Analysis Report on the Third Batch of Demonstration Projects

(04-NOV-2016)

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"CPPPC" and WeChat official account of "ChinaPPPCenter".

With the support from all sectors of society and the assistance from all ministries and commissions, the Ministry of Finance organized and completed the review and evaluation of the third batch of demonstration projects in September 2016, and released the list of the third batch of demonstration projects yesterday.

Compared with the first two batches, there have been many "Firsts" in the third batch of demonstration projects in 2016: For the first time, the Ministry of Finance jointly organized the application, evaluation and release with the ministries and commissions in charge of the relevant industries, encouraged the ministries and commissions to file applications and recommendations, and encouraged local industry departments and finance departments at all levels to make joint application and preliminary selection, to mobilize the enthusiasm of all industry departments; for the first time, comprehensively announced the evaluation procedures and standards in advance, by which the standardization and transparency was improved; for the first time, achieved online application and evaluation through the National PPP Integrated Information Platform and limited the number of applications filed by local governments, by which the number, quality and efficiency of application was further improved; added the stage of formal review to the evaluation procedures, thus being more strict in respect of completeness and standardization of the project materials; and the sector classification was more accurate, and there were eight evaluation groups divided by sector classification such as transport, municipal engineering, agriculture, forestry and water conservancy and environmental protection, comprehensive development, as well as social undertakings, and each group was assigned with balanced evaluation tasks, to ensure better quality of evaluation; in terms of the composition of experts, more industry experts were included, and for each group, there were three industry experts

recommended by the relevant ministries or commissions and one expert on policy, legal affairs, finance and consulting from the expert database respectively, thus making an expert group more professional and diverse and able to obtain a better grasp of the industry orientation and a comprehensive review of the project; and for the first time, the observers from the ministries and commissions were included and review experts could be selected randomly via the system, by which the fairness and justice of the evaluation was further improved.

On a whole, for the evaluation of the third batch of demonstration projects, all regions and departments paid more attention with more enthusiasm, prepared better for the application, and carried out the evaluation in a more scientific, standard, efficient and transparent manner, with more projects of better quality, richer types and wider coverage; the projects had a much stronger effect on leading the industries, driving the economic development in the relevant regions and setting models for innovation, thus upgrading from being demonstration projects at the level of Ministry of Finance to the national level.

Here sets out the brief analysis of the third batch of demonstration projects.

I. Overview of the Projects

This time there were 1174 projects in total from 34 provinces, autonomous regions, municipalities directly under the Central Government, cities specifically designated in the state plan, Xinjiang Production and Construction Corps and the central ministries and commissions applying for being one of the third batch of demonstration projects, involving a total investment of nearly RMB 2.3 trillion; both the number of projects under application and investment thereof surpassed the sums of the previous two batches under application. It should be noted that an upper limit of 50 projects was set for the number of projects filed for application by each province this time and 13 provinces in total met the upper limit. Thus, it could be calculated that if there had been no such limit, the number and investment scale of projects filed for demonstration projects would have been larger. This indicates, to some extent, that the first two batches have shown positive demonstration effect and the PPP model has received more attention and more extensive application.

Upon evaluation, a total of 516 demonstration projects stood out, accounting for 44% of all the projects filed, with the total investment of more than RMB 1.17 trillion. Compared to the second batch, the number of projects doubled, and the amount of investment increased by more than 80%.

Figure 1 shows the distribution of the third batch of projects in terms of the investment scale. Specifically, there were 168 projects with investment between RMB 100-500 million and 111 projects with investment between RMB 500-1,000 million, altogether accounting for 54% of the total number of the projects; and there were 18 projects with investment of below RMB 100 million, including 12 municipal engineering projects, 2 health care projects, 2 technology projects, 1 eco-construction and environmental project and 1 elderly care project; there were 21 projects with investment of RMB 10 billion or more, including 15 transport projects, 4 municipal engineering projects (all are rail transit ones), 1 comprehensive urban development project, and 1

eco-construction and environmental protection project. In terms of the project scale, this batch of demonstration projects registered two features: (1) Small and medium-sized projects accounted for the majority. With lower thresholds for participation, those projects could attract more social capital. (2) Large projects mainly concentrated in the transport sector, as such type of projects normally requires huge investment, and the application of PPP model in the transport sector is more mature.

