



Ca' Foscari  
University  
of Venice

**Master's Degree programm  
in Languages, Economics and  
Institutions of Asia and North Africa**

**Final Thesis**

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**Megalopolis**

**The transformation and development  
process in the Jing-Jin-Ji area**

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**Matriculation Number**

861142

**Academic Year**

2016 / 2017

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## 引言

河北：以在黄河之北而得名。唐大部分属河北道，为河北得名的开始。宋设河北路，后分河北东、西路；金分河北东路设大名府路；元设燕南赵北道；明设北平省，后废省，所有府和直隶州直属中央，称北直隶；清改直隶省；1929年民国改河北省，省名至今未变。本论文的主题着眼于河北省的经济地位而推动京津冀协同发展。本论文的想法来源于笔者在河北省生活两个半月的经验，这样笔者可以用自己的眼睛看河北省的急剧的变化。

第一章简要介绍河北省的详细描述，包括历史、不同时期的变化，地理，地形，省界，资源，气候，动植物，面积，行政单位，文化，语言，特殊性的河北省。

第二章简要介绍 河北省经济情况的基本内容，包括港口货运，新航线开航， 水资源管理， 河北城市环境项目，交通运输系统，国内生产总值成分：第一产业，第二产业，第三产业。然后，我介绍河北省外商直接投资的情况和投资刺激；还有一个河北经济开发区的悉尼描述，地区员工工资与人工成本 和 外资税收优惠政策。

第三章按照中国国民经济和社会发展的第十三个五年规划纲的基本原则要简要介绍京津冀一体化：

中国国务院总理李克强在2014年3月5日作政府工作报告时指出，加强环渤海及京津冀地区经济协作。京津冀是中国的“首都圈”，包括北京市、天津市以及河北省的保定、唐山、廊坊、石家庄、沧州、秦皇岛、张家口、承德、邯郸、邢台、衡水等11个地级市。其中北京、天津、保定、廊坊为中部核心功能区，京津保地区将率先联动。

北京：政治、文化、国际交流与技术创新中心。

天津：全国高端制造和研发基地，中国北方国际航运核心区，金融创新示范区、改革开放的前沿。

河北：重要现代化物流基地、产业转型升级试验区、新型城镇化示范区与城乡一体化、京津冀生态友好区。

# CHAPTER 1

## HEBEI 河北

### 1.1 History

Hebei, Wade-Giles romanization Ho-pei, conventional Hopeh, is a province located on North China, based on the Bohai Bay (渤海湾) of the Yellow Sea (黄海). The region is surrounded to the northwest by the Inner Mongolia Autonomous Region (内蒙古自治区) and by the provinces of Liaoning (辽宁) to the northeast, Shandong (山东) to the southeast, Henan (河南) to the south, and Shanxi (山西) to the west. Hebei means “North of the Yellow River.” Until 1958 the capital was located at Baoding (保定), then it was transferred first to Tianjin (天津) and then briefly (1966–68) back to Baoding; since 1968 it has been at Shijiazhuang (石家庄). Today the capital is at the centre of three railways: the Beijing-Guangzhou line (北京广州线), China's north-south trunk line, and lines to Shanxi (山西) and to Shandong (山东). The prosperous municipalities of Beijing, the national capital, and of Tianjin lie within Hebei province but are both province-level administrative units (自治市). From the point of view of the culture and the economy, Hebei is one of the principal provinces in the North China (华北). Hebei Region covers a total area of 187,700 sq km<sup>1</sup> and owns a population (2015) of 74,249,200<sup>2</sup> people of Han, Hui, Manchu, Mongolian and Korean nationalities<sup>3</sup>.

The Hebei Plain was the home of Peking man, an extinct hominin of the species *Homo erectus*, who lived about 770,000 to 230,000 years ago who used tools and fire; In Beijing is present the famous site of fossil finds, named Zhoukoudian (周口店), which was designated a UNESCO World Heritage site in 1987.<sup>4</sup> By 5000 BCE, agricultural groups of tribal communities had spread in what today is called China. There were agricultural tribes from the Wei River Valley (渭河) eastward parallel with the important Yellow River (黄河), which flowed out of the Kunlun Mountains (昆仑) through vast forest and along the loess soil of the North China Plain

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1 Victor C. Falkenheim, Frederick Fu Hung, Hebei, *encyclopaedia britannica*, 2013.

2 Hebei Provincial Bureau of Statistics and variuos other, National Bureau of Statistics, China, 2015.

3 Hebei's ethnic group, China Daily (中国日报), internet ed., 2014.

4 <http://whc.unesco.org/en/list/449>

(华北平原) and successively to the Bohai (渤海).

Along the Yangzi River farming had also flourished, but people along the Yellow River had to work harder in order to control the water flood and to create a functional irrigation system. This greater organized effort along the Yellow River may have made it larger and more dense in population than what developed along the Yangzi.

If people were producing surpluses of food and supplies, warriors had a stimulus to control and to keep safe the territory – rather than just plunder and move on to another places. Obviously a great series of conquerors arose on the North China Plain (华北平原). The first dynasty of kings in the North China Plain has been described as belonging to the Xia family (夏代), whose rule is said to have begun around 2200 BCE. But the Shang family (商代) is the first dynasty which is certainly and historically arise. The Shang clan moved from the Wei River Valley (渭河), the west part of the North China Plain. By around 1500 BCE the Shang family built an empire, unifying all the people and villages present in the North China Plain, controlling them through an accurate tax system and make every local kings as a partner, free to manage the local territory.

On 1384 BCE the Shang family decided to transfer the capital city from Shijiazhuang to Yin (殷). As always in the world's history the Shang emperors and nobles weren't relaxed during the organization of game drives, because Emperors and aristocrats had splendid homes with splendid and decorated walls, meanwhile common people keep to live in the typical poor houses of the past. As elsewhere there was a juxtaposition between political power and religious figure. In fact the chief priest was the Shang emperor. The emperor controlled an administrative bureaucracy with the support of a group of councilors, lesser priests and diviners. Like other warring societies, there were numerous slaves, for the creation growing crops. In the Shang society the women's figure was totally submitted to men, even if women appertenent to the higher level of society had a greater and freedom than common women. In the Shang dynasty' perios civilization along the Yellow River had canals for irrigating crops. People had drains that ran water out of the city. They produced beer from millet and extended their commerce using cowry shells as the official money. The most important products traded buy the Shang merchants was salt, iron, copper, tin, lead and

antimony, some of which had to be imported from far away. As early as the 1300s BCE a bronze casting industry had developed. This was later than the rise of bronze casting in Europe and West Asia, but it became the most advanced in the world.

Since nearly half of Hebei territory is occupied by mountains, consequently the density of population in inhabited zones is visibly much higher than the total provincial average (which is nearly three times the national average) suggests. The highest population densities of Hebei region are present in the area near the Taihang Mountains (太行山), located at the junction of Inner Mongolia, the Loess Plateau region, the North China Plain region and Tibet. This is an area arised since antiquity, on the traditional highway from the Zhongyuan (中原区), or “Middle Plain”, to Beijing and on to the districts north of the Great Wall. These plains have also been created since past times. The north areas of the Great Wall and the remote areas near the mountains have the lowest population's densities.

Before 1949 Hebei region was the theatre of a substantial migration from northwestern Hebei to Inner Mongolia. Large number of people settled in southeastern Hebei also transferred, at the beginning of the 20th century, to Inner Mongolia and to China’s northwestern and northeastern areas. Although the area, which today we know as Hebei province was settled very early, it was not take into account for a very long period in most economic, war and strategy activity of the Chinese empire. Before the integration into the Qin (秦) territory in the 3rd century BCE, the region was controlled before by the state of Yan (燕) and then by the state Zhao (赵).

However Hebei has long been a region of strategical importance. To the rulers of the Han dynasty (汉代) (206 BCE–220 CE), it was ever a frontier area through which lay their main enemies as the Xiongnu population (匈奴), and the core centre of opposition of the region thanks to the creation of imponent walls. To the expansionist emperors of the Tang dynasty (唐代) (618–907 CE), Hebei region represents the basis from which to start a large and important missions with the scope of control Korea. In 755, military coups were present in this area which had attempted to remove the Tang rule in a devastating rebellion run by the general An Lushan (安禄山). Hebei region gains prestige and military relevance during the period of power of a series of northern-based dynasties, as the Liao (辽), or Khitan (契丹) (907–1125); the Jin (后金), or Juchen (女真) (1115–1234); and the Yuan (元代), or Mongol (1206–1368). Just

during this dynasty Beijing was the first city becoming the unique capital of all the whole China. So, the Yuan bring off the project about the Grand Canal linking Hebei to the rice-producing areas of southern China, started with the Jin.

During the Qing (清代), or Manchu, dynasty (1644–1911/12) Hebei was named Zhili (直隶) (“Directly Ruled”) province and from the strategic point of view became a fundamental area, especially as foreign imperialist pressure mounted during the 19th century. Li Hongzhang (李鸿章), the foremost military and political leader of his time, served for many years as governor-general of Zhili and was succeeded by Yuan Shikai (袁世凯), who became president of the Chinese republic in 1912. A period of domination by a succession of autonomous warlords in Hebei followed Yuan’s death in 1916. The warlord Yan Xishan (阎锡山) continued to govern independently in Zhili (renamed Hebei in 1928) until the Japanese invasion of 1937. The province is also an important place of revolution. The Boxer Uprising (义和乱) began in Wei county (威县) of Hebei in 1900. During the War of Resistance Against Japan (抗日战争) (1937-45), Hebei was the main battlefield of war against Japan. The famous “Great Campaign with One Hundred Regiments” (百团大战) was also occurred in Hebei.

After Japan’s defeat in 1945, the occupiers surrendered to the Chinese Nationalists (国共). Chinese communist forces took the province in January 1949. Hebei’s northern area expanded significantly in 1952 when it absorbed the southeastern portion of the former province of Chahar (察哈尔). Conversely, the province’s territory shrank in 1967, when a large area in the east was carved off to create Tianjin municipality.<sup>5</sup> With the rich cultural resources accumulated over thousands of years, Hebei nurtured a number of politicians, thinkers, strategists, educators, artists and heroes. These famous people include: King Wu Ling of Zhao, king of the state of Zhao during the Warring States Period (战国时代) (475-221BC), outstanding statesman, military strategist and military reformer.

## 1.2 Geography and administrative units division

Hebei province is formed by two approximately corresponding parts: one is the northern part of the North China Plain (华北平原) and the mountain ranges along the northern and western boundaries. The former is generally named the Hebei Plain. It is in

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5 Victor C. Falkenheim, Frederick Fu Hung, *Hebei*, [www.encyclopaedia britannica.com](http://www.encyclopaedia britannica.com), *op. cit.*

great part formed by the alluvial deposits of the five principal tributaries of the Hai River (海河) group, which meet and then flow past Tianjin to the sea. Two of them, the Yongding (永定河) and the Chao (潮河), flow down from the northern highlands. The other three have their sources in the western and southern part of Hebei: the (大清河) and Ziya (子牙河) rivers and the Southern Grand Canal (南运河).

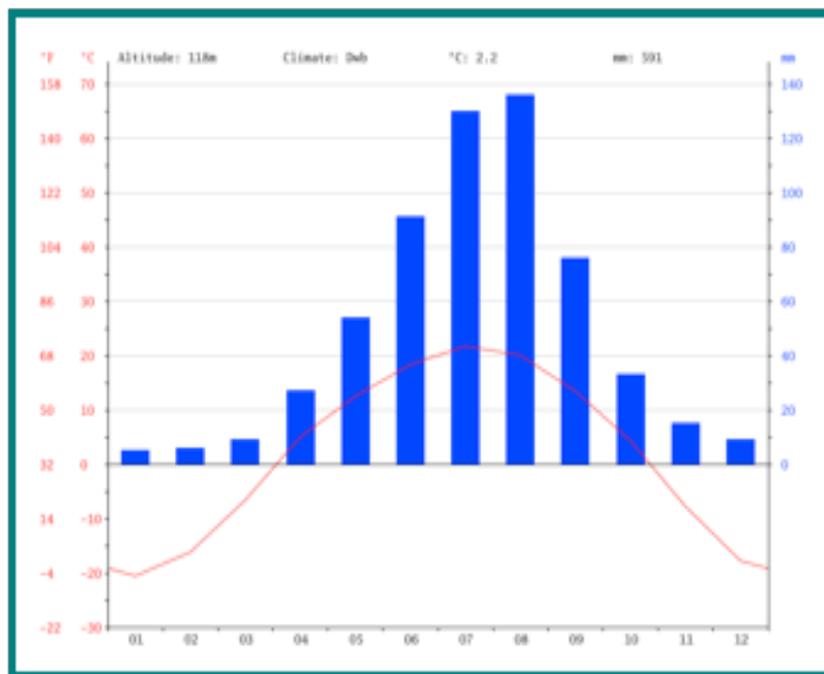
The Hebei Plain rises from west to east. It is surrounded by the Yan Mountains (燕山) on the north, the Taihang Mountains (太行山) to the west, and the Bo Hai to the east. The mountains have at their feet a group of alluvial fans. This inner belt of the Hebei Plain is generally well drained. Until the late 20th century the groundwater level usually was fairly close to the surface and was easily tapped for domestic water and irrigation. However, since then overuse has lowered the water table, necessitating deeper wells. The Yan Mountains form the northern rim of the North China Plain, displaying to the traveler an endless sea of rounded hills, with peaks averaging 1,500 metres above sea level. The Great Wall (长城) of China zigzags along its crests. Beyond these mountains the Mongolian Plateau stretches from the northernmost part of Hebei province to Mongolia. This part of Hebei was incorporated into the province in 1952, when Hebei's boundaries were extended beyond the North China Plain for the first time. The rim of the plateau has an average elevation of 1,200 to 1,500 metres and is rugged and inhospitable to human settlement. Between the Yan Mountains are large basin plains, cultivated and well inhabited. Coal and iron are mined in the northern mountains.

To the west of the North China Plain sprawls the lofty north-south range of the Taihang Mountains, separating the Hebei Plain from the Shanxi Plateau, its highest peak rising above 2,750 metres. The range is pierced by a number of west-east streams whose narrow valleys (the famous "Eight Gorges" of Taihang) are the routes of highways and railroads between the Hebei Plain and the Shanxi Plateau.

The most common soil in the Hebei Plain is dark brown earth developed on loessial alluvium, modified by cultivation over several millennia. It is extremely fertile, the famous "good earth". New alluvium is present in the zones along the rivers by everyday flooding. In the mountains the soils has a different kinds: the upland hills have leached dark brown soils, the more humid mountainous areas of the Yan and Taihang ranges have brown forest soils suited to fruit trees, and the northernmost Zhangbei plateau has

light chestnut zonal soils.

Hebei province is characterized by a continental climate. This means that in January there is a temperature variable which start from  $-4^{\circ}\text{C}$  in the south and touch  $-10^{\circ}\text{C}$  north of the Great Wall. While the difference of temperature in July is more or less  $25^{\circ}\text{C}$  in the North China Plain and  $23^{\circ}\text{C}$  to  $25^{\circ}\text{C}$  in the northern and western highlands, with annual precipitation of 400 to 800 mm, most present in the summer season. Each seasons is characterized by great climate changes: a large variety of possibility affect this area, like for example cold and dry winter, hot and rainy summer, transient and windy spring, and cool and agreeable autumn.<sup>6</sup>



河北气候

Most part of the natural vegetation of Hebei province is characterized by thick forest, but, because of many centuries of human settlement, cultivation, and deforestation projects, a poor part of the Hebei's traditional vegetation is only present in the high mountains and some inaccessible zones. Furthermore afforestation programs have destroyed millions of acres with the purpose to incentive the forest upland economy.

The northernmost Zhangbei plateau (张北) is characterized by steppe grass of

<sup>6</sup> China Climate, Hebei, *Climate-data.org*, internet ed.

the Mongolian Plateau variety . The higher mountains have coniferous forests. In the saline areas along the coast and in the low-lying depressions, plants that flourish in a salty environment dominate. There is a conspicuous absence of forests in the lowlands and lower hills. The flora is predominantly of a northern character. It includes willows, elms, poplars, Chinese scholar trees (*Sophora japonica*), trees of heaven (*Ailanthus altissima*), and drought-resistant shrubs.

The present fauna includes elements of the temperate forest (such as the brown-eared pheasant [*Crossoptilon mantchuricum*]) and of the cold-winter steppe (such as the camel), as well as some tropical elements from the Indo-Malay region (such as the tiger and monkey). The domestication of animals such as the dog, sheep, goat, cow, horse, donkey, mule, camel, and cat has led to the extinction or near- extinction of many wild species. The smaller mammals are better-preserved, including moles, bats, rabbits and hares, rats, mice, and squirrels. Birds include the Mandarin duck (*Aix galericulata*), native to China. Hebei region has a total area of 187,700 km<sup>2</sup>. Total population number is at 74.25 million in 2015. Hebei is part of the Jing-Jin-Ji (Beijing-Tianjin-Hebei) Economic Zone (京津冀經濟圈) and the Bohai Bay Economic Region (環渤海經濟圈). Hebei region is subdivided into 11 prefecture-level municipalities 地级市(dijishi). Under this principal level the province is divided into districts under the municipality市辖区 (shixiaqu), counties 县 (xian), autonomous counties自治县 (zizhixian), and county-level municipalities 县级市 (xianjishi). The traditional subcounty administrative unit was the civil township, or rural district 乡(xiang), which was supplanted in 1958 by the commune.

### Administrative units 行政单位

Code	native name	administrative center [native name]	area in sq.km.	population 2000-11-01 census	population 2010-11-01 census	population 2015-12-31 estimate
13000	石家庄市	Shijiazhuang Shi [石家庄市]	15,722	9,241,186	10,163,788	10,701,600
130200	唐山市	Tangshan Shi [唐山市]	13,206	7,040,554	7,577,289	7,801,200
130300	秦皇岛市	Qinhuangdao Shi [秦皇岛市]	7,467	2,753,962	2,987,605	3,073,200
130400	邯郸市	Handan Shi [邯郸市]	12,087	8,386,814	9,174,683	9,433,000
130500	邢台市	Xingtai Shi [邢台市]	12,439	6,645,766	7,104,103	7,294,400

130600	保定市	Baoding Shi [保定市]	22,159	10,471,123	11,194,382	11,552,400
130700	张家口市	Zhangjiakou Shi [张家口市]	36,829	4,191,035	4,345,485	4,421,700
130800	承德市	Chengde Shi [承德市]	39,519	3,324,121	3,473,201	3,530,100
130900	沧州市	Cangzhou Shi [沧州市]	13,419	6,639,501	7,134,062	7,443,000
131000	廊坊市	Langfang Shi [廊坊市]	6,330	3,833,444	4,358,839	4,563,200
131100	衡水市	Hengshui Shi [衡水市]	8,815	4,156,913	4,340,773	4,435,400
			187,991	66,684,419	71,854,210	74,249,200

7

From the linguistic and cultural point of view Hebei belongs to the Northern Mandarin dialect family and has in common many of the characteristics of that regional culture. Living in the northernmost part of the Sinitic zone—historically subject to nomad incursions and political subjugation—Hebei’s people traditionally have been described as orderly, submissive, and uncomplaining. Their cuisine characteristics are wheat cakes, mutton, and bean dishes. There are many local operatic and dramatic traditions, carried on by the province’s numerous art and theatre troupes.

Hebei is an important central point of tourism thanks to the presence of several famous attraction such as the Western and Eastern Qing tombs (遵化县) (collectively named a World Heritage site in 2000), respectively southwest and just east of Beijing municipality; and the Bishu Shanzhuang (避暑山庄) the summer residence of the Qing emperors, also named a World Heritage site [1994]) and other historic sites in northeastern Chengde (承德). One fundamental popular tourist destination is the Great Wall (designated a World Heritage site in 1987), which makes its way across the northern part of the province, and also represent a portion southwest of Beijing municipality; important point of the wall present in the province are represented by Shanhaiguan Pass (山海关) at Qinhuangdao (秦皇岛) in the east and Zijingguan Pass (紫荆关) near Yixian (易县) in the west.

### 1.3 Flood-control and Harbours

The major Hebei rivers arise from the loess-covered Taihang Mountains and the Shanxi Plateau. They carry a heavy load of silt after the summer downpours, depositing

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7 Hebei Statistics, *The State Council of The People's Republic of China* (中华人民共和国), internet ed., 2017.

it in the shallow channels downstream on the plain, gradually silting them up and causing widespread floods in low-lying areas. Since 1949 vigorous measures for water control and soil conservation have been carried out together with reforestation in the upland areas. Numerous dams, generally small to medium-size, have been built upstream and in the tributaries to conserve the water for irrigation and other uses; flood-retention basins and storage reservoirs have been built downstream. The Duliujian River (独流减河), connecting the Daqing to the sea, helps to drain the extremely low-lying tract around the large Baiyang Lake and the Wen'an Marsh. Water from the streams is used to wash away excess salt in the alkaline soil and to make it arable.<sup>8</sup>

The Hai River (海河) is only 55 km long, from the city of Tianjin to the sea, but the drainage basin of this river five tributaries represents two-thirds of Hebei province. A number of flood-control and power-generation projects have been developed in the Hai basin water, like for example the “Hai Basin integrated and environment managemnt project”<sup>9</sup> or the “HUEP” (Hebei Urban Environment Project, (城市环境项目)<sup>10</sup> financing by the World Bank. Another major river is the Luan (滦河), which drains northeastern Hebei. A major project of the 1980s was the construction of a diversion channel carrying water from the Luan to Tianjin. All the major Hebei rivers empty into the Bo Hai, a shallow sea with an average depth of only 30 metres. The water and nutrient matter brought down by the rivers nourish a rich marine fauna. In winter the surface water along the coast is frozen, but navigation is possible with the use of icebreakers.

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8 Survey of sustainable utilization of water resource in North China plain, *China Geological Survey*, 2009, Geological Press, Beijing.

9 See *infra*, Appendix A.

10 See *infra*, Appendix B.



11

There are three important ports: Tianjin (天津), which is about 35 miles up the Hai, Tanggu (塘沽), and the major coal-handling and oil-shipping port of Qinhuangdao (秦皇岛). Two major ports in Hebei province and Tianjin municipality has signed an agreement to work together instead of competing with each other, resulting in the foundation of a new company, the Tangshan Container Terminal.

