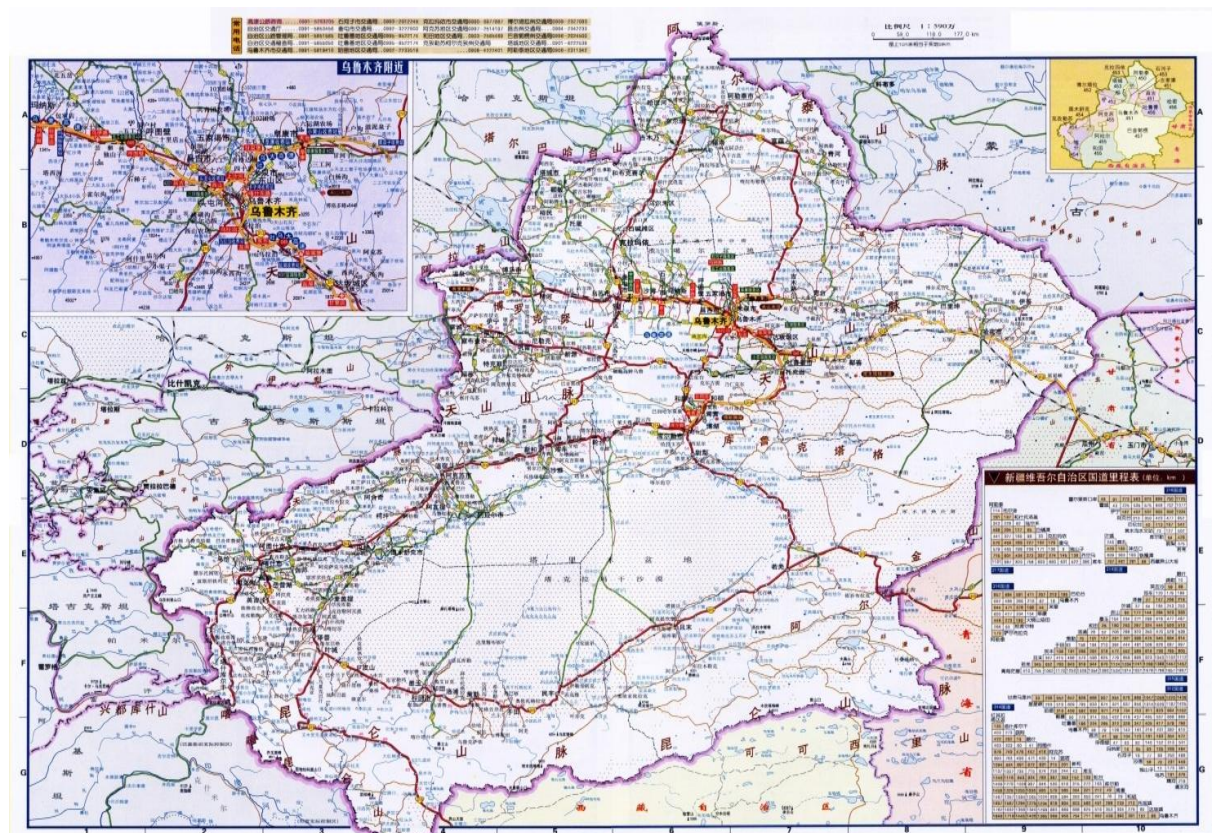
Population: 27 million Yuan

Position: Located in the central Eurasian continent, also in the north west of China, around Russia, Kazakhstan, Kyrgyzstan, Tajikistan, Pakistan, Mongolia, India, and Afghanistan.

Economics: Year 2008, GDP of Xinjiang was 415 billion Yuan.