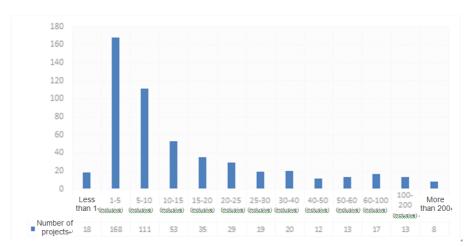


Figure 1 Distribution of the third batch of demonstration projects in terms of investment scale

II. The Projects Concentrate in Some Sectorss with the Coverage Further Expanded

(I) Information on projects in primary sectors

The third batch of demonstration projects covered 18primary sectors, namely, energy, transport, water conservancy construction, eco-construction and environmental protection, municipal engineering, comprehensive urban development, agriculture, forestry, science and technology, low-cost housing projects, tourism, medical care and public health, elderly care, education, culture, sports, social security and others. Among them, most of the projects were in the sectors of municipal engineering, transport, eco-construction and environmental protection and comprehensive urban development, accounting for 43%, 12%, 9% and 6% respectively, together reaching 70%; the projects in the sectors of transport, municipal engineering and comprehensive urban development, and eco-construction and environmental protection ranked top in terms of investment, accounting for 43%, 27%, 10% and 7%, together reaching 87%. It is not difficult to see that in terms of both the number of projects and investment scale, the projects in those four primary sectors accounted for more than 2/3. This indicates that the third batch of demonstration projects showed higher ratio of concentration in the above-mentioned sectors. The numbers and investments of projects in various sectors are shown in Figures 2 and 3.

Figure 2 Distribution of the third batch of demonstration projects in terms of sectors

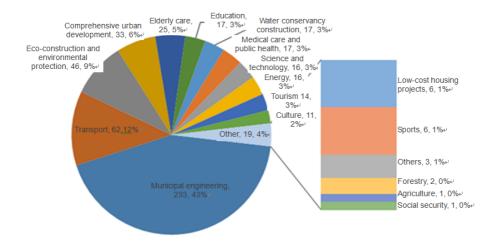
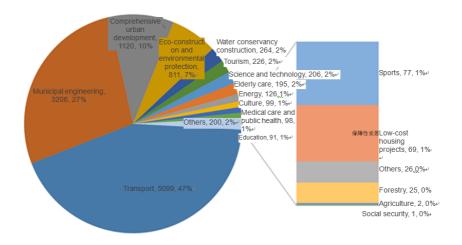
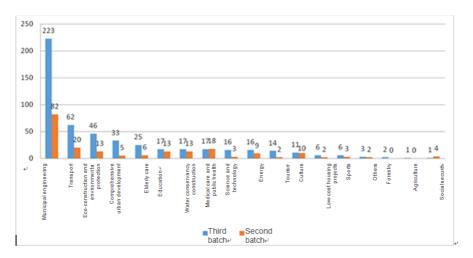


Figure 3 Investment scale of the third batch of demonstration projects in sectors and the corresponding proportions



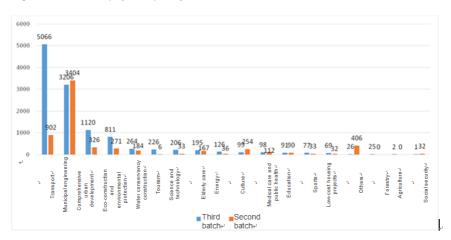
As shown in Figure 4, in terms of the types of sectors, two primary sectors(forestry and agriculture) were added in the third batch compared to the second batch; except for the slight decrease in the numbers of medical care and public health and social security projects, the number of projects in other sectors showed different levels of growth. Specifically, the increase in the top four sectors (municipal engineering, transport, eco-construction and environmental protection, and comprehensive urban development) was the greatest, with the numbers of new projects being 141, 42, 33 and 28 respectively; and the growth rates for projects in tourism and technology sectors were highest, reaching 600% and 430% respectively.