Tangshan Port and Tianjin Port signed the deal on July 18, which drew up some 500 million yuan (\$74.65 million) in registered capital. The newly-formed container terminal will process cargo from Asia, Europe and America. Sun Wenzhong, Chairman of the Board of Tangshan Port Group, said that the cooperation represents a win-win situation for the two ports and will benefit the development of the Beijing, Tianjin and Hebei areas.<sup>12</sup>

On the afternoon of December 27, the unveiling ceremony of the Tianjin Tang International Container Terminal Co., Ltd., jointly established by Tangshan Port Group and Tianjin Port Group, was held in Tangshan (唐山). Tianjin Tang International Container Terminal Co., Ltd. registered capital of 500 million yuan, will integrate the Tianjin Port, Tangshan Port container transport hardware and software resources, to

11 Hebei province wastewater management project, Asian Development Bank, *internet ed.*, 2002.

12 Hebei and Tianjin ports sign cooperation agreement, The People's Government of Hebei Province (河北省人民政府), 2016.

achieve between Hong Kong and the container resources to co-ordinate sharing routes to promote the development of container transport across the two places. In the future, the scientific layout will be formed with Tianjin Port as the center, Tangshan Harbor and Huanghua Port as the two wings, and promote the mutual complementation, benign interaction and win-win cooperation in the port resource and container route layout.

Tianjin Port is the largest comprehensive port in North China, with a total of 173 berths of various types, of which more than 119,000 berths. In 2015, Tianjin Port cargo throughput exceeded 540 million tons, ranking fourth in the world; container throughput of more than 14.11 million TEUs, ranked tenth in the world. Tangshan Port has 41 berths, waterways reach more than 70 countries (regions), more than 150 ports. In 2015, Jingtang port cargo throughput reached 233 million tons, container throughput reached 1.117 million TEUs, accounting for Hebei Province, "three Hong Kong four areas," 44.2%.

Tangshan Port Industrial Group General Manager Wang said that the aim of the establishment of Tianjin Tang International Container Terminal Co., Ltd. is to achieve the two port container resources complement each other, to build shared, marking the two sides to deepen the pragmatic cooperation has entered a new stage, not only for Beijing-Tianjin-Hebei region has opened up a new "sea-rail-transport" channel, which provides a new, efficient, convenient and low-cost container logistics channel for the economic and social development of Beijing-Tianjin-Hebei region and its surrounding areas.

By the end of the 13th Five-Year Plan (2016-2020) period, container ship berths at the Tianjing-Tangshan ports will increase from four to ten, with container capacity rise from 1.2 million to 5 million per year.<sup>13</sup>

Hebei Port Group Co.,Ltd. is a comprehensive enterprise group which is exclusively state-owned, mainly engages in port construction and development, the state-owned asset operation and management, investment and financing. It's also the world's largest bulk cargo transportation business, which the three major ports in Hebei province: Huanghua Port, Qinhuangdao Port and Caofeidian Port. The first Party congress of Hebei Port Group was held from Jan 3 to 5, during which the managers of three ports assessed the achievements made during the 12th Five-Year Plan period (2011-2015) and set out new proposals for the 13th Five-Year Plan period (2016-2020).

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13 Joint Venture of Tangshan Port and Tianjin Port to set up container terminal company, 新闻中心news, *internet ed.*, 2016.

By the end of the 12th Five-Year Plan period (2011-2015), Hebei Port Group achieved operating profits of 11.74 billion yuan (\$1.7 billion), and gross profits hit 2.51 billion yuan, with total assets increasing to 55.12 billion yuan, an increase of 92.2 percent compared with during the early 12th Five-Year Plan period (2011-2015).

Meanwhile, goods handled by the three ports of Hebei Port Group reached 374 million tons, among which oil and groceries accounted for 152 million tons, and containers handled by Hebei Port Group exceeded 1 million TEU. Hebei Port Group has also made great efforts to improve its infrastructure construction and financing businesses. The group finished the construction of the first phase of the ore terminal in Huanghua Port and the coal terminal in Caofeidian Port during 2011 to 2015, as part of the integrated development plan of the three ports affiliated with Hebei Port Group. Over the past five years, Hebei Port Group has actively developed its investment businesses at home and abroad, with the wholly-owned, holding and shareholding companies that Hebei Port Group has invested in amounting to 46. And the group achieved foreign investment income of 3.76 billion yuan, which makes investments an important source of income for the group. Moreover, Qinhuangdao Port share was successfully listed as an H-type share in Hong Kong. During the Party congress, Hebei Port Group set a new work target for the 13th Five-Year Plan period (2016-2020)<sup>14</sup>.

According to its plan, the group will make great efforts to reach the goal of achieving annual revenues of 22 billion yuan and gross profits of 3 billion yuan; and the ports throughout the group are expected to handle in the region of 540 million tons. To achieve the goal, Hebei Port Group will carry out three main strategies to boost the development and transformation of the group. First, Hebei Port Group will change its development model from expanding its operations to improving its service quality. Second, Hebei Port Group will make efforts to join the integration efforts of the Beijing-Tianjin-Hebei region by optimizing the layout of the port businesses. Third, Hebei Port Group will build itself into an energy-saving and eco-friendly business by insisting on environmental protection and cleaner production techniques. Specific measures include expanding Huanghua Port, Caofeidian Port and Tangshan Port eastward and establishing another 150 water channels; Qinhuangdao Port will gradually conduct container transportation to replace the previous bulk cargoes; and Hebei Port Group will push forward the construction of the kerosene oil terminal at Huanghua

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<sup>14</sup> The 13<sup>th</sup> five-year plan for economic and social development of the People's Republic of China, Compilation and translation Bureau, Central Committee of the Communist Party of China, Beijing.

Port.<sup>15</sup>

Shipping in Hebei ports has grown rapidly, reaching 474,000 TEUs in the first quarter of 2016, an increase of 18.5 percent.

Qinhuangdao Port has shipped 106,000 TEUs, consistent with the same period last year. Tangshan and Caofeidian Ports shipped 254,000 TEUs, an increase of 20 percent, while Huanghua Port reached 114,000 TEUs, an increase of 40.7 percent, ranking first of all ports in the province.

In addition, the province has opened three new shipping lines, from Jingtang Port (津唐港) to Fuzhou (福州) and Zhangzhou (漳州), and from Huanghua Port (黄花岗) to Zhuhai (珠海).

In the first quarter of 2016, Hebei ports have handled a total of 213 million tons of cargo, accounting for 21.3 percent of the annual target. Tangshan Port, with 120 million tons of cargo, is the first port to surpass the one hundred million mark.<sup>16</sup>

Hebei is well served by railroads. The province is at the centre of China's vast north-south railway network, and all of its major cities are connected by rail. Sea transport moves through Tianjin and Qinhuangdao. The port of Qinhuangdao, first opened to commercial activity in 1898, is now one of the country's most important trade entrepôts. It also is one of China's "open" coastal cities, which play a key role in the country's foreign trade and investment. Hebei is one of China's major road hubs, with express highways connecting the province's major cities as well as Beijing and Tianjin. Most air travel to and from the province is through the major airports at Beijing and Tianjin, but there is also a large international airport at Shijiazhuang.<sup>17</sup> In general Hebei's transportation system is structured as reported below:

Railways: fifteen trunk lines run through the province. The volume of goods carried by rail ranks first in the country.

Highways: there are 17 national artery highways and the volume of goods carried by road ranks second in the country. The expressway network is now 1,009 km long, second in China.

Harbors: transport by sea of the province is very convenient. From north to south, there are Qinhuangdao Port, Jingtang Port, Tianjin Port and Huanghua Port which is now

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15 Hebei Port Group Co., Ltd., China ports & harbours association, *english.chinaports.org.*, 2016.

16 Container throughput of Hebei ports experiences rapid growth, *The People's Government of Hebei Province*, internet ed., 2016.

17 Victor C. Falkenheim, Frederick Fu Hung, *Hebei*, internet ed., *op. cit.*

under construction. The handling capacity of Qinhuangdao Port is almost 100 million tons a year, the second largest in China. The available handling capacity of Jingtang Port is 6.51 million tons a year.

Airports: the Shijiazhuang civil airfield is an international airport approved by the State. So far, 25 air routes have been opened to public service, flying to 32 large and medium-sized cities across the country. Flight services are also available from Shijiazhuang to Hong Kong and to Russia and other states of the CIS. The Qinhuangdao Shanhaiguan airfield now has opened 21 air routes leading to 17 cities across the nation. The capital airport in Beijing and the international airport in Tianjin can be used by the province.<sup>18</sup>

Hebei acts as the distribution centre for the northeastern, northwestern and northern regions of China. Major department stores and shopping centers in Hebei include Shijiazhuang Beiguo Commercial City (石家莊北國商城), Tangshan Department Store (唐山百貨大樓) and Shijiazhuang Dongfang City Plaza (石家莊東方城市廣場), etc. Many foreign supermarkets have invested in Hebei, such as Carrefour from France<sup>19</sup>, Trust-Mart from Taiwan. Supermarket chain stores and related logistics and services are developing rapidly. Hebei's shipping and logistics industry centers mainly on the municipalities of Tianjin and Beijing, which are located in the interior of the province. Its largest seaport, located in the city of Qinhuangdao, handles over 245 million tonnes of cargo annually. Hebei's other port, near the city of Tangshan, has grown rapidly in recent years due to heavy investment by iron and steel companies within the region that desire easier access to the sea. Hebei's two major ports are connected to China's capital city, Beijing via multiple railways and Hebei's highly developed road network. High-speed rail service connects the municipalities of Beijing and Tianjin to several cities within Hebei, including Tangshan (唐山), Qinhuangdao (秦皇島), and Shijiazhuang (石家莊), and more passenger and freight routes are currently under construction.<sup>20</sup>

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18 Hebei ports, China Internet Information Centre (CIIC), internet ed., 2017.

19 Baolongcang set up JV in Hebei, , 2010.

20 Hebei logistic information, Ministry of Commerce of People's Republic of China (MOFCOM), 2017.

## CHAPTER 2

### THE ECONOMY

#### 2.1 The GDP's composition

In 2016, Hebei's GDP was 2,249 trillion yuan, an increase of 6.81 percent over the previous year, which ranked sixth in China. GDP per capita reached 40,255 yuan. Disposable income per capita in urban areas was 13,441 yuan, while rural income per capita was 4,795 yuan. The primary, secondary, and tertiary sectors of industry contributed 233.9 billion, 1,075.6 billion, and 937.1 billion yuan respectively. The registered urban unemployment rate was 3.96 percent.<sup>21</sup>

<b>Area: 187,700 km<sup>2</sup></b>
<b>Population: 74,249,200 million</b>
<b>Population density: 372 people/km<sup>2</sup></b>
<b>GDP: 2,249 trillion RMB</b>
<b>GDP per capita: 40,255 RMB</b>
<b>GDP growth: 6,81 %</b>
<b>Fixed Asset Investment: 2,942.5 billion RMB</b>
<b>Utilized FDI: 3.60 billion US\$<sup>22</sup></b>



Hebei province is one of the major cotton- and grain-producing regions of China. In 2014, planted cotton covered 669,000 hectares, reached fourth in China; total production was about 665,000 tons, reached third. Cotton grown in Hebei is very antagonistic for its too soon maturation and proceduring, which gave the opportunity to create a very strong and competitive textile industry. About 40 million tons of cotton is processed into textiles. In many territories of the province, in more or less two years is possible to produce really three crops. Chief cereal crops include wheat, corn (maize), kaoliang (a variety of grain sorghum), millet, and potatoes.

<sup>21</sup> Hebei Economic Yearbook 2016, Hebei Statistical Bureau, China's Customs Statistics, *Hong Kong Trade Development Council (HKTDC)*, internet ed. 2016.

<sup>22</sup> Hebei, *The China Perspective* (中国透视), *Internet ed.*, 2017.

To meet the need of today agriculture times demands , the Hebei Agriculture Department (河北省农业厅) has established more than 80 teams and 600 person-trips to go out of Hebei on investigation journey and played host to 113 groups of foreign guests. The Hebei Agricultural Department has also take the initiative to create a series of agreement with more than 40 countries including the United States, Canada, Japan, Russia and France. Through the diverse foreign exchanges, the department has introduced a total of 360 new crop kinds in seven categories: grains, cotton, edible oil, vegetables and flowers.

The main money-making crops are cotton, oil-bearing seeds, hemp, beets, and tobacco. The large application of tube-well irrigation in the late 1960s and early '70s gave to Hebei the possibility to become one of the principal provinces in irrigated acreage. The Zhangbei plateau north of the Great Wall is a pastoral land, famous because its variety of horses (raised near Kalgan [Zhangjiakou]) and Lambskin. Baiyang Lake is a principal inland freshwater fish-producing zone. In the suburbs of major cities there has been an extensive growth of freshwater aquaculture (fish and shrimp) and stock breeding (dairy cows, hogs, and chickens). Qinhuangdao is the core of marine fishing.

Hebei It is located at the center of one of the two largest industrial regions in China. The province promoted a good industrial centre from the 19th century, mainly in coal, iron, textiles, and indigenous handicrafts. In the 1950's there was the most important Hebei's industrial growth: the spinning force of Hebei's cotton belt was developed enormously; a major coal belt, stretching in an increasing through Hebei and into northern Henan, produced the input for a rapid growth of the coal-mining sector; and the consequent assimilation into Hebei (1952) of the Longyan iron ore district of former Chahar province speeded the flourishing of the iron and steel sector.

In the 1960s the crisis of the Huabei oil fields gave the possibility to Hebei to become a major oil producer, and in 1983 China's first deep-horizon oil field went into process in the southern part of the Dagang oil field on the Bo Hai coast, developing large amounts of petroleum and natural gas. Moreover, an extra principal oil field, in part offshore, was found near the area of the Bo Hai in the early 21st century.

The above factories became the core of the Beijing-Tianjin industrial zone, the most extent and important industrial center in the North China. Industrial manufacture has variegated and spreaded to involve important products as cement, agricultural

equipment, and fertilizer. Small industries include textile and ceramics production, food processing, paper fabrication and flour milling. Tianjin, the largest city of the region after Beijing, is the primary industrial and commercial point of North China and a fundamental trade hub in China. Tangshan (rebuilt in part after the catastrophic earthquake of 1976) and Qinhuangdao in the east, Baoding in the centre, Shijiazhuang in the west, and Handan in the south represent others important industrial towns of the Hebei province. Logistics industry is an emerging field in Hebei that take advantage from its useful position and crucial logistics hubs of Shijiazhuang, Tangshan, Langfang, Handan and Zhangjiakou, besides Shijiazhuang international logistics park and 30 other important logistics and distribution tools. The ports, railways and roads present in Hebei province are helping to the growth of a efficient logistics hub that is confident of domestic demand, act in relation with Beijing and Tianjin, deal with the entire country and has connection with every parts of the world. The information industry in Hebei has developed speedily in recent years. They involve modern screen technology, new types of communications, software, integrated circuits, modern tools and new electronic tools. A somewhat centralized industrial plan has been developed through the integration of Shijiazhuang, Baoding, Langfang, Tangshan, and Qinhuangdao. A number of important data about technology application projects are in operation, while the radio industry is flourishing. Hebei is famous for the manufacture of traditional and conventional medicines, particularly in raw materials and herbal methoding. Its production of 7-ACA, oxytetracycline and other chemicals reached first in China; the production of penicillin, streptomycin, vitamin C, vitamin B12 and anhydrous glucose ranks first in China while more than 10 types of compositions like penicillin powder for injection, amoxicillin, lincomycin, cefazolin, cephradine, cephalexin top production in the country. Modernization in technology, institutions and management keep to make the pharmaceutical sector in the province progressively competitive both in China and out of the country. Because of training in construction and development, Hebei's clothing sector has become a perfect industrial center of cotton textiles, printing and dyeing, chemical fibers and finished clothing, in addition at wool spinning, knitting, home textiles, industrial textiles, textile machinery and equipment manufacturing. Hebei province keep to improve its brand strategy to emphasize the complete competitiveness of its factories.

Even if these flourishing industrial sectors, Hebei's industry the heavy industry

is the most important. A complete industrial chain, involving mining, sintering, iron making, steel making, steel rolling, coking, and other sectors, is active in Hebei. Hebei's iron and steel industry keep to improve because of its rational structure, advanced technology, well-equipped and functional environmental protection and brilliant quality, as well as the integration, fusion, cross-shareholding, equity participation and other kinds of improved organization among key sectors. From the gross industrial production point of view, the share of heavy industry expanded from 69.4% in 2000 to 76% in 2015. Metallurgy industry obtained the most rapid growth in recent years. In 2015, the industry of smelting and pressing of ferrous metals was the most important in terms of gross industrial output.

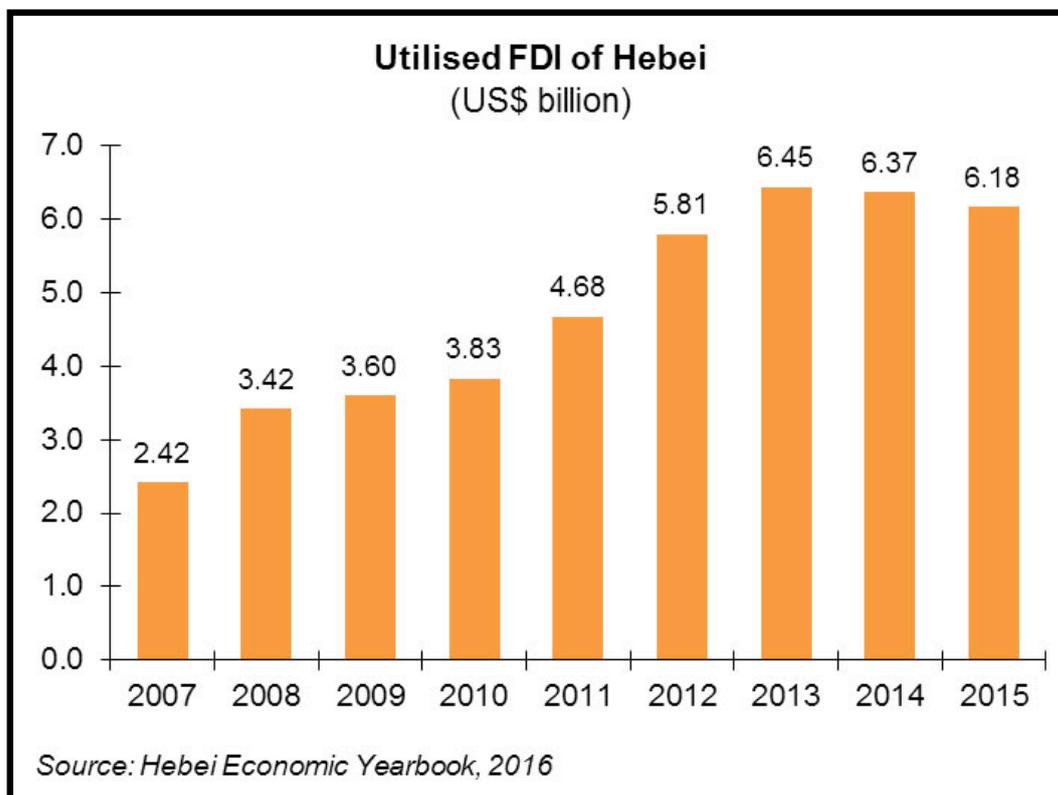
<b>Composition of GDP (%)</b>		
	<b>2000</b>	<b>2015</b>
Primary	16.3	11.5
Secondary	49.9	48.3
Industry	43.7	42.4
Tertiary	33.8	40.2

<b>Output Share of Leading Industry Groups (2015)</b>	
	<b>% share of gross industrial output#</b>
Manufacturing and processing of ferrous metals	22.03.00
Production and supply of electric power & heat	6.1
Manufacture of metal products	6.0
Chemical raw materials and chemical products	5.9
Processing of food from agricultural products	4.8
Manufacturing of automotive	4.8
Manufacture of electrical machinery & equipment	4.5
Manufacturing of nonmetallic mineral products	4.3
Mining of Ferrous metal ores	3.9
Processing of petroleum, coking	03.08.00

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## 2.2 FDI, SEZ and Investment incentives

In 2015, the bulk of FDI (外商直接投资)<sup>24</sup> flows into manufacturing, which accounted for 62.2% of the total utilized FDI. In the group of factories of the services sector, real estate took up 10% of the actual investment in 2015 while transportation and



storage ranked about 9.5%. Hong Kong is the most important fount of foreign investment in Hebei. In 2014, real investment by Hong Kong factories amounted to US\$3,403 million, accounting for 55% of the total. Japan and Germany represent others important founts of investment.

Independently from Shijiazhuang, Tangshan, Qinhuangdao and Langfang which represent typical destinations for foreign investment, Handan and Baoding have become recently important destinations for abroad investments.

Each region of the country, as Hebei, is characterized by a government run investment promotion authorities that run trade and foreign investment. While the Ministry of Commerce of the People's Republic of China, also known as MOFCOM (中华人民共和国商务部)<sup>25</sup>, has power for investment in the whole country, it can be very useful to reach out to similar agencies at the local and provincial levels as these organizations possess local market knowledge. Many regional authorities will also

<sup>24</sup> See *Infra*, Appendix C, Measures for the Administration on the Establishment of Partnership Business by Foreign Enterprises or Individuals in China.

<sup>25</sup> <http://www.mofcom.gov.cn>

provide further incentives to foreign investors interested in invest in some kind of sectors.

MOFCOM also enjoys the power for the direction of the China National Economic and Technological Development Zones ( 国家级经济技术开发区), which are the special territories of the country where foreign direct investment is promoted. These zones are typically named the "Economic and Technological Development Zones" oreasily the "Development Zones". Below the list of most important Hebei's Development Zones.

### **International Industrial Park of Matou Economic Development Zone in Handan**

#### **邯郸马头经济开发区**

The Italian Industrial Park is a base for world-class washing machine production, led by Maas Leo Co Ltd and other high-level machinery manufacturing enterprises from Italy. They have invested in constructing this scientific research, production and manufacturing base in China. The zone has helped bring about many European and American world-class technologies and equipment, has introduced the European scientific production and management model and has been important in nurturing manufacturing talent. The first project in the zone was the advanced European washing machine pipeline project, which has completed basic work, with equipment now being installed. It will play an exemplary lead role for successive projects. Japan's industrial park, with a total investment of US\$5bn, covering an area of 15,000 mu (1 mu = 0.0667 hectares), was introduced by Japan's Mitsubishi UFJ Capital C., Ltd to Japanese and world-renowned manufacturing companies. After multiple visits, Japanese businesses such as Hitachi, Meidensha, Toray Industries and others have identified the Report of Japanese Enterprises' Investments in Handan, and the project is in active planning. Taiwan Industrial Park is represented by Hebei Kaipuwei Medical Equipment Co Ltd and it has gathered such Taiwanese projects as Hebei Changsong Biotechnology Co Ltd, the Taiwan star hotel project and others. It provides a good development platform for the strategic shift of the triangular Taiwan enterprises. In addition, a number of leading companies have settled in the development zone - for example, Easy-Topia, Yuanjian Works, Gudi Plastics, Qiangneng Wall Materials, Kailon mixing equipment, Shiyue Special Vehicles, Xinxing Ductile Iron Pipes, Maximlas Pipe Industry, Sany Heavy Industry and Golden Lion Cotton Machines.