Transportation:

- Railway: Lan-Xin railway, South-Jiang railway, North-Jiang railway
- Airports: Xinjiang Airlines.Co was established in 1985. Now Xinjiang has 12 airports



APPENDIX 10. Yunnan Province

Area: 390, 000 square meters

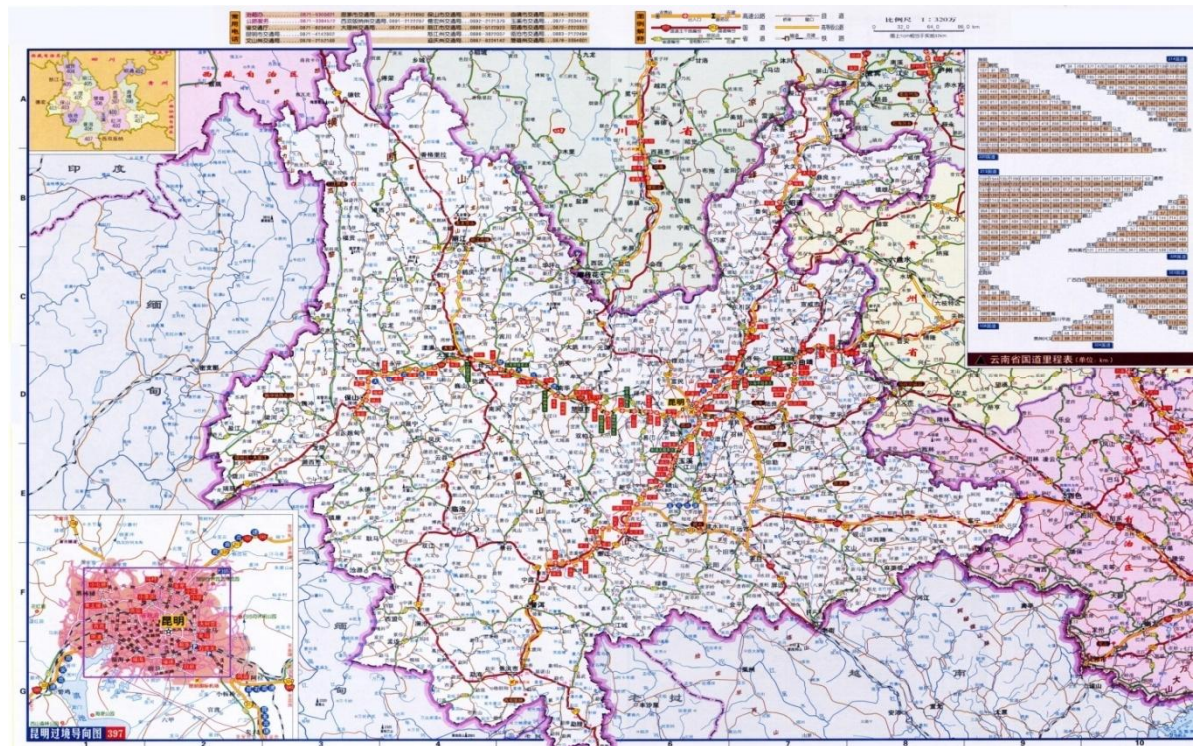
Population: 45.13 million Yuan

Position: Adjacent provinces are Sichuan, Yunnan, Guizhou, Guangxi, and Tibet. Yunnan has three neighbor countries: Myanmar, Laos and Vietnam

Economics: In 2009, Yunnan's GDP is 149 billion Yuan.

Transportation:

- Railway: until 2010, Yunnan's railway mileage reaches 2229 km
- Roads: Yunnan has 8 national route
- Airports: There are 12 airports, another 3 are under construction



APPENDIX 11. Tibet Autonomous Region

Area: 1,200,000 square meters

Population: 2.81 million Yuan

Position: Tibet is located in the world's largest high plateau, with an average altitude above 4 km. South border is across the Himalayas and India, Nepal, Sikkim, Bhutan, Myanmar and other countries. North and east is neighbor with Xinjiang, Qinghai, Sichuan and Yunnan provinces.

Economics: In 2006, Tibet's GDP is 29 billion Yuan

Transportation: Qinghai-Tibet railway is a symbol of the Western Development Project.



APPENDIX 12. Inner Mongolia Autonomous Region

Area: 11,830,000 square meters

Population: 24 million Yuan

Position: Mongolia and Russian are the neighbors

Economics: In 2009, Inner Mongolia's GDP is 137.81 billion Yuan

Transportation: the picture shows Inner Mongolia transportation map below:



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