Figure 4 Distribution of projects in primary sectors in the second and third batches in terms of number



As shown in Figure 5, in terms of the investment amount, the total investment scale of transport projects exceeded RMB 500 billion, followed by municipal engineering projects with a total investment of more than RMB 300 billion. The investment amount of projects in those two sectors accounted for more than 70%. Compared with the second batch, the investments in projects in transport, comprehensive urban development and eco-construction and environmental protection projects in the third batch increased substantially, with the additional amounts being RMB 416.4 billion, RMB 79.4 billion and RMB 54 billion; and the investment amounts of projects in municipal engineering, culture, medical care and public health, social security and others decreased slightly.

Figure 5 Distribution of projects in primary sectors in the second and third batches in terms of investment



(II) Information on projects in sub-sectors

The third batch of demonstration projects covered a total of 58 sub-sectors. Here sets out the specific analysis of the top three primary sectors in terms of number of projects and investment scale respectively.

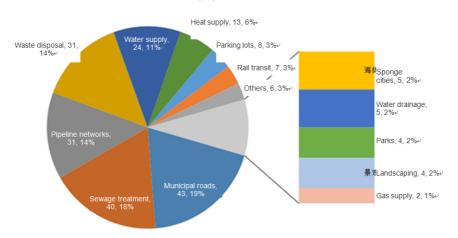
1. Municipal engineering

There were 233 municipal engineering projects in total, with the total investment of RMB 320.596 billion. Those projects accounted for 43% in terms of number and 27% in terms of investment.

As shown in Figure 6, in terms of number of projects, the top five sub-sectorswere municipal road (43 projects, accounting for 19%), sewage treatment (40 projects, accounting for 18%), pipeline network (31 projects, accounting for 14%), waste disposal (31 projects, accounting for 14%), and water supply (24 projects, accounting for 11%). All the projects in the top 5 sectorsaccounted for 76% in terms of number.

In terms of investment amount, the top 5 sub-sectors were rail transit (RMB 85.06 billion, accounting for 26.5%), pipeline networks (RMB 83.868 billion, accounting for 26.2%), municipal roads (RMB 57.679 billion, accounting for 18.0%), sponge cities (RMB 20.89 billion, accounting for 6.5%), and sewage treatment (RMB 18.137 billion, accounting for 5.7%). All the projects in the top 5 sub-sectors accounted for 82.9% in terms of investment.

Figure 6 Numbers of projects in sub-sectors under the category of municipal engineering and the corresponding proportions



Compared with the second batch, there were 141 new projects in total. Most of the new projects were distributed in the five sub-sectors of municipal roads, sewage treatment, waste disposal, pipeline networks and water supply, with the numbers being 37, 22, 19, 19, and 16 respectively, accounting for 80.1% of all the

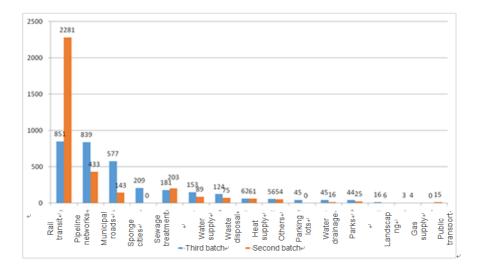
new projects. However, the investment decreased by RMB 19.8 billion. Specifically, the investment in rail transport projects dropped significantly by 62.7%; and the investment in sewage treatment projects also declined slightly. Such decrease against the substantial increase in the number of projects indicates that the investments of municipal engineering projects in the third batch were small generally, which also reflects the feature that the majority of the third batch of demonstration projects were small and medium-sized ones.

Figures 7 and 8 show the comparison of municipal engineering projects in the second and third batches in terms of number and investment

50 43 45 40 40 35 31 31 30 24 25 18 20 13 15 10 10 5 0 Pipeline networks+ Rail transit disposal frainage. Others ← Waste Water Parks arking ■Third batch ■ Second batch

Figure 7 Comparison of municipal engineering projects in the second and third batches in terms of number

Figure 8 Comparison of municipal engineering projects in the second and third batches in terms of investment



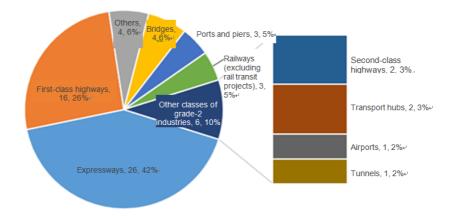
2. Transport

There were 62 transport projects in total, with the total investment of RMB 506.59 billion. Those projects accounted for 12% in terms of number and 43.3% in terms of investment.