## **Qinhuangdao Economic and Technical Development Zone**

### **秦皇岛经济技术开发区**

As one of the national economic and technological development zones ratified and established by the State Council in 1984, and after 20 years' construction and development, this has become a national model zone attaining ISO 14000 certification and integrating the functions of a national economic and technological development zone, a national export processing zone, a national science and technology park of universities and a national entrepreneur service centre. It has attracted foreign entrepreneurs and investors from 35 countries and regions. Over three years, the available area of 1.4 square kilometres was prepared for the steady construction of "China Digital Valley". A number of projects have signed contracts to operate here, such as Peking University (Qinhuangdao) Science and Technology Park. This base has been honoured as the "Regional Characteristic Industrial Base of New and High Technology in Hebei Province", the "Industrial Base of Service Outsourcing in Hebei Province" and the "Networking Industrial Base in Hebei Province". With a total planned area of 8.07 square kilometres, this base has attracted many famous enterprises at home and abroad, obtaining preliminary development in fields such as spatial data of geographic information, third-party e-commerce platforms, information for enterprises resources management, products for remote sensing images and so forth. Until now, the total investment of the projects is RMB37bn, covering an acreage of 266.8 hectares.

## **Luquan Economic Development Zone in Shijiazhan**

### **鹿泉经济开发区（石家庄）**

This zone has been honoured as the "National Industrialized Base of Semiconductor Illumination" and the "Industrial Park of Communication and Micro-electronics in Hebei Province". As the core area of "Optical Valley", the planned area of the base is 11.5 square kilometres. Along with the construction of No.13 and No.50 plants of the China Electronics Technology Group Corp, at present there are some 20 electronic information industrial enterprises, while the largest post-doctoral workstation has been granted the right to award master's degrees in the province. Undertaking six national major special projects in the fields of photovoltaic chip and navigation communication, 15 major projects from national ministries and 20 provincial projects, it is now the national-level LED detection and authentication centre for semiconductor products, and the national authentication centre for navigation products. According to its plan for the next five years, nine industrial chains will be gradually comprising LEDs, laser devices, detectors, condensed solar battery, light MEMS, satellite navigation, communication information system, public safety and logistics networking.

## **Shuangluan Economic Development Zone in Chengde**

### **双滦经济开发区（承德）**

The industrial base for vanadium has become high-end. With proved sefstromite reserves of nearly 10 billion metric tonnes in Chengde, vanadium there accounts for 40% of the national proved gross reserves. This is the largest resources base of vanadium and titanium in North China. Relying on the resource advantage of the second largest magnetite reserves, and the technical advantage of the vanadium industry, the lead is taken by comprehensively selecting and purchasing vanadium resources, further processing high-end products of titanium and phosphorus, recycling new environmental protection building materials and by advanced decoration materials and tailings. The zone was honoured by the Ministry of Science and Technology as the National Industrialized Base for High and new vanadium technology. Now, there are 18 vanadium production enterprises (two of them are of high and new technology) with 33,210 employees, which initially form the production of vanadium oxide, 50 vanadium iron, 80 vanadium iron and micro-vanadium alloy. Backbone enterprises include Vanadium Factor of Chengde Steel Co Ltd and Wanlitong Group. Taking the project of Vanadium Redox Battery as core, and the industrial cluster of vanadium as carriers, to attract other hi-tech projects and research and development institutions to settle here as well as extending its vanadium industrial chain, this zone is being built to be the "Research and Development Base of China's Energy Storage" and "China's Largest Production Base of Energy-Storage Battery".

## **Yanjiao New and High Technological Development Zone in Langfang**

### **燕郊高新技术开发区（廊坊）**

"China's Business Valley" refers to the project of "Yanjiao Logistics City in China", one of the important projects planned by the industrial development of the regions surrounding Beijing and Tianjin in Hebei Province.

Experts have estimated that the local economy will be driven to reach more than RMB200bn when the projects of "China Business Valley" are finalised. According to Guo Taicheng, project developer and chairman of the Shing Kee Godown Group, the biggest feature of "China's Business Valley" is to generate commercial

wisdom. "It not only has storage, transportation and delivery services, but is also a place of information and wisdom. Without leaving, people can travel through the world and do global business here. It is completely equipped with the characteristic of modern logistics" he says. Thus, a modern and new commercial city combining world goods, high-end industries, science and culture, and green ecology is setting sail from here.

### **Baoding New and High Technological and Industrial Development Zone**

(保定高新技术产业开发区)

As China's earliest national new and high technological zone involving the new energy industry, "China Telecom Valley" at present is also the only industrial zone with new energy as its industrial orientation at national level. It has the largest national production base of solar energy photovoltaic equipment and the first national photovoltaic platform project has settled in Baoding's new and high technological zone. There is also a group of leading enterprises in the valley, for example, Tianwei Yingli New Energy Co Ltd of the Baoding Tianwei Group. Its photovoltaic industry is at national level. In the industry of wind power generation, for example, there are nearly 50 enterprises with the capability of self-research and development as well as the production and detection of key equipment such as wind-power blades, complete machines and controllers. For example, Avic Huiteng Wind Power Equipment Co Ltd is the largest in China, ranking second in the world and the first in Asia in terms of scale of production. In terms of equipment for electricity transmission and transformation, Baoding Tianwei Group is China's largest base, with full proprietary intellectual property rights and a complete industrial chain. And for the industry of energy storage equipment, Fengfan Co Ltd is the largest in China's lead-acid battery industry with strong technical skills and the largest market share.

### **Gaocheng Economic Development zone in Shijiazhuang**

藁城经济技术开发区 (石家庄)

With the operation of mega-projects such as Yihai Grain Co, Hongchang Pegasus, Tsingtao Beer, the Liangcun Power Plant of China Power Investment Corp and Shijiazhuang Pharmacy Group, Gaocheng has housed 10 enterprises from the world's Top 500 and seven listed companies, forming a status with biomedical products as the mainstream that is supplemented by equipment manufacture and light and food industries. It is actively engaged in cultivating huge enterprises based on the support of

Top 500 companies' shareholders such as Hezhi Science, Yihai Grain and Oil, Jikai Fushihua as well as listed companies such as North China Pharmacy, Shijiazhuang Pharmacy, No. 4 Pharmacy, Sifang Communication, and Dongfang Thermoelectric Co. For guaranteeing the investment of RMB4bn of North China Pharmacy and the RMB1.5bn investment of Shijiazhuang Pharmacy, it will promote one or two new projects of the two pharmacies currently under construction. By 2015, the North China Pharmaceutical Park will have achieved output value of over RMB30bn with a profit tax of RMB3bn while the Shijiazhuang Pharmaceutical Park will have reached output value of over RMB20bn with a profit tax of over RMB2bn.

### **Gaobeidian Economic Development Zone in Baoding**

#### **高碑店经济开发区（保定）**

Building the World's Industry Base of Energy-saving Windows and Doors. The industrial park covers an area of six square kilometres and is divided into 15 functional areas, including production of energy-saving windows and doors, production of energy-saving curtain wall, the production of machinery and equipment, water-based paint installation, production of glulam (glued laminated timber), hollow glass processing, production of architectural hardware, production of Styrofoam, production of tapes, production of sealed materials, experimental testing centre, R&D center, international trading city of doors and windows, bonded warehouse, and supporting facilities. Currently, five door and window manufacturers are based in the German Industrial Park. The leading enterprise is Hebei Aoyunshunda Window Industry Co Ltd, which is a Sino-German joint venture. It is the largest manufacturer of energy-saving windows and doors in China, and was named in the Top 100 Influential Enterprises of Worldwide Environmental Protection & New Energy Industry in China by the United Nations Environment Programme (UNEP). In the park, there is a museum of doors and windows, which is the only one in China and also the first international doors and windows fair city in Asia. There are 24 various kinds of exhibition halls with 5,000 exhibition spaces. So far, six exhibition halls have been built for 118 domestic and foreign enterprises to reside in. Among them are over 20 international companies such as German Veili company which is the largest wood processing manufacturer in world, and Homag Group which is among the Top 500 Enterprises in the world, alongside 40 domestic enterprises such as the well-known Shenzhen Jianlang Accessories and Shandong Guoqiang Hardware. Others, such as Germany Noto and GU have identified

the park as their potential Asia-Pacific headquarters. The Guangdong Nanhai Aluminum Association and the Zhejiang Wood Industry Association also have plans to set up offices.

Additionally, Hebei established the Hebei Overseas Chinese Entrepreneurs Association (河北省归国华侨联合会), a nonprofit organization for overseas Chinese entrepreneurs starting businesses or bringing investment to the province. The association will serve as a bridge between businesses and the Hebei government to boost the province's international communications and economic development. The association currently has a total of 150 members. Wang Xiaodong, vice governor of Hebei province, claimed that Hebei province is experiencing a good development period. Together with the neighboring municipalities of Beijing and Tianjin, Hebei is jointly pushing forward a coordinated development strategy. "Overseas Chinese enterprises, as the pioneers of foreign capital entering Hebei province, are an important impetus for boosting Hebei's economic development, providing opportunities for Hebei to introduce world-leading technologies and industries", said Wang at the ceremony in Shijiazhuang.<sup>26</sup>

Hebei Investment Incentives		
河北省	投资	优惠政策
Incentive	Type	Description
Private Enterprise	State	The provincial government will commend and reward high tech export, environmental protection, energy conservation, and social welfare service enterprises.
R&D Enterprise	State	The provincial government offers significant subsidies on research staff salaries, equipment adjustment costs, technical books/materials, and testing/trials of new products for R&D enterprises.
Public Facilities Construction	State	The provincial government offers significant subsidies and tax incentives, access to financing, land accommodation, general preferential treatment in government servicing to foreign enterprises engaged in public facilities construction.
High Tech Enterprise	City	As an incentive to attract high tech industries, the Shijiazhuang Municipal Government offers tax subsidies for the following investment activities: High Tech R&D, technology transfer, technological development, technology consultation and related services, tech-intensive and intellectual-intensive projects, and enterprises establishing within the Shijiazhuang High-New-Tech Industry Development Zone.

<sup>26</sup> Hebei launches overseas Chinese entrepreneurs association, *The People's Government of Hebei Province*, internet ed., 2008.

Production Enterprise	City	As an incentive to attract production oriented enterprises, the Shijiazhuang Municipal Government offers tax subsidies for the following investment activities: Purchase of approved Chinese-made equipment, foreign invested capital exceeding USD 30 million, reinvestment of profits, the establishment of location in Shijiazhuang, and the export of goods
Undeveloped Enterprise	City	The Shijiazhuang Municipal Government offers significant tax subsidies for foreign agriculture, forestry, and animal husbandry enterprises.

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**The key projects for foreign investment:**

1. Introduction of foreign capital and advanced practical technologies to develop crop-planting and forestry and fruit-growing industries; to accelerate agricultural comprehensive development and renovation of the average yield and low yield farmland; to introduce improved varieties of grains, and to develop water-saving and dry land crops and to promote the agricultural industrialization.
2. Actively use foreign funds to speed up construction of highways, electric power generation stations, environmental protection projects, economical housing projects and urban public infrastructure.
3. The structural regulation of the chemical (pharmaceutical), building materials, metallurgy and foodstuffs industries will be well done and they will be optimized and upgraded.
4. Foreign investors are encouraged to invest in such projects in the form of capital, advanced technology and equipment as electronic information, new materials, and biological engineering.
5. Actively make use of foreign funds to open more sectors to the outside world of internal and foreign trade, finance, tourism and service and other tertiary industries.

**Foreign investors are encouraged to invest in the following projects:**

1. New agricultural technology, agricultural comprehensive development, energy sources, communications and important raw materials.

For instance: Reclamation and development of wasteland, waste mountains, and shoals (exclusive of those areas where there are military installations); renovation of farmland with average and low yield; development and introduction of fine varieties and breeds of farming crops, forestry, animal husbandry, and fisheries. Comprehensive development and utilization of coal minerals; and development projects of new energy

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27 Hebei investment promotion authorities and incentives, Ministry of Commerce of People's Republic of China (MOFCOM), internet ed., 2017.

sources, construction of highways, ports, civil airports and water conservancy facilities; new type building materials and non-ferrous metallic composite materials, industrial plastics and plastic alloys, semi-conductors and specialized photo-electric materials.

2. Projects of high technologies, advanced technologies and new equipment and new materials capable of promoting the performance of products, saving energy and raw materials, promoting economic results and meeting the requirements of the market, that are currently under-produced in the country.

For instance: Manufacturing of high performance welding robots and welding production lines; project of ultrahigh power 50-ton electric furnace; the making of large and medium-sized computers; the manufacture of satellite communications system equipment.

3. Projects that can meet the demands of the international market and promote product upgrading, develop new markets, expand overseas sales and increase the volume of exports.

For instance: Development project of new varieties and new technologies of quality and high yield farming products, such as sugar crops, fruit trees, vegetables, flowers and forage grass; project of printing, dying and after-treatment of industry-use special textile products, high quality artificial chemical fabrics, and superb texture surface materials; and project of new type drugs produced with biological engineering technology.

4. Project of new technology and new equipment by which resources can be used for multiple purposes, or reproduced, and where environmental pollution can be prevented.

For instance: Project of wastewater treatment equipment with a capacity of 142,500 tons a day; project of ecological environment control and construction; project of producing purging agents, catalyzers and other product for purifying the vehicle exhaust gases; project of reproducing resources and comprehensive utilization of resources; project of environmental pollution control and monitoring and testing technologies.

5. Other projects encouraged by state laws and regulations and such projects as are included in the category to be all exported with the permission of the government.

#### **Foreign economic and technological cooperation projects:**

1. Construction of Chengde city local railway from Changbaiwan (长白湾) to Shuangfengsi (双峰寺);

2. Construction of an expressway from Shijiazhuang to Cangzhou (沧州) by the

provincial Bureau of Communications;

3. Construction of the section in Hebei of an expressway from Xuanhua (宣化) to Dadong (大东) by the Bureau of Communications;

4. Construction of the second port of Jingtang Harbor (京唐港口) Administration;

5. Construction of a berth for 200,000-ton class ships for handling the import of mineral ores at Caohuidian (槽回电) port area, Jingtang Harbor Administration;

6. Expansion of a fishery wharf berth for 5,000-ton class ships by the Qinhuangdao Marine Fishery General Company (秦皇岛海洋渔业通总公司);

7. Expansion of the production line for 400,000 semi-finished nodular cast iron crank axles of the Cixian Automobile Auxiliary Product Factory (磁县全盛汽车配件有限公司);

8. Construction of a molybdenum mine with a daily output of 5000 tons of the Xuanhua County Chang Quan Zhuang gold mine;

9. Development of an iron-zinc mine at Sanyizhuang (三义庄) by Hebei Yangyuan Zhengyang Mining Co. Ltd (河北阳原正阳矿业有限公司);

10. Expansion of a factory to produce new type 2 million KVA transformers by the Tangshan City Transformer Factory (唐山市变压器厂);

11. Construction of a factory to produce 18 mm zinc-plating copper films with a yearly output of 1500 tons by the Zaoqiang County Jinxing Electronic Material Factory (枣强县金星电子材料厂);

12. Construction of a workshop producing gearbox with yearly output of 100,000, and conical helical gears with yearly output of 100,000, for lightweight cars by Hebei Tianye Automobile Group;

13. Expansion of the factory for producing farm-use trucks, yearly output of 200,000, by Tiandong Group Co. Ltd (田东集团有限公司);

14. Construction of large-type plant equipment for city wastewater treatment by Tangshan Qingyuan Environmental Protection Machinery Co;

15. Construction of a factory to produce exterior-fixed wide back view reflectors without blind areas, yearly output of 2 million, by Yongqing County Commercial General Co (永清县商业总公司);

16. Production of semi-conductor refrigerator machines, yearly output one million, by North China Refrigerator Equipment Co. Ltd (北中国制冷设备有限公司);

17. Production of infrared gas detector and measurement devices (CO<sub>2</sub> gas) in the Qinhuangdao Economic and Technological Development Area (秦皇岛经济技术开发区);
18. Development of special equipment for producing biological organic fertilizer in the Qinhuangdao Economic and Technological Development Area (秦皇岛经济技术开发区);
19. Construction of a factory to produce thin walled copper tube, capacity 5000-7000 tons a year, in the Bazhou Economic and Technological Development Area (霸州经济技术开发区);
20. Production of DSP industrial controllers, capacity of 2000 sets a year, by Yanshan University Industrial Group (燕山大学产业集团)
21. Construction of production lines for optical fibers (500,000 km a year) and optical cables (200,000 km a year) in the form of a joint venture with Qinhuangdao Beifang (North) Glass Production Group;
22. Expansion of production of motorcycle batteries, 50,000 a year, by the Fengfan Group (风帆集团);
23. Production of 30 million Ah Ni-H dynamic batteries a year by the Shijiazhuang Baoshi Electronic Group (石家庄宝石电子集团);
24. Production of 1,500 sets a year of optical fibers with Er amplifiers by the Shijiazhuang No.3 Radio Element Factory (石家庄无线电元件三厂);
25. Construction of a production line for transparent conductive glass used by color liquid crystal display devices by Qinhuangdao Laicheng Electronics Co. Ltd (秦皇岛市莱城电子有限公司);
26. Equity rights transfer of the STN type liquid crystal display screen production line of Hebei Liquid Crystal Display Development Co;
27. Construction of a factory to produce 500,000 meters a year of woolen fabric by Hebei Donggao Group (河北清河县东高羊绒厂);
28. Production of 25000 tons a year of PVC tubes by Hebei Baosuo Group (河北省宝索组);
29. Construction of a production line for colorful fine packaging by Baoding Jinyan Paper Co. Ltd (保定钞票纸业);
30. Expansion of the production line of high-grade sanitary fittings, one million a year,

- by Handan Ceramic Group General Co (邯郸陶瓷集团总公司);
31. Production of refined rubber powder in the Cangzhou Economic and Technological Development Area (沧州经济技术开发区);
32. Construction of a beverages production line, 10,000 tons a year, of Shijiazhuang Datianli Medical Care Foodstuff Co. Ltd (石家庄大天力保健食品有限公司);
33. Construction of a factory to annually produce 2 million rare earth ceramic bearings in the form of a joint venture with the Development and Construction General Company in the Shanhaiquan Economic and Technological Development Area (山海关经济技术开发区);
34. Production of 3,000 tons a year of rare earth permanent magnetic material cohered with Nd-Fe-B permanent magnetic material by Yanjiao Development Area (燕郊开发区);
35. Production of 15,000 tons a year of acetate fiber of Shijiazhuang Xinyu Sanyang Co. Ltd (石家庄新余三阳有限公司);
36. Production annually of 30 million non-contact IC cards and 20 million modules in the Beidaihe Economic and Technological Development Area (北戴河经济技术开发区);
37. Construction of animal medicine-producing factory of the Animal Husbandry Administration of Hebei Province (河北省畜牧局);
38. Construction of a biochemical pharmaceutical factory of the Shijiazhuang Hankang Pharmaceutical Development Co. Ltd (生化药品有限公司);
39. Expansion of production to 10,000 tons a year of AKD neutral/ alkali bonding for paper making by Hebei Provincial Forest Products General Co (河北省林产品总公司);
40. Production of 3,000 cubic meters a year of crude stones and 10,000 square meters a year of stone planks by Chengde City Yanshan Stone Material Development General Co (承德市燕山石材开发总公司);
41. Construction of a production line for groove glass, 100,000 square meters a year, by Zhangjiakou Flat Glass Factory (张家口平板玻璃厂);
42. Construction of a flower cultivation base covering 50000 mu of the Agricultural Bureau of Hebei Province (河北省农业局);
43. Construction of a flower and tree cultivating center in the Beijing-Tianjin area of the Langfang City Plantation (廊坊农院);

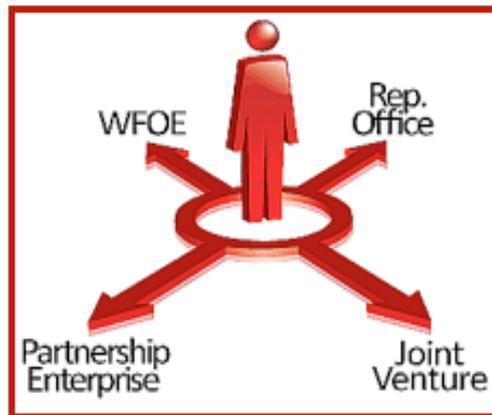
44. Construction of a North China propagating nursery center of the Langfang City Ecological Farm (廊坊生态农场);
45. Construction of a 200,000-head meat-type hog-breeding farm of the Gaobeidian live Hog Raising Group (高碑店市坤源生猪养殖有限公司);
46. Reconstruction of a 40,000 square meter rare and precious fish-rearing farm of the Tanghai County Balitan Fish Farm (唐海县balitan养鱼场);
47. Expansion of the lean-meat-type stock boar farm producing 100,000 heads a year of the Xingtai Weixian Jingwei Fine Strain of Hogs Farming Center (魏县省市精精精细猪养殖中心);
48. Breeding 100,000 meat cattle by Guyuan County Animal Husbandry Administration (固原县畜牧局);
49. Industrialization of winter dates on 100,000 mu of farmland of Huanghua city (黄骅市);
50. Construction of a grape orchard covering 44,000 mu of the Huailai County Grape Industrial Development General Co (怀来县葡萄产业发展总公司);
51. Construction of city water supply facility, 80,000 tons a day, in Langfang Yongqing (廊坊永清县).
52. Construction of wastewater treatment facility, 100,000 tons daily, in Gaocheng City (藁城);
53. Construction of water supply facility for Bada Industrial Park of the Baoding State New and High Technological Industrial Development Area (保定国家高新技术产业开发区的八达工业园);
54. Construction of five-star “Yandu Grand Hotel”, covering an area of 87356 square meters, by Hebei Guesthouse Group Co (河北宾馆集团有限公司);
55. Tourism development at Zushan (祖山) by Qinhuangdao Tourism Development Co (秦皇岛旅游控股有限公司);
56. Development of holiday resort at Nandaihe (南戴河) by Funing County Tourism Administration (阜宁县旅游局);
57. Construction of Tangshan City International Seismological Fair Park (唐山国际地震美丽公园);
58. Construction of a comprehensive vegetable farm abroad by the Bureau of Agriculture of Hebei Province;

59. Development of serial maize products containing high protein to be constructed abroad by the Bureau of Agriculture of Hebei Province;
60. Cooperative production and cultivation of strawberry seedlings abroad by the Bureau of Agriculture of Hebei Province (河北省农业局);
61. Construction of a meat duck farm to be invested in abroad by Renqiu Bureau of Animal Husbandry and Aquatic Products of Hebei Province (河北省任丘市畜牧水产局);
62. Construction of a production line for making 4Q series straw cutting and smashing machine to produce compost, which will be invested in abroad by the Shijiazhuang City Farming Machinery Factory (石家庄市农业机械厂);
63. Construction of a Jihe white hogs breeding farm to be invested in abroad by the Animal Husbandry and Veterinary Research Institute of Hebei Province;
64. Joint construction of a marsh prawn-breeding farm to be invested in abroad with the Aquatic Products Technological Popularization Station of Hebei Province (河北省水产技术推广总站);
65. Joint construction of a Chinese prawn-breeding farm abroad with the Aquatic Products technological Popularization Station of Hebei Province (河北省水产技术推广总站) ;
66. Joint construction of a fish powder processing factory abroad with the Qinhuangdao Marine and Fishery General Co. of Hebei Province (秦皇岛市海洋渔业总公司);
67. Joint construction of a fishing corporation together with the Qinhuangdao Marine and Fishery General Co. (秦皇岛市海洋渔业总公司);
68. Construction of a production line for making suspended fertilizer application and sowing machines abroad with the Shijiazhuang City Farming Machinery Factory (石家庄市农业机械厂);
69. Construction of a jean cloth and garment making factory by Qinhuangdao City Color Weaving and Textile General Co. (秦皇岛市色织总厂);
70. Construction of a production line for producing woolen fabrics abroad by the Baoding Tianxiang Group Co. (保定天翔集团);
71. Construction project abroad to be contracted by the Hebei Construction Group Co. Ltd. (河北建设集团有限公司);
72. Construction of a trailer-manufacturing factory abroad by the Zhangjiakou Trailer

General Factory of Hebei Province (河北省张家口拖车总厂).<sup>28</sup>

Like all cities, provinces and Special Economic Zones (SEZ) in China, including a business in Hebei represent a practice that includes a partnership between several Chinese Governmental Organizations. The Chinese Central Government (中國中央政府) includes four basic incorporation structures for foreign companies that are tailored to fit a wide range of business needs. Local authorities have different tax policies and regulation processes for each structure, so the benefits of each incorporation structure depending on location and intended scope of business.

The four structures include:



### 2.3 Labor cost and taxation

For those interesting to invest in Hebei is crucial to understand the region employee wage and labor cost information because the average wage of a direct manufacturing employee in Hebei has risen from circa RMB 1,838 per month in 2010 to more or less RMB 1,960 in the first half of 2011. Hebei's minimum wage variants between towns and locations, but on average, rose by a small margin from RMB 600 and RMB 750 per month in 2009 to RMB 690 and RMB 900 for full time employees in 2010. For part time employees it varies from RMB 5.5 to 7.3 per hour. These numbers seems to keep to growth in the future as China's legislation is hoping to increase the minimum wage through 2015 for the high inflation and increase the standard of living. Calculating the exact cost of a direct employee on an hourly basis involves a complex formula composed of a daily base salary, employee benefits, and taxation.<sup>29</sup>

Any foreign invested enterprises set up in Hebei Province enjoy the following favorable taxation:

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28 Hebei investments, China Internet Information Centre (CIIC), internet ed., 2017.

29 Hebei employee wage and labor cost information, Understand China, internet ed., 2016.

- 1) Any foreign invested productive enterprise whose operational period in the province is to be more than 10 years is exempt from local income tax starting from the first year to the fifth year of operation; local income tax is levied at a rate of 50 percent from the sixth year to the 10th year of operation with the approval of the local taxation office. Starting from the first year of production and operation, the enterprise is exempt from property tax and vehicle and ship license tax for five years.
- 2) Any non-productive foreign invested enterprises whose duration of operation in the province is to be more than 10 years will be exempted from local income tax from the first year of profit to the second year, after which tax will be levied from the third year to the fifth year at a rate of 50 percent upon approval of the local taxation office. Starting from the year when they begin operating, they shall be exempt from property tax and ship and vehicle license tax for a successive period of two years.
- 3) Any foreign invested enterprises whose export output value reaches a rate of 70 percent or above of total output is exempt from local income tax, property tax and ship and vehicle license tax upon the approval of the local taxation office and confirmation of the department of foreign trade. Any advanced technological enterprises will be exempt from local income tax, property tax and the ship and vehicle license tax with approval of the local taxation office.<sup>30</sup>

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30 Hebei, *China Internet Information Centre (CIIC)* (中国互联网信息中心), internet ed., 2017

## CHAPTER 3

### JING-JIN-JI 京津冀

#### 3.1 The Thirteenth Five-Year Plan

The building of a moderately affluent society in a comprehensive manner by 2020 represents the most important goal of the “two centenary goals” decided by the Communist Party of China. The “Thirteenth Five-Year Plan” period is an important step for the creation of a moderately affluent society in a comprehensive manner. And the “Thirteenth Five-Year Plan” must be created in order to achieve this purpose.

Set up on the basis of the Recommendations of the Central Committee of the Communist Party of China (CPC) for the 13<sup>th</sup> Five-Year Plan for Economic and Social Development of the People’s Republic of China (2016–2020), the 13th Five-Year Plan sets forth China’s strategic intentions and describes its fundamental objectives, tasks, and measures for economic and social advancement. Such a plan has the aim to direct actions for market organisms, an important basis for government in performing its duties, and a common vision to be understood among the people of China. The suggestions of the CPC Central Committee on the Thirteenth Five-Year Plan for National Economic and Social Development affirm that “China will cultivate a number of growth poles that can drive the coordinated development of regions. Efforts should be made to advance the coordinated development of Beijing, Tianjin, and Hebei Province, optimize the spatial arrangements of cities and industrial structure, take out non-capital functions of Beijing in an orderly way, promote transportation integration, expand environment accommodation and ecological space, and explore new models for the optimized development of highly populated areas.”<sup>31</sup> The plan propounded the growth of a new territory that would be home to 130 million persons covering an area large as New England.<sup>32</sup> The agreement signed by thirteen national economic and technological development zones in Beijing, Tianjin and Hebei in order to create the Beijing-Tianjin-Hebei Development Zone Innovative Development Association (京津冀开发区创新发展联盟) perfectly represent the idea of integration, collaboration and modernization of this project. The association, run by China Association of

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31 Suggestions of the CPC Central Committee on the Thirteenth Five-Year Plan for National Economic and Social Development.

32 A look at China's 130 million resident Megacity of the future, *ASIA TIMES*, internet ed., 2017.

Development Zones, is dedicated to pushing regional economic integration with development zones as foreunner, under the principle “The government guides, the market leads”. It will settled its secretariat in the Beijing Economic-technological Development Area. “We are determined to facilitate the industry tie in the Beijing-Tianjin-Hebei region,” said Gao Yanjie, vice director of Beijing Economic-technological Development Area, “we will be the main force of the integration process.” The association will pool resources, avoid needless competition, and enhance the economic competitiveness of Beijing-Tianjin-Hebei region. Beijing Economic-technological Development Area will create platforms for industrial development, enterprise service and entrepreneurship, Gao said. The development area will also own online and offline services for innovation including a brick-and-mortar service center, website and research center, according to Gao. “We will contribute 5 billion yuan to the founding of the Beijing-Tianjin-Hebei Innovative Development Fund,” Gao said, and “raise 200 million yuan each year to introduce and cultivate talent for development zones in Beijing-Tianjin-Hebei region.”<sup>33</sup>

In the part IX of the 13<sup>th</sup> five-year plan, named Development coordinated between regions, the chapter 38 contains the guidelines to create the integration of Beijing, Tianjin and Hebei, with the aim to guarantee the mobile and well-ordered flow of tools of production, effective functional zoning, equitable access to basic public services, and development that is within the carrying capacity of the environment and natural resources. China Development Bank (国家开发银行) affirm that it has provided 984 billion yuan (about \$143 billion) of loans in 2016 in order to encourage the Beijing-Tianjin-Hebei region and totally allocated 73.4 billion yuan with the aim to fund poverty relief in Hebei Province<sup>34</sup>. The whole country will attend a model of regional combination for Beijing, Tianjin, and Hebei that equally beneficial and draws on complementary strengths, modify and optimize the region’s economic and spatial layout, find new procedures for the right development of overpopulated areas with intensive economic activity, and develop a world-class city cluster with Beijing, China’s capital, at its core, leading the development of the region surrounding the Bohai Sea as well as further inland in north China. Below the chapter 38 of the 13<sup>th</sup> Five-Year Plan:

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33 Wang Sujuan and Cao Xiating, Development zones in Beijing, Tianjin, Hebei align for integrated development, *China Daily*, 2016.

34 China Development Bank's loans to Beijing-Tianjin-Hebei region close 1 trillion yuan, *The People's Government of Hebei Province*, internet ed., 2016.

## **Promote the integration of Beijing, Tianjin, and Hebei**

### *Section 1 Relieving Beijing of Its Nonessential Functions*

We will actively and prudently relieve Beijing of functions nonessential to its role as China's capital and work to lower the population density of its main districts. We will focus on the relocation of energy-intensive and high- water-consuming enterprises, regional logistics centers and special markets, a portion of education, medical, and training institutions, and a portion of administrative and public service institutions and enterprise headquarters, as well as others. We will ensure sound development of a sub-administrative center for the Beijing municipal government. We will plan and develop relocation areas and micro centers for functions nonessential to Beijing's role as China's capital.

### *Section 2 The Spatial Layout and Functions*

The spatial layout for the Beijing-Tianjin-Hebei region will be developed around the idea of creating “a single core, twin engines, three industrial belts, four functional zones, and multiple nodes.” This will involve developing Beijing as the core, strengthening integration and cooperation between Beijing and Tianjin as the region's two leading economic engines, developing the three industrial belts of the Beijing-Tianjin, Beijing-Baoding-Shijiazhuang, and Beijing-Tangshan-Qinhuangdao regions, designating and ensuring the geographical boundaries and developmental focuses of the region's four functional zones, and developing the carrying capacity, service capabilities, and manufacturing of a number of intraregional local urban centers. We will improve the industrial layout and promote the development of the Beijing- Tianjin- Hebei region as a collaborative innovation community. Beijing will focus on developing its knowledge economy, service economy, and green economy, and accelerate structural development of high-tech, superior, and cutting-edge industries. Tianjin will optimize and develop advanced manufacturing, emerging strategic industries, and the modern service sector, and develop a national advanced manufacturing research and development center as well as a financial innovation and operation demonstration zone. Hebei Province will take on functions transferred from Beijing and work on the application of scientific and technological advances from Beijing and Tianjin, and it will focus on the development of major national modern commercial logistics centers,

new- type industrialization centers, and experimental zones for industrial transformation and upgrading.

### *Section 3 An Integrated Modern Transport Network*

We will develop efficient, dense rail transit networks, strengthen the development of main railway lines, accelerate the development of intercity and intracity (suburban) railways while gradually forming them into networks, make maximal use of existing intercity and intracity (suburban) railcar capacity, and ensure passenger train services cover all cities at or above the prefectural level. We will improve the network of expressways and upgrade main national and provincial highways. We will establish port clusters based on coordination and division of work, improve port transport and distribution systems, and establish a new model of coordinated oversight over maritime affairs. We will develop world-class aviation hubs and establish cooperative mechanisms for air transport.

### *Section 4 Environmental Capacity and Ecological Space*

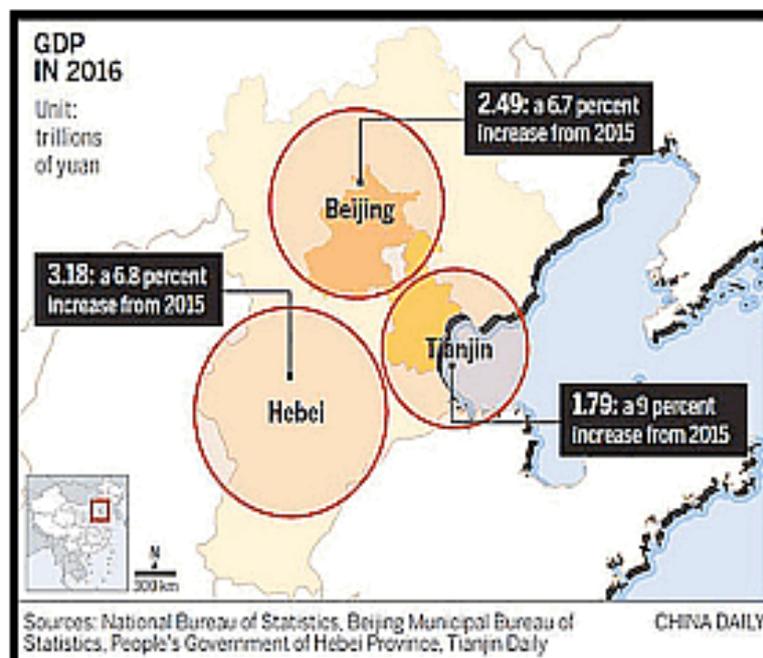
We will establish a regional monitoring network, early-warning system, and coordinated response mechanisms for ecosystems and the environment, and reduce total pollutant emissions in the Beijing-Tianjin- Hebei region. We will better coordinate efforts to prevent and control air pollution, implement gasification projects in key areas of heavy air pollution, and ensure that the concentration of fine particulate matter is reduced by at least 25%. We will strengthen the protection of drinking water sources and joint pollution control efforts around rivers, lakes, and coastlines. We will set a red line for the protection of ecosystems, implement management by region, and establish ecological corridors around the Yongding River and elsewhere. We will redouble afforestation efforts in the Beijing-Tianjin-Baoding region and wetlands restoration efforts around lakes such as Baiyangdian and Hengshui, and ensure joint efforts are made to develop the Bashang Plateau Ecological Protection Zone and the Yanshan-Taihangshan Ecological Conservation Zone.

### *Section 5 The Common Development and Sharing of Public Services*

We will establish a regional information sharing and service platform for human resources and better coordinate policies on inter-regional labor, employment, and skilled personnel. We will improve the distribution of education resources, encourage institutions of higher learning to jointly develop disciplines and share resources, and

promote the coordinated development of vocational education. We will establish sound regional systems for referring patients, in both directions, between major hospitals and community health service facilities and for promoting universal recognition of medical examination results, and support the participation of nongovernmental capital in the operation of public hospitals. We will ensure that documents related to the old age insurance scheme are mutually recognized throughout Beijing, Tianjin, and Hebei Province, and we will promote the coordinated development of social insurance.<sup>35 36</sup>

Beijing Tianjin and Hebei province had combined gross domestic product of 7.46 trillion yuan (\$1.09 trillion) in 2016, accounting for about 10 percent of China's 74.41



trillion yuan GDP.

For the three provincial level entities involved, the central government has set different goals for them and will require the three entities to act accordingly:

- Beijing: Centre of politics, culture, international exchange, and technological innovation.
- Tianjin: National high-end manufacturing and R&D base, international shipping core area in Northern China, financial innovation demonstration zone, frontier and open-door policy.
- Hebei: Important modernized logistics base, test area for industrial transformation &

35 The 13<sup>th</sup> Five-Year Plan for economic and social development of the People's Republic of China, *Compilation and Translation Bureau, Central Committee of the Communist Party of China Beijing*, (2016-2020)

36 Chinese original version in *Appendix D* (中国国民经济和社会发展第十三个五年规划纲要)

upgrading, demonstration zone for new urbanization & urban-rural integration, Jing-Jin-Ji's eco-friendly zone.

Beijing-Tianjin-Hebei region is currently in a critical period of transformation from extensive production to intensive production, some developed areas have completed such a transformation, and this transformation in many underdeveloped areas is not yet completed, therefore, suitable measures should be taken according to local conditions. According to the data of 2010, those areas of higher GDP were mainly the districts and counties of the Beijing plain, Tianjin's central urban area and the new area of Binhai (滨海), Tangshan urban area, districts and counties in the east side of the Beijing-Guangzhou Railway in Shijiazhuang, districts and counties in the west side of the Beijing-Guangzhou Railway in Handan (邯郸). Those areas of lower economic development level have two classes: class-I was district and counties in mountainous areas, they were mainly located in north Qinhuangdao, Chengde, Zhangjiakou, and west Baoding; class-II was plain hinterlands, they were mainly located in Hengshui (衡水) and east Xingtai (邢台). More population were in developed areas, but low administrative area, therefore in the per capita GDP distribution map, spatial disparity was reduced, and in the GDP distribution map, the disparity was further enlarged.<sup>37</sup>

Jing-Jin-Ji, however, will be China's third mega-region, joining with the Shanghai Yangtze Delta and Guangzhou to Shenzhen Pearl River Delta although this new project will see cities much further apart in distance integrated.

It can also be seen as part of Chinese President Xi Jinping's anti-corruption campaign. For many years local government officials have operated autonomously from central government and often been able to engage in corruption with a certain level of impunity. By integrating regions such as Jing-Jin-Ji, lower level administrative units will have the rug pulled from beneath them, with greater authority given to higher levels of regional administration, which in turn are easier to control by the central authorities of the Communist Party.<sup>38</sup>

### **3.2 The integration of transportation system**

One important measure adopted for the Jing-Jin-Ji (京津冀) integration plan is the

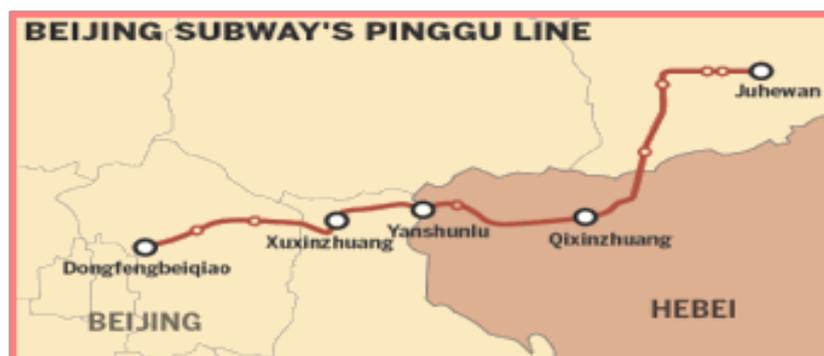
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37 Qingmiao Li, Mengxin Zhang, Data Drawing List: Data and Spatial Distribution Graph on Carrying Capacities of Beijing, Tianjin, and Hebei, *Report on Development of Beijing, Tianjin, and Hebei Province*, 2013, pp. 242-244.

38 Tom Bailey, Jing-Jin-Ji: China's new mega-region, *WORLD FINANCE*, internet ed., 2015.

integration of transportation system, which involves building of roads and railways to connect cities within the Jing-Jin-Ji region. The integration of the transportation system will benefit the economic development in Jing-Jin-Ji in different manners. Firstly, it improve the mobility of labour and thus its allocation efficiency. Secondly, the better connection within the region will be useful to help the creation of satellite cities near Beijing and Tianjin, as the reduction in transportation costs makes it profitable to found officies or factories in the suburbs. Thirdly, the integration plan provides policy backing to local governments to keep a relatively high level of infrastructure spending. Four new subway lines will be create to connect Beijing and Hebei province by 2021, as part of the region's integrated development, Hebei's top economic planner said. The subway lines, in connection with other kinds of transportation, will reduce the transfer time between the capital and cities in Hebei to less than 1 hour, according to a transportation plan released by the Hebei Development and Reform Commission<sup>39</sup> for the 13th Five-Year Plan period (2016-20) period.

According to the plan, one of the four subways—the Pinggu Line (平谷线)—will link Beijing's Pinggu and Tongzhou districts (通州) with Sanhe (三河) in Langfang (廊坊), Hebei (河北). Preparatory work for the Pinggu Line has already started and is expected to be completed by 2021, according to the National Development Commission (国家发展和改革委员会).



The other three subway lines would link Yizhuang (亦庄) in Beijing with downtown Langfang; Daxing (大兴) in Beijing with Gu'an(固安) in Langfang; and Fangshan (房山) in Beijing with Zhuozhou (涿州) in Baoding (保定). The creation of the urban rail transportation system in the Beijing-Tianjin-Hebei region must be

<sup>39</sup> Hebei transportation plan, *Hebei Development and Reform Commission* (河北省发展和改革委员会), internet ed., 2017.

promoted as there is significant demand for transportation services for short- and medium distance trips in the region, according to the plan. Passengers have the possibility to use just one travel card for all metro systems present in Beijing, Tianjin and Hebei province by the end of 2015.

The latest move is part of efforts to promote the integrated development of the Beijing-Tianjin-Hebei region. "In the past three years, the region has made progress in many areas, including road construction, transportation services, energy saving and reducing emissions," said Rong Jun, a spokesman for the Beijing Municipal Commission of Transport (北京市交通委员会).

Since 2014, a total of 39 bus routes linking Beijing have been created in Hebei's Yanjiao, Zhuozhou and Langfang, with the monthly passenger count hitting a record 11 million, according to the commission.

At the end of 2014, a new national highway was inaugurated, reducing the transportation time between Beijing and Hebei's Fengning (丰宁) county to two hours from the previous four and a half hours.<sup>40</sup>

By 2015, five cities in Hebei—Langfang, Cangzhou, Shijiazhuang, Baoding and Tangshan—had become part of a "one-hour traffic circle" linking them to Beijing. Also in 2015, three bullet train lines were opened between Beijing and Yanjiao, benefiting thousands of commuters.<sup>41</sup>

To better meet demand, a 58-billion-yuan (\$8.4 billion) investment will see the total length of the urban rail transportation system in Hebei, including lines connecting Beijing, reach 80 kilometers by 2020.

Intercity railway lines that connect Beijing, Tianjin and Hebei, not including subway lines, will be extended to a total of more than 400 km. Intercity railway stations will be established mainly around Beijing's new airport in Daxing (大兴) district and Chongli (崇礼) in Zhangjiakou (张家口), a co-host of the Beijing 2022 Winter Olympics (北京冬季奥运会). Construction of the stations is expected to guarantee convenient routes for passengers traveling between the new airport and Winter Olympics venues. The 2022 Beijing Winter Games will in fact be split between three Olympic sites: one in the city of Zhangjiakou, 125 miles from Beijing in the Hebei province, another in

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40 Luo Wangshu, Travel card provides convenience for local commuters, *Chinadaily* (中国日报网), internet ed., 2017.

41 Reconnecting Asia, Pingu metro line 22, *Center for Strategic & International Studies*, internet ed., 2017.

Yanqing (延庆), a mountainous region to Beijing's north-west, and a third in China's sprawling capital itself.<sup>42</sup>

The upgrade of the transportation system will aid in moving Beijing's noncapital functions, and the transfer of industries and people to Hebei, the plan said, adding that it will also create job opportunities and help develop the local economy.