As shown in Figure 9, in terms of number of projects, the top five sub-sectors were expressways (26 projects, accounting for 42%), first-class highways (16 projects, accounting for 26%), bridges (4 projects, accounting for 6%), others (4 projects, accounting for 6%), railways (3 projects, accounting for 5%)(excluding rail transit projects), and ports and piers (3 projects, accounting for 5%). All the projects in the top 5 sectors accounted for 90% in terms of number.

In terms of investment amount, the top 5 sub-sectors were expressways (RMB 368.94 billion, accounting for 73%), first-class highways (RMB 50.11 billion, accounting for 10%), bridges (RMB 37.01 billion, accounting for 7%), airports (RMB 20.3 billion, accounting for 4%), and railways (excluding rail transit projects) (RMB 12.641 billion, accounting for 2%). All the projects in the top 5 sub-sectors accounted for 96% in terms of investment.

Figure 9 Numbers of projects in sub-sectors under the category of transport and the corresponding proportions



Compared with the second batch, there were 42 new projects, mainly concentrating in the sectors of expressways and first-class highways. The numbers of new projects in those two sub-sectors were 20 and 13 respectively, together accounting for 78.6% of the new projects. In addition, there were projects for ports and piers, second-class highways and tunnels, which were not seen in the previous two batches. Specifically, there were 3 projects for ports and piers. Therefore, the third batch covered more sub-sectors.

The new investment was RMB 416.4 billion; specifically, the new investments in the sub-sectors of expressways and first-class highways were RMB 312.2 billion and RMB 43.5 billion respectively, accounting for 85.4% of the new investment.

Figures 10 and 11 show the comparison of transport projects in the second and third batches in terms of number and investment

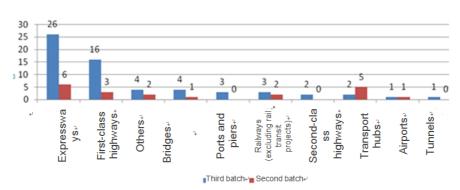
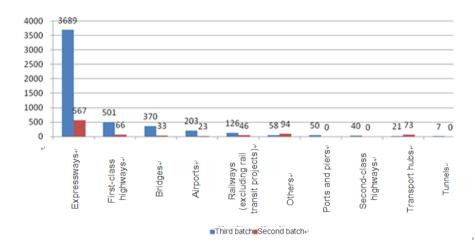


Figure 10 Comparison of transport projects in the second and third batches in terms of number

Figure 11 Comparison of transport projects in the second and third batches in terms of investment

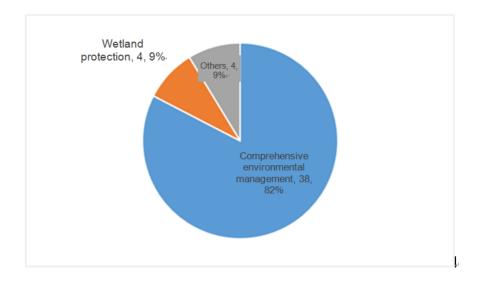


3. Eco-construction and environmental protection

There were 46 eco-construction and environmental protection projects in total, with the total investment of RMB 81.056 billion. Those projects accounted for 8.9% in terms of number and 6.9% in terms of investment.

As shown in Figure 12, there were only three classes of sub-sectors under this category. Specifically, there were 38 projects for comprehensive environmental management, accounting for 82.6%; 4 projects for wetland protection, accounting for 8.7%; and 4 projects for others, accounting for 8.7%. The investment in the projects for comprehensive environmental management was RMB 71.132 billion, accounting for 87.8%; the investment in the projects for others was RMB 5.914 billion, accounting for 7.3%; and the investment in the projects for wetland protection was RMB 4.01 billion, accounting for 4.9%.