"The system will make life more convenient for residents of the capital's neighboring cities, which will attract more investment," said Wang Yuling, an official at the Hebei Development and Reform Commission.<sup>43</sup>

According to the Hebei Transportation Department, Hebei is going to establish another 25 new airports to meet the increasing demand for air transportation in the Beijing, Tianjin and Hebei regions. Increasing demand for short-distance transportation, emergency rescue, business aviation, aviation training and tourism, has led to this decision, Hebei Daily reported on 2015 August 8. At present, Hebei has a total of five airports in operation which includes Ruancheng, Huanghua, Qianan and Baoding. The province plans to build three general airport groups covering Beijing, the Bohai coast area and the southern area of Hebei province by 2020.<sup>44</sup>

### 3.3 The relocation plan

Hebei is a major agricultural base in China. In 2015, value-added of the primary sector ranked the 4th in the country. This contributed a lot to the development of related processing industries, such as dairy product industry. According to the 13th five-year-plan agreements on 10 relocation and investment projects, worth 31.2 billion yuan (\$4.5 billion), were signed at a financial capital matchmaking symposium between 200 Beijing-based companies and 30 development zones in Tianjin and Hebei province.

The financial matchmaking event, held in Beijing, was one of the most recent events organized to promote the Beijing-Tianjin-Hebei integration strategy. The strategy aims to integrate resources, capital and skilled employees, to boost the less-developed areas in the three regions. One of the established major central relocation projects in the Beijing-Tianjin-Hebei integration strategy—the Xinfadi wholesale agricultural goods

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42 Tom Phillips, Winter Olympics 2022: Beijing chosen ahead of Almaty to host Games, *The Guardian*, internet ed., 2015.

43 Zhang Yu, Subway lines to link Beijing with cities in Hebei, *Chinadaily* (中国日报网), internet ed., 2017.

44 Hebei to establish 25 new airports, The People's Government of Hebei Province (河北省人民政府), internet ed., 2016.

and logistics center in Gaobeidian, Hebei province has expanded rapidly to become home to 5,300 wholesalers, with a total average daily trade volume of 116,000 metric tons of farm produce, worth 115 million yuan. Starting operations in October 2015, the market is located less than 100 kilometers southwest of downtown Beijing, and covers nearly 140 hectares. Mi Yalin, general manager of Hebei Xinfadi Agricultural Products Co Ltd, said about 80 percent of the wholesalers had relocated from Beijing. "They suffered from problems like the high cost of living and traffic jams before moving here, and now find that business and living costs are much lower while their trade volumes are not," Mi said. The lower storage costs in Hebei could help cut total costs by roughly 30 percent for the vendors, he added. Fan Jinsuo, a banana wholesaler since 1997, was one of the first to make the move from Beijing. He said his daily trade volumes were now about 60 tons, one-third higher than when he was doing business in Beijing, and the area of his store-house had expanded from 2,000 square meters to nearly 4,000 sq m. Beijing alone accounts for half of his sales, he said. "Dozens of my friends, who ran wholesale businesses in Beijing for more than 10 years, have followed me here," Fan said. "They would not leave at first, but changed their minds when they saw the infrastructure and the business opportunities here." An expansion plan will be implemented this year, aiming to build the area into the world's biggest agricultural products trading and logistics hubs within five years, with targeted annual sales of 150 billion yuan.



北京离岸外包

According to the relocation plan, many former large-scale agricultural goods wholesale markets in Beijing will focus more on local needs and highlight agricultural exhibitions and e-business. Among them is Jinxiudadi wholesale market, which has

provided one third of the agricultural and associated products for about 25,000 supermarkets and restaurants in Beijing since 2003. Zhang Ying, the general manager of the Beijing Jinxiudadi E-commerce Co Ltd, said that although the logistics and storage system moved out of Beijing, the trading prospered both through online and offline channels. Sales from its 5,000 online shops totaled 7 billion yuan from July 2015 to the end of 2016, while offline sales expanded above 20 billion yuan during the same period, she said. Liu Yingying opened a store in the exhibition center last year, displaying tea, dried beef, wolfberries, liquor and other Chinese specialities. Customers could either order the products face to face or on the internet, Liu added. "Although the old wholesale market was closed, sales increased 35 percent at my store thanks to the online platform," she added.<sup>45</sup>

In order to advance the industrial coordination of the Beijing-Tianjin-Hebei region, the Ministry of Industry and Information along with the governments of the three places has recently jointly organized a series of activities in Shijiazhuang to promote industrial transfer cooperation. A total of 51 key cooperation projects were signed, with a total investment of more than Rmb290 billion. Among the projects are: 10 industrial park projects including the Beijing-Hebei aviation industrial park project; 10 electronic information industry projects with focus on big data including the cloud computing center project jointly built by Langfang municipal government and Langchao Group; 10 high-end equipment manufacturing projects including the Foton new energy vehicle smart industrial base jointly established by Chengde municipal government and Beiqi-Foton Motor Co Ltd; 10 biomedicine, new energy, new materials projects including the Zhongguancun (Daxing) Biomedicine Industrial Base Gu'an cooperation park project; and 11 industrial transformation and upgrading projects in traditional sectors including the food and beverage production projects developed by Chengde municipal government in collaboration with the China Huiyuan Juice Group.

More than 80 industrial projects with a total investment in excess of Rmb120 billion have been relocated from the Beijing region to Hebei. The combined scale of the projects is said to be equivalent to Rmb250 billion in production capacity. How the two regions clarify the ideas and priorities for collaboration in integrating the characteristics of natural resources in different regions has raised concern. For example, the

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<sup>45</sup> Zhang Zhao, Agricultural wholesalers boosted by relocation out of Beijing, *China Daily* (中国日报), internet ed., 2017.

development of Caofeidian demonstration area joint meeting system has been established, investment companies jointly set up by the two regions have been completed, development and construction plan of a pilot zone has been completed, infrastructure construction has been started, industrial development plan of the Beijing (Caofeidian) Modern Industrial Development Experimental Zone has also been released. Airport economic cooperation zone plan of the New Airport has been submitted for approval. Steel structure construction of Beijing Hyundai Motor Company's fourth plant in China is underway in Cangzhou, Hebei.<sup>46</sup>

Thirteen national economic and technological development zones in Beijing, Tianjin and Hebei signed an agreement to found the Beijing-Tianjin-Hebei Development Zone Innovative Development Association. The association, led by China Association of Development Zones, is dedicated to pushing regional economic integration with development zones as forerunner, under the principle "The government guides, the market leads".

It will set up its secretariat in the Beijing Economic-technological Development Area.

"We are determined to facilitate the industry tie-in in the Beijing-Tianjin-Hebei region," said Gao Yanjie, vice director of Beijing Economic-technological Development Area, "we will be the main force of the integration process."

Gao said the association will pool resources, avoid needless competition, and enhance the economic competitiveness of Beijing-Tianjin-Hebei region.

Beijing Economic-technological Development Area will establish platforms for industrial promotion, enterprise service and entrepreneurship, Gao said.

The development area will also provide online and offline services for innovation including a brick-and-mortar service center, website and research center, according to Gao.

"We will contribute 5 billion yuan to the founding of the Beijing-Tianjin-Hebei Innovative Development Fund," Gao said, and "raise 200 million yuan each year to introduce and cultivate talent for development zones in Beijing-Tianjin-Hebei region."<sup>47</sup>

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46 Beijing-Tianjin-Hebei Region to step up industrial Transfer collaboration, *HKTDC*, internet ed., 2015.

47 Development zones in Beijing, Tianjin, Hebei align for integrated development, *China Daily* (中国日报), internet ed., 2015.

In order to improve the integration plan of building a megalopolis in North China, China has announced the establishment of the Xiong'an New Area (XNA) (雄安新区) in Hebei province, which has the purpose is to explore a new model of optimized development in densely-populated areas. It will span the counties of Xiongxian, Roncheng and Anxin, which are at the center of the triangular area formed by Beijing, Tianjin and Shijiazhuang. XNA'S establishment is part of the coordinated development of Beijing-Tianjin-Hebei region. It will help phase out some economic management and service functions from Beijing. It also marks China's efforts to solve problems facing big cities, like traffic jams and heavy smog. XNA aims to develop into a green, ecological and livable area, a leading innovation-driven development area, and a demonstration zone for coordinated and innovative development.<sup>49</sup>



Photo taken by drone camera shows Xiongan New Area, April 4, 2017<sup>48</sup>

新区) in Hebei province, which has the purpose is to explore a new model of optimized development in densely-populated areas. It will span the counties of Xiongxian, Roncheng and Anxin, which are at the center of the triangular area formed by Beijing, Tianjin and Shijiazhuang. XNA'S establishment is part of the coordinated development of Beijing-Tianjin-Hebei region. It will help phase out some economic management and service functions from Beijing. It also marks China's efforts to solve problems facing big cities, like traffic jams and heavy smog. XNA aims to develop into a green, ecological and livable area, a leading innovation-driven development area, and a demonstration zone for coordinated and innovative development.<sup>49</sup>

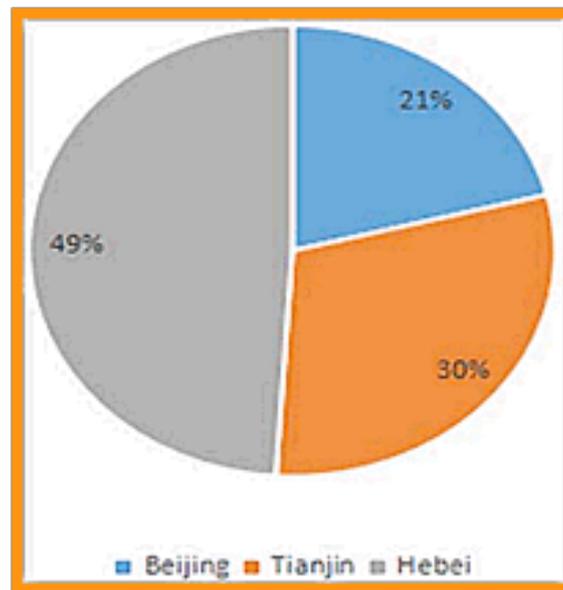
### 3.4 Logistic, taxation inspection cooperation and pension subsidies

All these purposes cannot be split off from the fundamental question of the logistics informationization development. The development of science and technology could promote the maturity of Beijing-Tianjin-Hebei's informationization of logistics. Since Logistics Park is an important portion of logistics system, it could be act as a key

48 View from the top: Xiongan New Area, *The People's Government of Hebei Province* (河北省人民政府), internet ed., 2017.

49 China to set up Xiongan New Area in Hebei, *The Daily Mail*, internet ed., 2017

role in the development of logistics informationaization. In recent years, China have put the development of the logistics industry into regional economic development planning, and Logistics Park planning and layout is regarded as an important foundation of the regional logistics development.



The Logistics Park of Beijing-Tianjin-Hebei quantity<sup>50</sup>

The government attaches great importance to support the development of the Logistics Park. In September 2013, 12 departments including The National Development and Reform Commission issued the first special Logistics Park planning in China, The National Logistics Park Development Plan.<sup>51</sup>

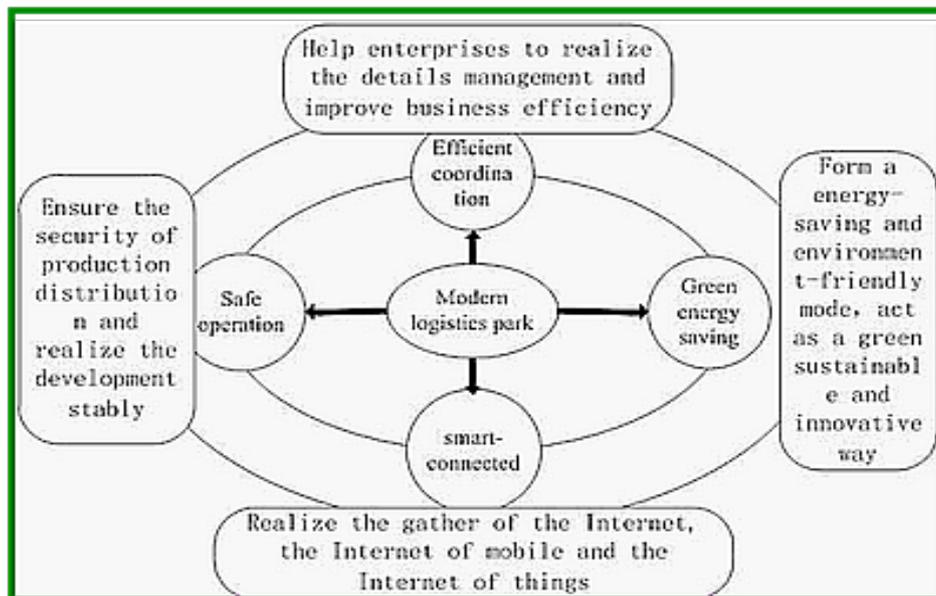
According to data, there are 43 large and medium scale of Logistics Parks in Beijing-Tianjin-Hebei region. Its distribution not only depended on the regional economic development level and the population density, but also depend on several factors like geographical factors, area. The higher the level of economic development, population density, the greater the geographic area, the greater the need of Logistics Park. The number of Logistics Park in Beijing is accounted for 21% of the total number of the Beijing-Tianjin-Hebei district, Tianjin’s accounted for 27%, Hebei’s accounted for 25%. Beijing-Tianjin-Hebei integration is proposed for the played a significant role in the planning and construction of Logistics Park.

The Logistics Park information platform is an information exchange platform, using

50 Wu Pingyu, Zhu Lingyao, Li Weipeng, He Rui. The Statistical Study of Beijing-Tianjin-Hebei Logistics Park Informationization Development. *Science Journal of Business and Management*, Vol.4, No.3, 2016, pp.77-81.

51 Logistics Park operation statistical analysis report, *China Logistics & Purchasing*, internet ed., 2015.

information platform to deal with logistics operations, logistics procedure and logistics management. These work contains collection, classification, selection, storage, analysis,



evaluation, feedback, release, manage, and control of general information exchange platform. The Logistics Park information is the optimal way for small and medium-sized logistics enterprises to realize logistics informationization. Enterprises could enforce sharing information with other enterprises or their customers only if they access to a logistics information platform.<sup>52</sup>

The general information construction of a Logistics Park is beneficial to a highly efficiency cooperate between enterprises and their customers, the construction of green Logistic Park, resource-efficient environmentally friendly development road; the promotion to the gathering of Internet, mobile, Internet of things, building an optimal resource allocation, highest efficiency, safe and reliable, convenient modern wisdom Logistics Park.<sup>53</sup>

One another important step of the integration project is the creation of the MOU (黑名单) on Taxation Inspection Cooperation of State Taxation and Local Taxation Bureaus of Beijing, Tianjin and Hebei Province (国家税务总局稽查局与中国人民银行征信中心联合). This represent a fundamental

52 Guo Lei, Under the economic globalization of regional logistics research, *Hebei Normal University* (河北师范大学), internet ed., 2008.  
 53 Ling Wang, Shao-ju Lee, Ping Chen, Xiao-mei Jiang, Bing-lian Liu, *Contemporary Logistics in China*, Springer, 2016.

step with the scope to enforce the Program for Deepening the Reform of State and Local Tax Collection and Administration System and put into action a strong cooperation between tax authorities of the state and local tax authorities taken by the state taxation bureaus and local taxation bureaus of the three cities and provinces, which is of great relevance for promoting the advancement of taxation inspection cooperation of Beijing, Tianjin and Hebei Province. In April 2015, the state taxation bureaus of Beijing, Tianjin and Hebei Province officially signed the Agreement on Taxation Inspection Cooperation of Beijing, Tianjin and Hebei Province. In the half year since its development, the state taxation inspection departments of the three regions have a deep coordination, made vigorous explorations and close cooperation, and initiated 128 collaborative items in total, which has not only significantly improved the quality of day-to-day cooperative investigation, but also made breakthroughs with respect to collaborative case handling and dynamic analysis. In addition, such efforts have played a favorable facilitating role in optimizing the regional taxation environment. Based on this, in order to thoroughly carry out the requirements of the CPC Central Committee and the State Council on deepening state and local tax collection and administration system reform, the six taxation bureaus of Beijing, Tianjin and Hebei Province joined hands and signed the Memorandum of Understanding on Taxation Inspection Cooperation of Beijing, Tianjin and Hebei Province. The six taxation bureaus of Beijing, Tianjin and Hebei Province have earnestly carried out the work deployment of the State Administration of Taxation (国家税务总局办公厅) by leveraging the opportunity of Beijing-Tianjin-Hebei coordinated development, strengthened horizontal connections, and taken the lead in establishing cross-regional and cross state and local taxation inspection coordination system. Such efforts are of great significance to deepening the taxation inspection cooperation of the three places, will surely accelerate the development of taxation inspection work of the three places, and will play a good demonstration role in deepening inspection system and mechanism reform, deepening cooperation between state and local tax authorities and deepening regional taxation cooperation.<sup>54</sup>

Beijing, Tianjin and Hebei signed an agreement to cooperate on pension fulfillment during Beijing's annual development conference on June 2, 2016.

Hebei Gaobeidian Pension service, Tianjin Wuqing Pension Care center and Hebei

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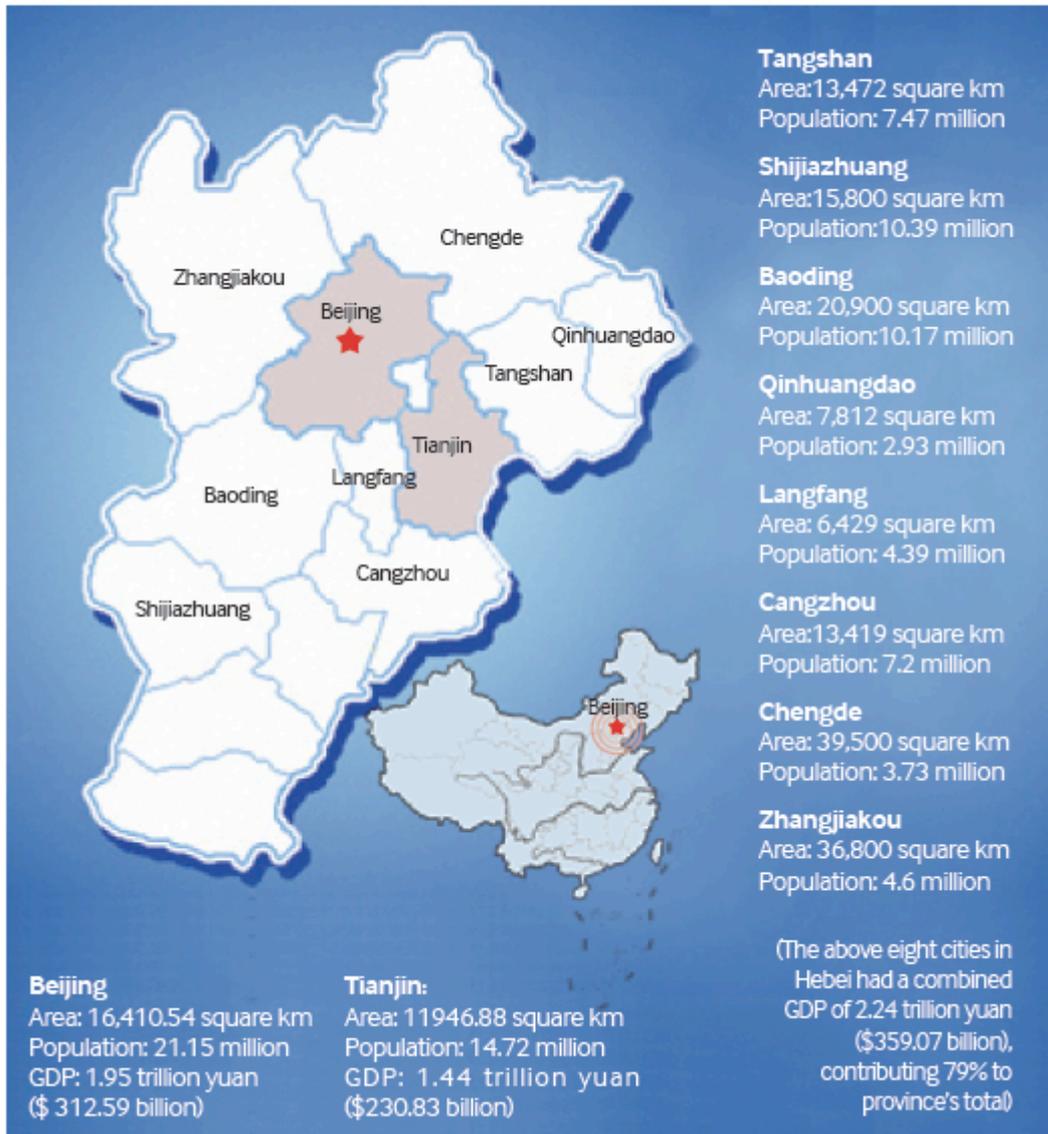
54 State and Local Taxation Bureaus of Beijing, Tianjin and Hebei Province sign MOU on Taxation Inspection Cooperation, *State Administration of Taxation* (国家税务总局), internet ed., 2016.

Sanhe Yanjiao International Health City were chosen as the three trial projects. More than 10 regions in Beijing's Dongcheng and Xicheng districts, Tianjin's Wuqing District and Hebei's capital Shijiazhuang were selected as trial regions. To support the project, Beijing is encouraging elderly residents in Dongcheng and Xicheng to relocate to the three projects by offering subsidies. The Beijing government will also donate money to state-owned companies and social pension organizations that will set up and operate a pension center in Tianjin and Hebei. Li Hongbing, deputy director of the Beijing Civil Affairs Bureau, said that Beijing had 3.15 million elderly residents at the end of 2015, which is more than 23 percent of the city's total population. Li said that, by the end of 2040, Beijing's elderly population will exceed 6 million and account for a third of the city. "We want Beijing, Tianjin and Hebei to cooperate on pension services to connect and share resources. A transfer of elderly populations may also be required," Li said. "It also provides more opportunities and activities for active elders who want to live in Tianjin and Hebei," Li said. The subsidies offered to organizations and companies involved in the project is between 20,000 and 25,000 yuan. Beijingers who relocate to Tianjin and Hebei will receive an additional 300 to 500 yuan per month, he said.<sup>55</sup>

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55 Diao Jiayi, Beijing offers subsidy to Tianjin, Hebei-bound Pensioners, *Beijing Today*, internet ed., 2016.

## Jing-Jin-Ji Overview



(Source: Government websites, as of the end of 2013)

## APPENDIX

### A

Project Name	<b>CHINA-Hai Basin Integrated Water and... Environment Management Project</b>
Region	East Asia and Pacific Region
Sector	General water/sanitation/flood protection sector (50%); Irrigation & drainage (50%)
Project ID	P075035
Implementing Agency	Ministry of Water Resources State Environmental Protection Agency Municipalities of Beijing and Tianjin Province of Hebei Address: Ministry of Water Resources, Baiguang Rd., Beijing, China Contact Person: Mr. Liu Bin Tel: (8610) 6320-2127 Fax: (8610) 6320-2027 Email: nfb@mwr.gov.cn
Environment Category	C
Date PID Prepared	September 6, 2002
Auth Appr/Negs Date	September 30, 2003

## 1. Country and Sector Background

Degradation of the Bohai SeaThe Bohai Sea, located in the northwest corner of the Yellow Sea, is one of the world's most ecologically important, and stressed, bodies of water and the fishery resources are important to China, Japan, and North and South Korea. More than 40 rivers discharge into the Bohai Sea, of which the Yellow (Huang), Hai, and Liao rivers are the most significant. From an ecological perspective, the Bohai Sea is a large, shallow embayment of the Yellow Sea. The Yellow Sea, in turn, is a shallow continental sea of the Northwest Pacific Ocean. These relationships are important because of the physical and biological links between these systems. In particular, fish and shellfish stocks in the Yellow Sea are dependent on the Bohai Sea as a reproduction and nursery area. The open water environment in the Bohai Sea supports diverse marine life including invertebrates, fishes, marine mammals and birds. In the past, a major source of larvae and juveniles for the East China Seas came from the Bohai Sea, but this function has steadily diminished. Therefore, the ecological condition of the Bohai Sea is critically important for maintaining fishery stocks and biodiversity in China's northern fisheries. It is generally accepted that over-fishing, pollution, reduction of freshwater inflows and habitat loss have combined to reduce these ecosystem functions. The Bohai Sea has historically been an important fishing area due to its location adjacent to major population centers, and its role as a seasonal spawning and nursery ground for the larger and more productive Yellow Sea fishery. The history of Bohai Sea fisheries is one of boom and bust scenarios, with the major impact being the introduction of motorized fishing vessels in the 1960s, and new types of fishing gear such as fine-mesh nets for prawns that also caught all kinds of juvenile and larval fish. In 1988, prawn trawling was banned, and has been replaced now by thousands of kilometers of drift and set gill nets, which also have a negative impact on juvenile and larval fish. A major paradox of the Bohai Sea fishery is that despite its damaged condition, it is still attracting increasing numbers of fishermen due to lack of alternative employment in the region for many people. Today, the Bohai Sea is very heavily fished, with almost 90,000 registered fishing vessels in the provinces/municipalities surrounding the Sea. In contrast to the decline in the natural aquatic systems, aquaculture has grown rapidly, and the Bohai Sea and northern Yellow Sea now account for almost two-thirds of the PRC's total production. The major species cultivated are prawns,

oysters, clams, mussels, cockles, abalone, and seaweed. Pollution, both from external sources and self-production, as well as diseases are increasingly affecting aquaculture production, and the threat of human disease and toxic contaminants are putting pressure on the government and the industry to clean up pollution problems. The Bohai Sea is subject to heavy land-based pollution from domestic, industrial, agricultural, and livestock sources. The Bohai Sea is subject to one-third of the wastewater and half of the pollutant loading discharged into seas bordering China. This amounts to 3 billion m<sup>3</sup> of wastewater and 700,000 tons of pollutants per year. The areas where pollutant concentrations exceed the national standards in the Bohai Sea, mainly for inorganic nitrogen and phosphorous, has been expanding and in 1997 it covered 43,000 km<sup>2</sup>, accounting for half of the total sea area. The most seriously affected areas include the estuaries and coastal shallows. Pollution has led to mass mortalities of aquaculture species and contributes to an increasing frequency of harmful algal blooms, commonly known as "red tides." In 1989 a "red tide" covering 1,300 km<sup>2</sup> formed in the Bohai Sea off the coast of Hebei; an even more massive "ride tide" extending over 3,000 km<sup>2</sup> appeared in the Liaodung Gulf of the Bohai Sea in 1998. Water Pollution Surface and groundwater quality in China has been seriously degraded due to lack of effective pollution control, combined with rising population and industrial operations. Sixty-eight percent of the total river length in the north China plains is classified as polluted (i.e., unsuitable as raw water sources for drinking water), and 50% of the groundwater resource is polluted. Hai River is one of the most polluted river systems with more than 80% of the river reaches classified as polluted. Hai River discharges into the Bohai Sea and is a major contributor to its pollution loadings. The Chinese Government is beginning to address the serious water pollution problem in the Bo Hai Sea and the Hai Basin, both of which have been identified as priority areas in the 9th National Five Year Plan (1995-2000). SEPA has prepared the "Bo Hai Blue Sea Action Plan" and the "Water Pollution Prevention Program of Hai River Basin". Both plans includes components of pollution control. The Government's efforts to control pollution has been focused on large industrial sources, with the major cities of Beijing, Tianjin, and Shijiazhuang now beginning to embark on large-scale wastewater treatment plant construction programs. Despite considerable reduction of pollution generated from these large point sources, water quality has continued to decline. This trend suggests that many other sources are contributing to water pollution. Reducing pollution from secondary towns is essential to improving water quality in the Hai Basin and the

environment of the Bo Hai Sea. Although information on the impact on secondary towns on water quality is limited, it is estimated that - together with surrounding rural areas - they account for more than half of the total pollution generated in the Hai Basin. However, pollution from secondary towns is largely uncontrolled. Almost none of the secondary towns has wastewater treatment facilities. Township and Village Enterprises (TVE) and other small industries located in these towns have very little pollution control infrastructure. In 2001, SEPA formulated the 10th Five Year Plan of Water Pollution Prevention and Treatment in the Hai Basin, briefly named the Hai River Plan. The Hai River Plan is based on a Program of Water Pollution Prevention in the Hai Basin approved by the State Council in March 1999. In this plan, the programmed water quality goals of some river reaches were revised, a control target index of gross amount of pollutant for 2005, COD and NH<sub>3</sub>-N were added, and some necessary water pollution treatment items were supplemented. The Hai River Plan identified that the key needs are to substantially reduce the gross amount of pollutant discharge in Hai Basin, to guarantee drinking water source areas reach standards, to address cross-provincial water quality disputes, and to establish a control system for the gross amount of NH<sub>3</sub>-N pollutant.

Water Scarcity and Groundwater Mining

Water resources in China are unevenly distributed. While water resources are quite abundant in the south, water availability in the north is very limited. In the Hai Basin, water availability is only 305 m<sup>3</sup> per capita which is about 13% of the national average. A 2001 study sponsored by the World Bank, "Agenda for Water Sector Strategy for North China" estimates current economic losses from water shortages of approximately 60 billion Yuan per year in the three major river basins in North China: the Hai, Huai, and Huang (Yellow). Total abstraction of groundwater in the Hai Basin is estimated to be around 26 bcm per year, which is approximately 9 bcm more than the sustainable yield. The Government has started to take measures to address water scarcity problems, including improving irrigation efficiency and creating "real water savings," increasing the price of piped water to encourage conservation and improve the finances of public water utilities, and encouraging wastewater reuse. One of the most ambitious measures is the proposed "The South-North Water Transfer Project" (SNWT Project). This project, when completed, will transfer 20 bcm water from the Yangtze River system to North China, including the Hai Basin, at an estimated cost of around U.S. \$10-15 billion. China's leadership, in particular Premier Zhu Rongji, is making a point of emphasizing the need to combine the construction of the SNWT Project with redoubled efforts on water use

efficiency, pollution clean-up and prevention, and appropriate (i.e., higher) pricing. The official slogan emerging from the high-level study session in October 2000 where it was decided to go ahead with the Eastern and Central Routes is "first save water, then transfer water; first treat pollution; then move water; first protect the environment, then use water." In order to safeguard sustainable development of the social economy in capital city of Beijing and surrounding areas, the Capital Water Resources and Sustainable Utilization Plan for 2001-2005 for the Early Part of 21st Century was approved by the State Council. The water consumption in Beijing has exceeded bearing capacity of the water resources and the ecological system due to rapid population and economic growth and the high speed of urbanization. Therefore, in view of the water ecological system, the Plan emphasized the need for coordinated attention to population, resources and the environment. The Plan aims to achieve a general balance of water resources supply and demand in terms of the water supply systems and the configuration of water resources in local region, in order to guarantee sustainable development of the social economy in Beijing and surrounding areas. The Plan will include integrated policies such as water conservation, water recycling, utilization of rainfall and flood waters, conjunctive use of surface water and groundwater, water resources protection, integrated water resources management systems and adjustments in water pricing. Water and Environmental Management Institutions

The complex and interrelated nature of water pollution, water scarcity, groundwater overdraft, and flooding in the Hai Basin calls for an integrated approach to water and environmental management. An integrated approach will lead to better understanding of important surface/subsurface and water quality interactions, and facilitate new management techniques. However, integrated water and environmental management techniques are problematic because of difficulties in inter-jurisdictional and inter-administrative cooperation along several dimensions. Water and environment management involves many central-level ministries and agencies: MWR, SEPA, MOC, MOA, and others. While the MWR has the primary responsibility for overall management of the nation's water resources, there are considerable overlapping jurisdiction problems with other ministries and agencies concerning urban water supply, groundwater management, water quality, pollution control, and operation of reservoirs for hydropower. The management role of central ministries is further limited by the increasing powers of provinces following the decentralization process. According to the official government structure, local and provincial agencies have vertical technical interaction with central

ministries. However, the local and provincial agencies report and depend on provincial and lower-level governments, especially in relation to administration of laws and most importantly for funding. Well-meaning principles (such as water allocation at the basin level or polluter-pays-principle) are often in conflict with the economic interests of the provinces and lower-level governments. Administrative bodies--whose financial viability depends on provincial budgets--empowered by laws to enforce regulations at the local level are often under pressure to act in the interest of local governments to the detriment of sound overall water or environmental resource management. China also has a number of River Basin Commissions (RBCs) for its major basins. While the RBCs have been established pursuant to the 1988 Water Law, they are commissions only in name, having no separate governing board or corporate status. The RBCs are agencies of MWR and perform those functions that MWR delegates to them. It is difficult for the RBCs to enforce provisions of basin plans on other sector ministries and provincial governments, and the functions they perform overlap with activities undertaken at the provincial and local level. In principle, RBCs prepare basin development and operating plans in full consultation with the provinces, sectoral ministries, and other stakeholders. In practice, there are few formal consultation mechanisms, and the main directives affecting RBC activities are received vertically from MWR.

2. Objectives The overall objective is to catalyze a more integrated approach to water resource management and pollution control in the Hai River Basin in order to improve the Bohai Sea environment. Specifically, the project will reduce wastewater discharges from small cities along the rim of the Bohai Sea, improve integrated water and environment planning and management in the Hai Basin, and support institutional aspects related to effective local, municipal/provincial, and basin-wide water and environment planning and management. The project is intended to demonstrate new technologies and management approaches, with the lessons learned applied throughout the Hai Basin and other basins bordering the Bohai and Yellow Seas. The project will also serve as a complement and link on water and environmental management issues for two on-going World Bank-financed operations in the Hai Basin: Tianjin Urban Environment Project (FY03) and the Water Conservation Project (FY01).

3. Rationale for Bank's Involvement The Bank is helping the Chinese Government to develop and implement an integrated cross-sectoral approach to water and environment management. The Project

would address an important missing link in efforts to improve the Bohai Sea Environment. Other GEF and Chinese initiatives are addressing the marine and coastal issues (PEMSEA and the Yellow Sea Marine Ecosystem Project). Large Chinese cities, such as Beijing and Tianjin, often with partial World Bank financing, are beginning to construct wastewater treatment systems to reduce land-based sources of pollution into the Bohai Sea. The proposed project will complement these efforts by financing pilot activities to control pollution for secondary towns and rural areas, and develop a framework for comprehensive management. More than half of the pollutant loading into the Bohai Sea comes from secondary towns and rural areas. The general approach taken will be to develop an integrated water and environmental management framework, which deals with water scarcity, groundwater mining, and water pollution. Management improvements will take place from the bottom-up with pilot counties, at the middle administrative levels through Tianjin, and from the top-down at the basin and national levels. While developing this comprehensive framework, the proposed project also finances specific pollution control measures in secondary towns to provide immediate benefits to the Bohai Sea. The Project builds upon, fills in the gaps, and links two Bank-financed projects, the WCP and TUEP, and fits into the overall framework for improving the Bohai Sea. It would also help provide the management framework for integrated water resources management in the Hai Basin, which is indispensable for a long-term, sustainable approach to rescuing the Bohai Sea. Reducing pollution into the Bohai Sea is best done within an integrated water resources framework. Although government policy calls for an integrated framework, inter-jurisdictional and inter-administrative cooperation often proves difficult in practice, and the GEF grant will provide an incentive to break through institutional barriers and provide a powerful demonstration effect. The Bank is helping to provide international expertise to provide Chinese counterparts with a broad range of management experiences and instruments to draw upon.

4. Description The Project would be designed to support top-down and bottom-up aspects of

integrated water and environment management in the Hai Basin taking advantage of existing institutional mechanisms to the extent possible.

According to the natural characteristics of the Hai Basin, the proposed project includes five components. Namely: (a) water and environment management in Tianjin

Municipality; (b) water and environment management in a key subbasin of the Hai Basin; (c) water and environment management at the county level; (d) water and environment management at the Hai Basin level; (e) institutional development at the central level. Component 1: Water and Environmental Management in Tianjin Municipality (US\$9

Million). As one of the leading urban areas in China, Tianjin has a special administrative status which makes it similar in many respects to a

province. The Municipality has a total population of 10 million, but only the 4 million people that live within the city boundaries of Tianjin have (or will have) adequate wastewater treatment. The component would finance

three activities. First, the GEF grant would provide partial grant financing for 2-3 wastewater treatment plants in secondary cities in

Tianjin Municipality. Most of the financing for these plants would be provided by the FY03 TUEP, which is also financing wastewater investments

in the city of Tianjin. The small amount of GEF grant financing would be used as an incentive to encourage a first set of pioneer small cities to

invest in wastewater treatment facilities. The Secondary Cities program is considered essential to addressing the municipality's (and the Bohai Sea's) water pollution problems. Second, the GEF grant would finance technical assistance for the remediation of the 70-km long, highly contaminated, Dagu Canal which starts in the city of Tianjin and discharges directly to the Bohai Sea. This canal has served as the main sewage canal for Tianjin for the last four decades, and is silted up with highly contaminated sediment. The FY03 TUEP will finance the remediation of the canal, including the dredging, dewatering effluent treatment, and sediment disposal. The TUEP is also financing the construction of wastewater treatment plants in Tianjin City, but it is necessary to also remove the sediment in Dagu Canal in order to reduce pollutant inflows into the Bohai Sea. Third, the component would facilitate the establishment of institutional coordinating mechanisms for integrated water and environmental management and support the formulation of a Municipal Integrated Water and Environmental Management Plan (IWEP). The IWEP would develop programs for: i) water quality management and pollution control, including: wastewater planning for secondary cities, industrial

wastewater, and agricultural pollution; ii) treated wastewater reuse; and iii) groundwater management. Based on the IWEP, the component would also fund the implementation of specific management activities, and pre-investment studies for innovative projects, such as additional small city wastewater treatment plants, artificial groundwater recharge, livestock wastewater treatment, pollution prevention and industrial pretreatment technology, hazardous waste treatment and disposal, irrigation water conservation, etc. Since Tianjin is the area directly bordering the Bohai Sea in the Hai Basin, any pollution control activities will have a direct beneficial impact on coastal water quality.

**Component 2: Water and Environment Management in a Key Subbasin (US\$5 Million).** During project preparation a subbasin of the Hai Basin will be selected for an integrated water resources utilization and water pollution prevention demonstration project. The subbasin selected should have crucial problems related to water resources and the water environment. Addressing and solving these problems will in itself improve the water utilization and water environment in the Hai Basin, and in addition will provide a demonstration for carrying out similar programs in the rest of the Basin and elsewhere in China. In accordance with the Hai River Plan mentioned above, the whole basin is divided into 9 subbasin planning zones. The selection of the subbasin to be supported in the Project will be based on whether water in subbasin reaches is used for drinking water (preference, yes), the present status of water quality in the different subbasin reaches (preference, poor water quality), the present gross amount of pollutant discharge (preference, large amounts), the control target index for gross amount of pollutant (preference, strict target), the influence of the subbasin on the downstream environment including the Bohai Sea (preference, substantial influence). With the objective of addressing key problems in the selected subbasin, an integrated program and implementation plan will be developed for water resources utilization and pollution control, including institutional mechanisms for integrated management, industrial structural adjustments, integrated utilization of water resources, wastewater reuse, institutional development, emergency systems and ecological environment rehabilitation. Following completion of the program and implementation plan, activities will be selected for implementation under the project which will serve as a demonstration for other areas. The implementation of these activities will be carried out with the participation of the various existing institutional entities and will include the participation of several counties in the subbasin.

**Component 3: Water and Environment Management at the County Level**

(US\$7 Million). This component would support integrated water and environment management in about 10 selected counties in Beijing

Municipalities and Hebei Province. Preference would be given to counties included in the FY01 Bank-financed Water Conservation Project and where

possible to counties that are located in small tertiary tributary systems or long groundwater flow units within the Hai Basin that include one or several counties. The selection of the counties should also be based on

the seriousness of the water problems in the counties and on there being a reasonable hydrographic sub-zone for study purposes. The component would support preparation of an Integrated Water and Environment Plan (IWEP) to help to improve and implement help develop a set of policies, and legal, administrative and institutional instruments for county-level integrated water and environment management, including the development of institutional mechanisms for integrated management, definition of management objectives, information exchange and definition of investment needs, and surface and groundwater management including both quantity and quality aspects. The component will also develop capacity building for integrated water and environment management. Based on the IWEP, the component would also fund the implementation of specific management activities, and pre-investment studies for innovative projects, such as water saving irrigation, integrated protection and management of small river course, agriculture non-point (surface runoff) pollution control, livestock wastewater treatment, pollution prevention and industrial pretreatment technology, hazardous waste treatment and disposal, artificial groundwater recharge, etc. Experience obtained at the county level could be extended throughout the Hai Basin to develop a water resources and environmental management system from the bottom-up. Extension of the experience will be along tributaries and groundwater flow units because of the need for coordinated action in regard to shared resources.

Component 4: Water and Environment Management at the Hai Basin Level (US\$9 Million). The component will support formulation of a basin action plan with focus on capacity building and basin integrated management, on the basis of the characteristics of the basin, Bohai Action Plan and the 10th Five Plan of Water Resources Protection and Water Pollution Prevention in Hai River Basin. The component would also facilitate the establishment of institutional coordinating mechanisms for integrated water and environmental management. The component would improve basin-wide measurement, monitoring, modeling, and

database management for water and environmental management (hereinafter referred to as Knowledge Management, or KM). Specific KM activities could include improving basin-wide water quality monitoring and modeling systems, and water ecological environment monitoring system for river reaches and other water bodies in the Basin, including a coastal water quality model; basin-wide network of flow monitoring stations coupled with a simulation model for real-time reservoir management and water allocation; regional groundwater models; GIS mapping; satellite imagery for improved resources management, etc. The specific KM needs will be defined during project preparation. The component will also include studies that address major problems in Hai Basin. The studies to be included will be determined during project preparation, but could include the development of policies and strategies for: (a) integrated institutional mechanisms for water and environment management in the Hai Basin; (b) determining the water environment sustainable capacity for different reaches and water bodies; (c) determining targets for control of the gross amount of pollutants for different reaches and water bodies; (d) industrial structural adjustments; (e) integrated utilization of water and specifically how to guarantee adequate water for ecological purposes; (f) wastewater discharge licensing systems and penalization of polluters; (g) bulk water pricing; (h) countermeasures for protection and management of the water ecological system of river courses and wetlands; (i) establishing and maintaining safe drinking water quality zones; (j) evaluation and sustainable management of groundwater; (k) wastewater reuse; (l) municipal, industrial and agriculture water conservation; and (m) flood and drought management. A consolidated report on integrated water and environment management incorporating aspects of the above would also be produced. These studies will help to identify appropriate approaches for improving water and environment management in the Hai Basin and will also help to identify and prioritize management actions and investment needs that will serve as a reference for the Chinese Government and the international donor community.

Component 5: Institutional Support at the Central Level (US\$2 Million). The component would support the development of policy, and help to define legal, administrative and institutional mechanisms and instruments for integrated water and environment management. The component would provide support to MWR and SEPA to establish policy, mechanisms and instruments for improved water resources and water environmental management at the basin, provincial/municipal and county level. Examples of potential activities include policy framework of integrated management of water utilization and water pollution

prevention, guidelines for water and water environment management, developing improving national standards on wastewater reuse, Reestablishment of sound data management and monitoring processes and procedures, etc.

1. Water and Environment Management in Tianjin Municipality.
2. Water and Environment Management in a key subbasin.
3. Water and Environment Management at the County Level.
- 4: Water and Environment Management at the Hai Basin Level.
5. Institutional Support at the Central Level.

#### 5. Financing

Total (US\$m)

BORROWER \$15.00

IBRD

IDA

GLOBAL ENVIRONMENT FACILITY \$17.00

Total Project Cost \$32.00

#### 6. Implementation

The implementation arrangements would build upon the existing management structures for the Tianjin Urban Environment Project (TUEP) and the Water Conservation Project (WCP). A Project Leading Group would be established consisting of high level representatives from the following agencies: n Ministry of Water Resources (MWR)n State Environmental Protection Agency (SEPA)n Ministry of Construction (MOC)n State Oceanic Administration(SOA)n Ministry of Agriculture (fisheries)n Ministry of Financen Beijing Municipalityfn Tianjin Municipalityfn Hebei Provincefn Hai River Basin Commission (under the MWR)MOF will play the role of general project coordinator. Project preparation activities will be managed by an MOF-MWR-SEPA Coordination Unit. Two PMOs will be established: one in the CPMO of the Water Conservation Project of MWR; and one in the CWCP of the Foreign Economic Cooperation Office (FECO) of SEPA, respectively for routine managing and operation work. The Coordination Unit and PMOs will be responsible for central coordination and Hai Basin level activities as well as for overall coordination to the municipal/provincial

and county levels. PMOs will also be established in Tianjin and Beijing Municipalities and in Hebei Province, as well as in counties involved in the Project. The World Bank will provide funds to one special account. The Coordination Unit will distribute funds to five locally administered special accounts by the PMOs in MWR, SEPA, Tianjin, Beijing and Hebei.

## 7. Sustainability

Investments in wastewater treatment for secondary towns under the project will be financed through a combination of self-financing, loans, and GEF grants (the terms and conditions of the GEF grant will be determined during project preparation). All sewerage companies or departments will be required to repay the loans and cover O&M costs through wastewater tariffs. Financial management and operational development plans are a condition for financing and will be monitored during project implementation. Counties and municipalities participating in the project will establish institutional mechanisms to coordinate across sectors to prepare and implement Integrated Water and Environment Plans. The Hai River Basin Commission has existed since the mid-1980s, and the best financing method for maintaining the KM systems funded through the project will be identified and implemented during implementation.

8. Lessons learned from past operations in the country/sector The Bank has assisted in financing 17 water resources and irrigation projects in China and numerous water supply and sanitation projects over the last 15 years. Generally, these projects have been implemented efficiently, and time and cost overruns have not been excessive despite periods of sharp price escalation. In recent years the Bank has been supporting a institutional aspects of water and environmental management: (a) at the Basin level in the Yangtze Basin Water Resources Project, the Tarim Basin II Project, the Guanxi Urban Environment Project and the Liao Basin Environment Project; and (b) at the system level through self-financing irrigation and drainage districts and water supply and sanitation corporations in numerous projects. Key lessons from previous Bank-financed water resources projects in China are that: (a) detailed organizational and staff arrangements should be formulated and agreed before implementation; (b) counterpart funding should be committed before implementation, including the direct participation of the provincial Planning Commissions and Finance Bureaus; (c) projects should include institutional development support for the strengthening of provincial and local bureaus; (d) water and environmental management needs to have both bottom-up and

top-down aspects; bottom-up activities need to have strong involvement by existing political/administrative entities (townships, counties, prefectures, municipalities, provinces) including their respective technical/administrative bureaus (water, environmental protection, agriculture, construction, etc.) because these are the entities with direct line responsibility for management; top-down activities should be concentrated at the river-basin level and should establish the enabling policy and strategic environment for cross-sectoral and cross-administrative boundary coordination; (e) participation of water users in water resources management especially in the lower-level bottom-up aspects is crucial; and (f) data and knowledge management activities are critical to water and environment management and need to be widely shared and compatible. Experience with institutional development Project indicates that strong government support is necessary for its success, and that specialized TA during preparation and early implementation is important to help promote, teach and establish institutional reforms before full implementation begins. The 1993 World Bank Policy Paper on Water Resources Management and Chinese Government policy are compatible and emphasize the following principles: (a) water resources should be managed and developed in a comprehensive integrated manner and consider cross-sectoral issues with the goal of ensuring the sustainability of the water environment for multiple uses as an integral part of the country's economic development process; (b) water resources planning and management should be carried out considering the interrelationships between water, land and human resources with the objective of enhancing economic growth and development in an environmentally sustainable manner; (c) water is an economic resource and therefore should be managed in an economically efficient manner; (d) the river basin should be the basic unit for planning and managing water resources; (e) water users should participate directly in water resources management and development; and (f) water use should be efficient and environmentally sustainable.

#### 9. Environment Aspects (including any public consultation)

Issues : The overall objective is to catalyze a more integrated approach to the Hai River Basin in order to improve the Bohai Sea environment. Specifically, the project will reduce wastewater discharges from small cities along the rim of the Bohai Sea, help control groundwater mining, encourage wastewater reuse, and establish effective local, municipal/provincial, and basin-wide water management institutions. The project is intended to demonstrate new technologies and management approaches, with the

lessons learned applied throughout the Hai Basin and other basins bordering the Bohai and Yellow Seas. Except for the Tianjin small city wastewater treatment plants, the Project will not include any infrastructure investment. All of the Project activities will contribute to overall environmental improvements, including reductions in pollution and improvements in water quality in water bodies including the Bohai Sea, reductions in groundwater over exploitation and improvements in monitoring, planning and water rights administration. Water and environmental management needs to have involvement by existing political/administrative entities (townships, counties, prefectures, municipalities, provinces, ministries) including their respective technical/administrative bureaus (water, environmental protection, agriculture, construction, etc.) because these are the entities with direct line responsibility for management. Participation of water users and polluters in water resources management is also important. Information management and sharing are needed aspects of water and environment management. During the initial phase of Project implementation, IWEPs for about 10 counties, Tianjin Municipality and a key subbasin will be prepared, which will include consultation with these stakeholders through surveys and working sessions to ensure their adequate involvement and input. The TORs for these IWEPs will be prepared during Project preparation and will include requirements for consultation during IWEP preparation. Implementation of the IWEPs will also require significant participation, which will be defined in the IWEPs. The IWEPs will be designed to take into account all the different water uses and the entire range of threats to water quality including point and diffuse pollution sources. During preparation an action plan for knowledge management, and TORs for strategic planning studies, for technical assistance in the areas of policy and legal framework development and for guidelines for integrated water resources management will be prepared. These action plan and TORs will include requirements for consultation to ensure that relevant viewpoints are taken into account during the preparation of these activities during Project implementation.

#### 10. Contact Point:

Task Manager

Douglas C. Olson

The World Bank

1818 H Street, NW

Washington D.C. 20433

Telephone: 202 473-9227

Fax: 202 522-1674

11. For information on other project related documents contact:

The InfoShop

The World Bank 1818

H Street, NW

Washington, D.C. 20433

Telephone: (202) 458-5454

Fax: (202) 522-1500

Web: [http:// www.worldbank.org/infoshop](http://www.worldbank.org/infoshop)

**Project Agreement**  
**Hebei Urban Environment Project**

城市环境项目

between

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

and

HEBEI PROVINCE

Dated November 1, 2000

PROJECT AGREEMENT

AGREEMENT, dated November 1, 2000, between INTERNATIONAL BANK  
FOR  
RECONSTRUCTION AND DEVELOPMENT (the Bank) and Hebei Province (Hebei).

WHEREAS by the Loan Agreement of even date herewith between  
People's Republic of China (the Borrower) and the Bank, the Bank has  
agreed to make available to the Borrower an amount equal to one hundred  
fifty million Dollars (\$150,000,000) on the terms and conditions set  
forth in the Loan Agreement, but only on condition that Hebei agrees to  
undertake such obligations toward the Bank as are set forth in this  
Agreement; and

WHEREAS Hebei, in consideration of the Bank's entering into the  
Loan Agreement with the Borrower, has agreed to undertake the obligations  
set forth in this Agreement;

NOW THEREFORE, the parties hereto hereby agree as follows:

ARTICLE I

Definitions

Section 1.01. Unless the context otherwise requires, the several terms defined in the Loan Agreement, the General Conditions (as so defined in the Loan Agreement) and the preamble to this Agreement have the respective meanings therein set forth.

ARTICLE II

Execution of the Project

Section 2.01. (a) Hebei declares its commitment to the objectives of the Project as set forth in Schedule 2 to the Loan Agreement, and, to this end, shall:

(i) cause Handan to carry out Parts C, D and E of the Project and cause Handan to carry out Parts A(2), C, D and E of the Project through Handan Water Supply Company and Parts B(2), C, D and E of the Project through Handan Sewage Treatment Co., Ltd.;

(ii) cause Shijiazhuang to carry out Parts C, D and E of the Project and cause Shijiazhuang to carry out Parts B(3), C, D and E of the Project through Shijiazhuang Wastewater Treatment Co., Ltd.;

(iii) cause Tangshan to carry out Parts C, D and E the Project and cause Tangshan to carry out Parts A(1), C, D and E of the Project through Tangshan Water Supply Company and Parts B(1), C, D and E of the Project through Tangshan Wastewater Treatment Co., Ltd.; and (iv) carry out Part D of the Project, all with due diligence and efficiency and in conformity with appropriate administrative, financial, engineering, public utility and environmental practices, and Hebei shall provide, or cause to be provided, promptly as needed, the funds, facilities, services and other resources required for the Project.

(b) Without limitation upon the provisions of paragraph (a) of this Section and except as the Bank and Hebei shall otherwise agree, Hebei shall carry out the Project, or cause the Project to be carried out, in accordance with the Implementation Program set forth in Schedule 2 to this Agreement.

Section 2.02. Except as the Bank shall otherwise agree, procurement of the goods, works, and consultants' services required for the Project and to be financed out of the proceeds of the Loan shall be governed by the provisions of Schedule 1 to this Agreement.

Section 2.03. (a) Hebei shall carry out the obligations or cause to be carried out the obligations set forth in Sections 9.04, 9.05, 9.06, 9.07, 9.08 and 9.09 of the General Conditions (relating to insurance, use of goods and services, plans and schedules, records and reports, maintenance and land acquisition) in respect of this Agreement. (b) For the purposes of Section 9.07 of the General Conditions and without limitation thereto, Hebei shall:

(i) prepare, on the basis of guidelines acceptable to the Bank, and furnish to the Bank not later than six (6) months after the Closing Date or such later date as may be agreed for this purpose between the Bank and Hebei, a plan for the future operation of the Project; and

(ii) afford the Bank a reasonable opportunity to exchange views with Hebei on said plan.

Section 2.04. (a) Hebei shall, at the request of the Bank, exchange views with the Bank with regard to the progress of the Project, the performance of its obligations under this Agreement, and other matters relating to the purposes of the Loan.

(b) Hebei shall promptly inform the Bank of any condition which interferes or threatens to interfere with the progress of the Project, the accomplishment of the purposes of the Loan, or the performance by Hebei of its obligations under this Agreement.

## ARTICLE III

### Financial Covenants

Section 3.01. (a) Hebei shall maintain, or cause to be maintained, records and

accounts adequate to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of the Project of the departments or agencies of Hebei as well as the Project Municipalities responsible for carrying out the Project or any part thereof. (b) Hebei shall:

(i) have the records and accounts referred to in paragraph (a) of this Section for each fiscal year audited, in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Bank;

(ii) furnish to the Bank as soon as available, but in any case not later than six (6) months after the end of each such year the report of such audit by said auditors, of such scope and in such detail as the Bank shall have reasonably requested; and

(iii) furnish to the Bank such other information concerning said records and accounts and the audit thereof, as the Bank shall from time to time reasonably request.

#### ARTICLE IV

##### Effective Date; Termination Cancellation and Suspension

Section 4.01. This Agreement shall come into force and effect on the date upon which the Loan Agreement becomes effective.

Section 4.02. This Agreement and all obligations of the Bank and of Hebei thereunder shall terminate on the date on which the Loan Agreement shall terminate in accordance with its terms, and the Bank shall promptly notify Hebei thereof.

Section 4.03. All the provisions of this Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the General Conditions.

#### ARTICLE V

##### Miscellaneous Provisions

Section 5.01. Any notice or request required or permitted to be given or made under this Agreement and any agreement between the parties contemplated by this Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand or by mail, telegram, cable, telex or facsimile to the party to which it is required or permitted to be given or made at such party's address hereinafter specified or at such other addresses as such party shall have designated by notice to the party giving such notice or making such request. Deliveries made by facsimile transmission shall also be confirmed by mail. The addresses so specified are:

For the Bank:

International Bank for  
Reconstruction and Development

1818 H Street, NW

Washington, DC 20433

United States of America

Cable address:           Telex:                   Facsimile:  
INTBAFRAD           248423 (MCI) or           (202)

Washington, D.C.   64145 (MCI)

For Hebei:

No. 14 Huaan Street  
Shijiazhuang,  
Hebei Province 050051  
People's Republic of China

Section 5.02. Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Agreement on behalf of Hebei may be taken or executed by its Governor or Vice-Governor, or by such other person or persons as Hebei shall designate in writing, and Hebei shall furnish to the Bank sufficient evidence of the authority and the authenticated specimen signature of each such person.

Section 5.03. This Agreement may be executed in several counterparts, each of which shall be an original, and all collectively but one instrument.

IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Agreement to be signed in their respective names in Beijing, People's Republic of China, as of the day and year first above written.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By /s/ Yukon Huang

Authorized Representative

HEBEI PROVINCE

By /s/ Zhu Guangyao

Authorized Representative

SCHEDULE 1

Procurement

## Section I. Procurement of Goods and Works

### Part A: General

Goods and works shall be procured in accordance with the provisions of Section I of the “Guidelines for Procurement under IBRD Loans and IDA Credits” published by the Bank in January 1995 and revised in January and August 1996, September 1997 and January 1999 (the Guidelines) and the following provisions of Section I of this Schedule.

### Part B: International Competitive Bidding

1. Except as otherwise provided in Part C of this Section, goods and works shall be procured under contracts awarded in accordance with the provisions of Section II of the Guidelines and paragraph 5 of Appendix 1 thereto.
2. The following provisions shall apply to goods and works to be procured under contracts awarded in accordance with the provisions of paragraph 1 of this Part B.

#### (a) Grouping of contracts

To the extent practicable: (a) contracts for works shall be grouped in bid packages estimated to cost \$5,000,000 equivalent or more each; and (b) contracts for goods shall be grouped in bid packages estimated to cost \$400,000 equivalent or more each.

#### (b) Preference for domestically manufactured goods and domestic contractors

The provisions of paragraphs 2.54 and 2.55 of the Guidelines and Appendix 2 thereto shall apply to goods manufactured in the territory of the Borrower and works to be carried out by domestic contractors (other than goods manufactured in the Hong Kong Special Administrative Region or the Macau Administrative Region of the Borrower and works carried out by contractors from either of said regions).

### Part C: Other Procurement Procedures

#### 1. National Competitive Bidding

(a) Works estimated to cost less than \$8,000,000 equivalent per contract, up to an aggregate amount not to exceed \$85,000,000 equivalent; and (b) goods estimated to cost less than \$400,000 equivalent per contract, up to an aggregate amount not to exceed

\$17,500,000 equivalent, may be procured under contracts awarded in accordance with the provisions of paragraphs 3.3 and 3.4 of the Guidelines.

#### Part D: Review by the Bank of Procurement Decisions 1. Procurement Planning

Prior to the issuance of any invitations to bid for contracts, the proposed procurement plan for the Project shall be furnished to the Bank for its review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Guidelines. Procurement of all goods and works shall be undertaken in accordance with such procurement plan as shall have been approved by the Bank, and with the provisions of said paragraph 1.

#### 2. Prior Review

With respect to each contract for: (i) works estimated to cost the equivalent of \$5,000,000 or more; and (ii) goods estimated to cost the equivalent of \$250,000 or more, the procedures set forth in paragraphs 2 and 3 of Appendix 1 to the Guidelines shall apply.

#### 3. Post Review

With respect to each contract not governed by paragraph 2 of this Part, the procedures set forth in paragraph 4 of Appendix 1 to the Guidelines shall apply.

### Section II. Employment of Consultants

#### Part A: General

Consultants' services shall be procured in accordance with the provisions of the Introduction and Section IV of the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" published by the Bank in January 1997 and revised in September 1997 and January 1999 (the Consultant Guidelines) and the following provisions of Section II of this Schedule.

#### Part B: Quality- and Cost-based Selection

Except as otherwise provided in Part C of this Section, consultants' services shall be procured under contracts awarded in accordance with the provisions of Section II of the Consultant Guidelines, paragraph 3 of Appendix 1 thereto, Appendix 2 thereto, and

the provisions of paragraphs 3.13 through 3.18 thereof applicable to quality- and cost-based selection of consultants.

Part C: Other Procedures for the Selection of Consultants 1. Individual Consultants Services for tasks that meet the requirements set forth in paragraph 5.1 of the Consultant Guidelines may be procured under contracts awarded to individual consultants in accordance with the provisions of paragraphs 5.1 through 5.3 of the Consultant Guidelines.

Part D: Review by the Bank of the Selection of Consultants 1. Selection Planning

Prior to the issuance to consultants of any requests for proposals, the proposed plan for the selection of consultants under the Project shall be furnished to the Bank for its review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Consultant Guidelines. Selection of all consultants' services shall be undertaken in accordance with such selection plan as shall have been approved by the Bank, and with the provisions of said paragraph 1.

## 2. Prior Review

(a) With respect to each contract for the employment of consulting firms estimated to cost the equivalent of \$200,000 or more, the procedures set forth in paragraphs 1, 2 (other than the third subparagraph of paragraph 2(a)) and 5 of Appendix 1 to the Consultant Guidelines shall apply.

(b) With respect to each contract for the employment of consulting firms estimated to cost the equivalent of \$100,000 or more, but less than the equivalent of \$200,000 the procedures set forth in paragraphs 1, 2 (other than the second subparagraph of paragraph 2(a)) and 5 of Appendix 1 to the Consultant Guidelines shall apply.

(c) With respect to each contract for the employment of individual consultants estimated to cost the equivalent of \$50,000 or more, the qualifications, experience, terms of reference and terms of employment of the consultants shall be furnished to the Bank for its prior review and approval. The contract shall be awarded only after the said approval shall have been given.

## 3. Post Review

With respect to each contract not governed by paragraph 2 of this Part, the procedures set forth in paragraph 4 of Appendix 1 to the Consultant Guidelines shall apply.

## SCHEDULE 2 Implementation Program

For the purposes of Section 2.01(b) of this Agreement, the Implementation Program shall consist of the provisions set forth or referred to below.

### Project Management

1. In order to ensure the proper carrying out of the Project, Hebei shall:

(a) continue to maintain a project management office with functions satisfactory to the Bank, staffed by qualified personnel in adequate numbers, to be responsible for: the overall coordination, management, supervision and quality assurance of Project implementation; the supervision of the procurement of goods and services thereunder; the preparation and furnishing to the Bank of reports and other information thereon; and annual budget preparation for the Project; and

(b) ensure that each Project Municipality shall continue to maintain a project office with functions satisfactory to the Bank, staffed by qualified personnel in adequate numbers, to be responsible for: the coordination and supervision of the implementation of its and its Utility Company's Respective Part of the Project; the supervision of procurement of goods and services under its and its Utility Company's Respective Part of the Project; and the preparation and furnishing to PMO of reports and other information thereon.

### Resettlement Action Plans and Environmental Assessment

2. Hebei shall take, and shall cause the Project Municipalities to take, all measures necessary to ensure that the Project shall be carried out in accordance with the Resettlement Action Plans and the Environmental Assessment.

3. Hebei shall ensure that any proposed revision of the Resettlement Action Plans or the Environmental Assessment shall be furnished to the Bank for prior approval.

Industrial Pollution Control Action Plan 4.

Hebei shall:

(a) carry out its part, and shall cause each of the Project Municipalities to carry out its respective part of the Industrial Pollution Control Action Plan, in a manner satisfactory to the Bank; and

(b) ensure that the Industrial Pollution Control Action Plan is not modified or amended without the prior concurrence of the Bank.

Financial Arrangements

5. Hebei shall allocate to each Project Municipality an amount of the Loan under arrangements satisfactory to the Bank, which shall include, without limitation, the following principal terms:

(a) The principal amount so made available to each Project Municipality: shall be the amount in Dollars (on the date, or respective dates, of withdrawal from the Loan Account) of the value of the currency or currencies so withdrawn on account of said Project Municipality's Utility Company's Respective Part of the Project.

(b) Hebei shall recover: (i) the principal amount so made available; and (ii) an amount equal to one percent (1%) of said principal amount, over a period of twenty (20) years, inclusive of a grace period of five (5) years.

(c) Hebei shall charge: (i) interest on said principal amount, withdrawn and outstanding from time to time, at a rate equal to the rate of interest applicable from time to time to the Loan pursuant to Section 2.06 of the Loan Agreement; and (ii) a commitment charge on such principal amount, not withdrawn from time to time at a rate, equal to three fourths of one percent ( $\frac{3}{4}$  of 1%) per annum.

Subsidiary Loan Agreements

6. Hebei shall cause each Project Municipality to relend the portion of the proceeds of the Loan, which was allocated to it pursuant paragraph 5 of this Schedule for the purposes of carrying out its Utility Company's Respective Part of the Project, to its Utility Company under a subsidiary loan agreement to be entered into between said

Project Municipality and its Utility Company: (a) on the principal terms set forth in Section I of Schedule 3 to this Agreement; and (b) under conditions which shall have been approved by the Bank, and which shall include, without limitation, those set forth in Section II of Schedule 3 to this Agreement.

7. (a) Hebei shall ensure that each Project Municipality shall cause its Utility Company to:

(i) perform, in accordance with the provisions of the Subsidiary Loan Agreement to which said Utility Company is a party, all of the obligations of said Utility Company therein set forth; (ii) take, or cause to be taken, all action, including the provision of funds, facilities, services and other resources, necessary or appropriate to enable said Utility Company to perform such obligations; and (iii) not take or permit to be taken any action which would prevent or interfere with such performance.

(b) Hebei shall, and shall cause each Project Municipality to, exercise its rights under each Subsidiary Loan Agreement to which it is a party in such manner as to protect the interests of the Borrower, the Bank, Hebei and said Project Municipality and to accomplish the purposes of the Loan, and except as the Bank shall otherwise agree, not assign, amend, abrogate or waive any Subsidiary Loan Agreement to which Hebei or said Project Municipality is a party or any provision thereof.

#### Institutional Development

8. Hebei shall cause each Project Municipality, through its respective Utility Company, to carry out Part C of the Project in accordance with a time-bound action plan acceptable to the Bank and said action plan shall not be modified without the agreement of the Bank.

#### Monitoring and Reporting 9.

Hebei shall:

(a) maintain policies and procedures adequate to enable it to monitor and evaluate on an ongoing basis, in accordance with indicators satisfactory to the Bank, the carrying out of the Project, including the Resettlement Action Plans and the Environmental Assessment, as well as the achievement of the objectives thereof;

(b) prepare, under terms of reference acceptable to the Bank, and furnish to the Bank, the following quarterly reports on January 31, April 30, July 31 and October 31 in each

year, beginning on October 31, 2000, integrating the results of the monitoring and evaluation activities performed pursuant to paragraph 9(a) of this Schedule 2, based on the quarterly progress reports prepared by the municipal project offices referred to in paragraph 1(b) of this Schedule 2, on the physical and financial progress achieved in the carrying out of the Project during the preceding calendar quarter (the report due on April 30, 2003, to summarize progress achieved during the period, from July 31, 2000 through March 31, 2003) and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objectives thereof during the period following such date; and

(c) after furnishing each report referred to in paragraph 9(b) of this Schedule 2, review said report with the Bank (the report due on April 30, 2003, shall be reviewed with the Bank by June 30, 2003, or such later date as the Bank shall request), and promptly take all measures required to ensure the efficient completion of the Project (including, when applicable, the carrying out of the Resettlement Action Plans and the Environmental Assessment) and the achievement of the objectives thereof, based on the conclusions and recommendations of said report and the Bank's views on the matter.

### SCHEDULE 3

#### Principal Terms and Conditions of the Subsidiary Loan Agreements

For the purposes of paragraph 6 of Schedule 2 to this Agreement, the terms of availability of the Loan proceeds shall be those set forth in Section I of this Schedule 3 and the Subsidiary Loan Agreements shall be entered into on the conditions set forth in Section II of this Schedule 3.

#### Section I. Terms of Availability

1. The principal amount of each Loan made by a Project Municipality to its Utility Company, shall be the amount in Dollars (on the respective dates of withdrawal from the Loan Account) of the value of the currency or currencies so withdrawn on account of said Utility Company's Respective Part of the Project.
2. Each Project Municipality shall recover: (a) said principal amount; and (b) one percent of said principal amount, over a period of not more than fifteen (15) years,

inclusive of a grace period of five (5) years.

3. Each Project Municipality shall charge interest on said principal amount, which is withdrawn and outstanding from time to time, at a rate not less than the rate of interest applicable from time to time to the Loan pursuant to Section 2.06 of the Loan Agreement.

4. Each Project Municipality shall charge a commitment charge on said principal amount, which is not withdrawn from time to time, at a rate not less than three fourths of one percent (3/4 of 1%) per annum.

## Section II. Conditions

The Subsidiary Loan Agreements shall include the following principal conditions.

1. Each Utility Company shall undertake to:

(a) carry out the Utility Company's Respective Part of the Project with due diligence and efficiency and in accordance with:

(i) appropriate technical, financial, engineering and public utility practices; and

(ii) appropriate health, safety and environmental standards acceptable to the Bank, and provide, promptly as needed, the funds, facilities and other resources required for the purpose; and

(b) without limitation on the foregoing, take all measures necessary to ensure that its Utility Company's Respective Part of the Project shall be implemented in accordance with the Respective RAP and the Environmental Assessment.

2. Each Utility Company shall undertake to procure the goods and services to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 1 to this Agreement, and utilize such goods and services exclusively in the carrying out of its Utility Company's Respective Part of the Project.

3. Each Utility Company shall undertake to enable the Bank, Hebei and the Project Municipality concerned to inspect such goods and the sites and works included in its Utility Company's Respective Part of the Project, the operation thereof, and any relevant records and documents.

4. Each Utility Company shall undertake to take out and maintain with responsible

insurers such insurance, against such risks and in such amounts, as shall be consistent with sound business practice, including, without limitation, such insurance to cover hazards incident to the acquisition, transportation and delivery of goods financed out of the proceeds of the Loan to the place of use or installation, any indemnity thereunder to be made payable in a currency freely usable by the Utility Company to replace or repair such goods.

5. Each Utility Company shall undertake to:

(a) maintain records and accounts adequate to reflect in accordance with consistently maintained sound accounting practices its operations and financial condition;

(b) have its financial statements (balance sheets, statements of income and expenses and related statements) for each fiscal year audited, in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Bank and the Project Municipality concerned;

(c) furnish to Hebei, the Project Municipality concerned, and to the Bank, as soon as available, but in any case not later than six months after the end of each such year:

(i) certified copies of said financial statements and accounts for such year as so audited; and

(ii) the report of such audit by said auditors in such scope and detail as Hebei, the Bank and/or said Project Municipality shall have reasonably requested; and

(d) prepare and furnish to the Bank, Hebei, and the Project Municipality concerned all such other information concerning said records, accounts and financial statements, as well as the audit thereof, as the Bank, Hebei, and/or said Project Municipality shall reasonably request.

6. Each Utility Company shall undertake, when applying to the relevant authorities for a tariff increase: (a) to include both the domestic consumer and industrial consumer categories in said tariff increase proposal; and (b) to implement such tariff increase as shall have been approved by said authorities. Notwithstanding sub-paragraph (a), a Utility Company may include only the domestic consumer category in its tariff increase application provided that said Utility Company includes the industrial consumer category in its next tariff increase application and vice versa.

7. Each Utility Company shall undertake to continue to maintain a project

implementation unit with functions satisfactory to the Bank, staffed by qualified personnel in adequate numbers, to be responsible for: the coordination and supervision of the implementation of its Utility Company's Respective Part of the Project; the supervision of procurement of goods and services under its Utility Company's Respective Part of the Project; and the preparation and furnishing of reports and other information thereon to the respective Project Municipality's project office.

8. Handan Water Supply Company and Tangshan Water Supply Company shall for each fiscal year as of 2001, undertake:

(a) to produce total revenues, equivalent to not less than the sum of: (i) its total operating expenses; and (ii) increases in working capital other than cash, debt service requirements and 20% of the annual average of its capital expenditures incurred, or expected to be incurred, for the current year, the previous fiscal year and the next following fiscal year;

(b) to review, before September 30 in each fiscal year as of fiscal 2001 and on the basis of forecasts prepared by it and satisfactory to the Bank, whether it would meet the requirements set forth in subparagraph (a) hereof, in respect of such year and the next following fiscal year and furnish to the Bank the results of such review upon its completion; and

(c) if any such review shows that it would not meet the requirements set forth in subparagraph (a) hereof for the fiscal years covered by such review, promptly to take all necessary measures (including, without limitation, adjustments of the structure or levels of its tariffs) in order to meet such requirements.

9. Handan Sewage Treatment Co., Ltd., Shijiazhuang Wastewater Treatment Co., Ltd., and Tangshan Wastewater Treatment Co., Ltd., shall for each fiscal year as of 2001, undertake:

(a) to produce total revenues, equivalent to not less than the sum of: (i) the provision for its total operating expenses; and (ii) the amount by which debt service requirements exceeds depreciation;

(b) to review, before September 30 in each fiscal year as of fiscal 2001 and on the basis of forecasts prepared by it and satisfactory to the Bank, whether it would meet the requirements set forth in subparagraph (a) hereof, in respect of such year and the next following fiscal year and furnish to the Bank the results of such review upon its

completion; and

(c) if any such review shows that it would not meet the requirements set forth in subparagraph (a) hereof for the fiscal years covered by such review, promptly to take all necessary measures (including, without limitation, adjustments of the structure or levels of its tariffs) in order to meet such requirements.

10. Each Utility Company shall undertake not to incur any debt unless a reasonable forecast of its revenues and expenditures shows that its estimated net revenues for each fiscal year during the term of the debt to be incurred shall be at least 1.3 times its estimated debt service requirements in such year on all of its debt including the debt to be incurred.

11. For purposes of this Schedule:

(a) The term "total revenues" means the terms of total operating revenues and net non-operating income.

(b) The term "total operating revenues" means revenues from all sources related to operations.

(c) The term "total operating expenses" means all expenses related to operations, including administration, adequate maintenance, taxes and payments in lieu of taxes, and provision for depreciation on a straight line basis at a rate of not less than 3.3% per annum of the average current gross value of the Utility Company's fixed assets in operation, or other basis acceptable to the Bank, but excluding interest and other charges on debt.

(d) The average current gross value of the Utility Company's fixed assets in operation shall be calculated as one half of the sum of the gross value of its fixed assets in operation at the beginning and at the end of the fiscal year, as valued from time to time in accordance with sound and consistently maintained methods of valuation satisfactory to the Bank.

(e) The term "debt service requirements" means the aggregate amount of repayments (including sinking fund payments, if any) of, and interest and other charges on, debt.

(f) The term "debt" means any indebtedness of the Utility Company maturing by its terms more than one year after the date on which it is originally incurred.

(g) Debt shall be deemed to be incurred:

(i) under a loan contract or agreement or other instrument providing for such debt or for the modification of its terms of payment on the date of such contract, agreement or instrument; and

(ii) under a guarantee agreement, on the date the agreement providing for such guarantee has been entered into.

(h) The term "net revenues" means the difference between:

(i) the sum of revenues from all sources related to operations and net non-operating income, and

(ii) the sum of all expenses related to operations including administration, adequate maintenance, taxes and payments in lieu of taxes, but excluding provision for depreciation, other non-cash operating charges and interest and other charges on debt.

(i) The term "net non-operating income" means the difference between:

(i) revenues from all sources other than those related to operations; and

(ii) expenses, including taxes and payments in lieu of taxes, incurred in the generation of revenues in (i) above.

(j) The term "reasonable forecast" means a forecast prepared by the Utility Company not earlier than twelve months prior to the incurrence of the debt in question, which both the Bank and said Utility Company accept as reasonable and as to which the Bank has notified said Utility Company of its acceptability, provided that no event has occurred since such notification which has, or may reasonably be expected in the future to have, a material adverse effect on the financial condition or future operating results of said Utility Company.

(k) The term "working capital other than cash" means the difference between current assets excluding cash and current liabilities at the end of each fiscal year.

(l) The term "current assets excluding cash" means all assets other than cash which could in the ordinary course of business be converted into cash within twelve months, including accounts receivable, marketable securities, inventories and pre-paid expenses properly chargeable to operating expenses within the next fiscal year.

(m) The term "current liabilities" means all liabilities which will become due and payable or could under circumstances then existing be called for payment within twelve months, including accounts payable, customer advances, debt service requirements,

taxes and payments in lieu of taxes, and dividends.

(n) The term "capital expenditures" means all expenditures on account of fixed assets, including interest charged to construction, related to operations.

12. Whenever, for the purposes of this Schedule, it shall be necessary to value, in terms of the currency of the Borrower, debt payable in another currency, such valuation shall be made on the basis of the prevailing lawful rate of exchange at which such other currency is, at the time of such valuation, obtainable for the purposes of servicing such debt, or, in the absence of such rate, on the basis of a rate of exchange acceptable to the Bank.

13. Each Project Municipality shall have the right to suspend or terminate the right of its Utility Company to the use of the proceeds of the loan made available under the Subsidiary Loan Agreement with said Utility Company upon failure by such Utility Company to perform its obligations under the agreement.

## C

### **Measures for the Administration on the Establishment of Partnership Business by Foreign Enterprises or Individuals in China.**

Article 1 For the purpose of regulating the establishment of partnership business by foreign enterprises or individuals in China and facilitating foreign enterprises or individuals to invest in China in the form of partnership to expand foreign economic cooperation and technical exchanges, the Measures herein shall in accordance with the Partnership Business Law of the People's Republic of China (hereinafter referred to as the Partnership Business Law) be formulated.

Article 2 The establishment of partnership business by foreign enterprises or individuals in China in the Measures herein refers to the establishment of partnership businesses by 2 or more foreign enterprises or individuals, and foreign enterprises or individuals and Chinese natural person, legal person and other organizations in China.

Article 3 The establishment of partnership business by foreign enterprises or individuals in China should abide by the Partnership Business Law, other relevant laws, administrative regulations and rules and related industrial policies for foreign investment.

The legitimate rights and interests of foreign enterprises or individuals shall be protected by law while establishing partnership businesses in China.

China shall encourage foreign enterprises or individuals with advanced technologies and management experience to establish partnerships in China to boost the development of the modern service industry and other industries.

Article 4 The currency utilized by foreign enterprises or individuals for contribution should be the foreign currency that can be freely exchanged as well as the Renminbi earned by law.

Article 5 In the event of the establishment of partnership business by foreign enterprises or individuals in China, the representatives designed or the agent jointly entrusted by the whole copartners should apply to the local industrial and commercial administration authorized by the administrative department for industry and commerce under the State Council (hereinafter referred to as the enterprise registration organ) for registration of establishment.

The documents prescribed in the Measures of the People's Republic of China for the Registration of Partnership Enterprises and the explanation qualified for the industrial policies for foreign investment should be submitted to the enterprise registration organ while applying for establishment registration. In the event approving to register, one enterprise registration organ should simultaneously notify the information related to registration to the competent commerce department at the same level.

Article 6 In the event the registration for partnership enterprises set up by foreign enterprises or individuals in China (hereinafter referred to as foreign investment partnership enterprise) alters, they should apply for alteration to the enterprise registration organ by law.

Article 7 In the event one foreign investment partnership enterprise is dismissed, liquidation should be done in accordance with the Partnership Business Law, and the liquidator should handle the cancellation of registration in the enterprise registration organ by law within 15 days upon the end of liquidation.

Article 8 In the event foreign copartners withdraw from one foreign investment partnership enterprise while the enterprise continues to operate, application for alteration should be filed to the enterprise registration organ according to law.

Article 9 In the event one foreign investment partnership enterprise alters or cancels registration, the enterprise registration organ should simultaneously notify the information involved in altering or canceling registration to the competent commerce department at the same level.

Article 10 In the event the Measures herein fails to provide for the other administrative issues for the registration of one foreign investment partnership enterprise, it should be subject to the Measures of the People's Republic of China for the Registration of Partnership Enterprises and relevant provisions of the state.

Article 11 The establishment of partnership enterprises by foreign enterprises or individuals in China involves such issues as financial accounting, taxation, foreign exchange, customs and personnel entry and exit, it should be handled according to relevant laws, administrative regulations and relevant provisions of China.

Article 12 In the event foreign enterprises or individuals join while Chinese natural person, legal person and other organizations set up partnership enterprises in China, it should be subject to relevant provisions in the Measures herein and go through the enterprise registration organ for the application for registration alteration.

Article 13 In the event the establishment of partnership enterprises by foreign enterprises or individuals in China involves the investment project that shall be checked and approved by the government, approval formalities for investment project shall be handled according to relevant provisions of China.

Article 14 In the event China has other provisions for the establishment of partnership enterprises by foreign enterprises or individuals in China with investment as the main business, it should be subject to the provisions.

Article 15 The establishment of partnership enterprises by the enterprises or individuals from Hong Kong Special Administrative Region, Macao Special Administrative Region and Taiwan should be subject to the Measures herein.

Article 16 The Measures herein shall come into effect as of March 1, 2010.

## D

# 中国国民经济和社会发展第十三个五年规划纲要

### 第三十八章 推动京津冀协同发展

坚持优势互补、互利共赢、区域一体，调整优化经济结构和空间结构，探索人口经济密集地区优化开发新模式，建设以首都为核心的世界级城市群，辐射带动环渤海地区和北方腹地发展。

#### 第一节 有序疏解北京非首都功能

积极稳妥推进北京非首都功能疏解，降低主城区人口密度。重点疏解高耗能高耗水企业、区域性物流基地和专业市场、部分教育医疗和培训机构、部分行政事业单位服务机构和企业总部等。高水平建设北京市行政副中心。规划建设集中承载地和“微中心”。

#### 第二节 优化空间格局和功能定位

构建“一核双城三轴四区多节点”的空间格局，优化产业布局，推进建设京津冀协同创新共同体。北京重点发展知识经济、服务经济、绿色经济，加快构建高精尖产业结构。天津优化发展先进制造业、战略性新兴产业和现代服务业，建设全国先进制造研发基地和金融创新运营示范区。河北积极承接北京非首都功能转移和京津科技成果转化，重点建设全国现代商贸物流重要基地、新型工业化基地和产业转型升级试验区。

#### 第三节 构建一体化现代交通网络

建设高效密集轨道交通网，强化干线铁路建设，加快建设城际铁路、市域（郊）铁路并逐步成网，充分利用现有能力开行城际、市域（郊）列车，客运专线覆盖所有地级及以上城市。完善高速公路网络，提升国省干线技术等级。构建分工协作的港口群，完善港口集疏运体系，建立海事统筹监管新模式。打造国际一流航空枢纽，构建航空运输协作机制。

#### 第四节 扩大环境容量和生态空间

构建区域生态环境监测网络、预警体系和协调联动机制，削减区域污染物排放总量。加强大气污染联防联控，实施大气污染防治重点地区气化工程，细颗粒物浓度下降25%以上。加强饮用水源地保护，联合开展河流、湖泊、海域污染治理。划定生态保护红线，实施分区管理，建设永定河等生态廊道。加大京津地区营造林和永定、衡水湖等湖泊湿地恢复力度，共建坝上高原生态防护区、燕山—太行山生态涵养区。

#### 第五节 推动公共服务共建共享

建设区域人力资源信息共享与服务平台，衔接区域间劳动用工和人才政策。优化教育资源布局，鼓励高等学校学科共建、资源共享，推动职业教育统筹发展。建立健全区域内双向转诊和检查结果互认制度，支持开展合作办医试点。实现养老保险关系在三省市间的顺利衔接，推动社会保险协同发展。

## REFERENCES

- A look at China's 130 million resident Megacity of the future, *ASIA TIMES*, [www.atimes.com](http://www.atimes.com), Mar 28, 2017.
- Beijing-Tianjin-Hebei Region to step up industrial Transfer collaboration, *Hong Kong Trade Development Council (HKTDC)*, [www.hktdc.com](http://www.hktdc.com), May 3, 2015.

- China Development Bank's loans to Beijing-Tianjin-Hebei region close 1 trillion yuan, *China Daily*, (中国日报网), [www.chinadaily.com](http://www.chinadaily.com), Feb 27, 2017.
- China to set up Xiongan New Area in Hebei, *The Daily Mail International*, [www.dailymailnews.com](http://www.dailymailnews.com), Apr 02, 2017.
- Container throughput of Hebei ports experiences rapid growth, *The People's Government of Hebei Province* (河北省人民政府), [www.hebei.gov.cn](http://www.hebei.gov.cn), 2016.
- Development zones in Beijing, Tianjin, Hebei align for integrated development, *China Daily* (中国日报网), [www.chinadaily.com](http://www.chinadaily.com), July 17, 2015.
- Diao Jiayi, Beijing offers subsidy to Tianjin, Hebei-bound Pensioners, *Beijing Today*, [www.beijingtoday.com.cn](http://www.beijingtoday.com.cn), June 22, 2016.
- Guo Lei, Under the economic globalization of regional logistics research, *Hebei Normal University* (河北师范大学), [www.article.sciencepublishinggroup.com](http://www.article.sciencepublishinggroup.com), June 2008.
- Hebei, *China Internet Information Centre (CIIC)* (中国互联网信息中心), [www.china.org.cn](http://www.china.org.cn), 2017.
- Hebei investment promotion authorities and incentives, *Ministry of commerce of the People's Republic of China (MOFCOM)*, [www.english.mofcom.gov.cn](http://www.english.mofcom.gov.cn), Gen 11, 2017.
- Hebei Economic Yearbook 2016, Hebei Statistical Bureau, China's Customs Statistics, *Hong Kong Trade Development Council (HKTDC)*, [www.hktdc.com](http://www.hktdc.com), Dec 12, 2016.
- Hebei launches overseas Chinese entrepreneurs association, *The People's Government of Hebei Province*, (河北省人民政府), [www.hebei.gov.cn](http://www.hebei.gov.cn), Feb 5, 2008.

- Hebei logistic information, *Ministry of Commerce of People's Republic of China (MOFCOM)*, [www.english.mofcom.gov.cn](http://www.english.mofcom.gov.cn), Feb 23, 2017.
- Hebei Provincial Bureau of Statistics and variuos other, *National Bureau of Statistics*, [www.stats.gov.cn](http://www.stats.gov.cn), May 1, 2015.
- Hebei province wastewater management project, *Asian Development Bank*, [www.adb.com](http://www.adb.com), May 2002.
- Hebei and Tianjin ports sign cooperation agreement, *The People's Government of Hebei Province* (河北省人民政府), [www.hebei.gov.cn](http://www.hebei.gov.cn), Apr 13, 2016.
- Hebei, *The China Perspective* (中国透视), [www.thechinaperspective.com](http://www.thechinaperspective.com), Gen 21, 2017.
- Hebei's ethnic group, *China Daily* (中国日报), [www.chinadaily.com](http://www.chinadaily.com) July 4, 2014.
- Hebei Port Group Co., Ltd., China ports & harbours association, [www.english.chinaports.org](http://www.english.chinaports.org), Gen 5, 2017.
- Hebei employee wage and labor cost information, *Understand China*, [www.understand-china.com](http://www.understand-china.com), 2016.
- Hebei Statistics, *The State Council of The People's Republic of China* (中华人民共和国), [www.hebei.gov.cn](http://www.hebei.gov.cn), Gen 3, 2017.
- Hebei to establish 25 new airports, *The People's Government of Hebei Province* (河北省人民政府), [www.hebei.gov.cn](http://www.hebei.gov.cn), Sept 8, 2016.
- Hebei transportation plan, *Hebei Development and Reform Commission* (河北省发展和改革委员会), internet ed., 2017.
- Joint Venture of Tangshan Port and Tianjin Port to set up container terminal company, 新闻中心 *news*, internet ed., Dec 28, 2016.

- Ling Wang, Shao-ju Lee, Ping Chen, Xiao-mei Jiang, Bing-lian Liu, *Contemporary Logistics in China*, Springer, Beijing, 2016.
- Logistics Park operation statistical analysis report, *China Logistics & Purchasing*, [www.article.sciencepublishinggroup.com/pdf](http://www.article.sciencepublishinggroup.com/pdf), May 28, 2015
- Luo Wangshu, Travel card provides convenience for local commuters, *China Daily* (中国日报网), [www.chinadaily.com](http://www.chinadaily.com), Gen 24, 2017.
- Mo Hong'e, Capital area to be economic dynamo, *China Daily* (中国日报), [www.chinadaily.com](http://www.chinadaily.com), Feb 20, 2017.
- Qingmiao Li, Mengxin Zhang, Data Drawing List: Data and Spatial Distribution Graph on Carrying Capacities of Beijing, Tianjin, and Hebei, *Report on Development of Beijing, Tianjin, and Hebei Province*, 2013, pp. 242-244.
- Reconnecting Asia, Pingu metro line 22, *Center for Strategic & International Studies*, [www.csis.org](http://www.csis.org), 2017.
- State and Local Taxation Bureaus of Beijing, Tianjin and Hebei Province sign MOU on Taxation Inspection Cooperation, *State Administration of Taxation* (国家税务总局), [www.chinatax.gov.cn](http://www.chinatax.gov.cn), 2016.
- Suggestions of the CPC Central Committee on the Thirteenth Five-Year Plan for National Economic and Social Development.
- Survey of sustainable utilization of water resource in North China plain, *China Geological Survey*, 2009, Geological Press, Beijing.
- The 13<sup>th</sup> five-year plan for economic and social development of the People's Republic of China, *Compilation and translation Bureau/ Central Committee of the Communist Party of China*, Beijing, 2015.
- Tom Bailey, Jing-Jin-Ji: China's new mega-region, *WORLD*

- FINANCE*, [www.worldfinance.com](http://www.worldfinance.com), Nov 10, 2015.
- Tom Phillips, Winter Olympics 2022: Beijing chosen ahead of Almaty to host Games, *The Guardian*, [www.theguardian.com](http://www.theguardian.com), Jul 31, 2015.
  - Victor C. Falkenheim, Frederick Fu Hung, “Hebei”, *Encyclopedia Britannica*, [www.britannica.com](http://www.britannica.com), 2016.
  - Wang Sujuan and Cao Xiating, Development zones in Beijing, Tianjin, Hebei align for integrated development, *China Daily*, [www.chinadaily.com](http://www.chinadaily.com), Apr 29, 2016.
  - Wu Pingyu, Zhu Lingyao, Li Weipeng, He Rui, The Statistical Study of Beijing-Tianjin-Hebei Logistics Park Informationization Development, *Science Journal of Business and Management*, Vol.4, No.3, 2016, pp.77-81.
  - Zhang Yu, Subway lines to link Beijing with cities in Hebei, *China Daily* (中国日报网), [www.chinadaily.com](http://www.chinadaily.com), Mar 7, 2017.
  - Zhang Zhao, Agricultural wholesalers boosted by relocation out of Beijing, *China Daily* (中国日报), [www.chinadaily.com](http://www.chinadaily.com), Feb 24, 2017.