Figure 12 Numbers of projects in sub-sectors under the category of eco-construction and environmental protection and the corresponding proportions



Compared with the second batch, there were 33 new projects. The number of the projects for comprehensive environmental management increased considerably, and the sectors of wetland protection and others were two new types of sub-sectors in the third batch; the new investment was RMB 53.94 billion.

Figures 13 and 14 show the comparison of eco-construction and environmental protection projects in the second and third batches in terms of number and investment

Figure 13 Comparison of eco-construction and environmental protection projects in the second and third batches in terms of number

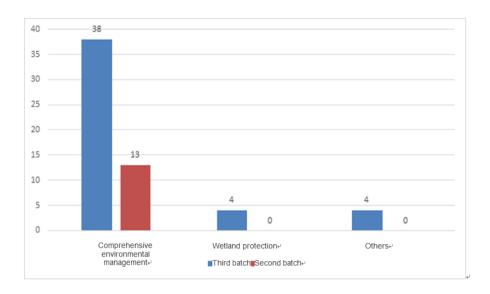
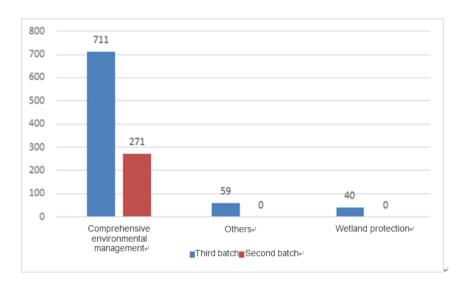


Figure 14 Comparison of eco-construction and environmental protection projects in the second and third batches in terms of investment



III. The Projects Are Distributed in More Regions with Substantial Increase in Terms of Number and Scale

The third batch of demonstration projects involved 34 regions in total, i.e., 22 provinces, 4 autonomous regions, 3 municipalities directly under the Central Government, 4 cities specifically designated in the state

plan and Xinjiang Production and Construction Corps (XPCC). Compared with the second batch, there were 4 new regions, and thus more regions were covered.

In terms of the number of projects, Shandong, Yunnan, Anhui and Hubei ranked the top four, and Hubei, Hunan and Inner Mongolia tied for fifth, with the specific numbers of projects being 42, 40, 32, 31, 27, 27 and 27 respectively, accounting for 43.8% of the total number of projects; this has shown that the projects tended to concentrate in certain regions. Among them, the projects in Inner Mongolia increased from 9 in the second batch to 27, and it was the only ethic minority region coming to the first five places in terms of the number of projects. As shown in Figure 15, except for Shandong and Yunnan, the numbers of projects in other regions showed a tendency of linear gradient decline roughly. Among the cities specifically designated in the state plan, Qingdao boasted the most projects; if Qingdao was included in Shandong Province, the projects in Shandong would far outnumbered other regions. The total number of projects in provinces in central and western China was larger than that in provinces in eastern China. This indicates to some extent that the provinces in central and western China were inclined to the adoption of the PPP model to mitigate their financial pressure due to their weaker financial strength as compared with the eastern regions, so that those central and western provinces could achieved the desired results with the passage of time and provide better public services. Compared with the second batch of demonstration projects, most of the regions saw a substantial increase in the number of projects; while the numbers of projects in Henan, Guangxi, Liaoning and Ningbo City declined to different extents.

In terms of the investment scale, Hebei, Yunnan, Anhui, Guizhou and Shandong ranked the top five, with the specific investment amounts being RMB 170.4 billion, EMB 170.2 billion, RMB 77.4 billion, RMB 52.9 billion and RMB 49.5 billion respectively, together accounting for 44.4% of the total investment. As shown in Figure 16, except for Hebei, Yunnan and Anhui, the investment scale in other regions showed a tendency of linear gradient decline generally, too. Among the administrative regions at the provincial level, the investment scale in Hebei and Yunnan tended to be similar; in combination with the number of projects, it could be seen that the investment scale for a single project was larger in Hebei. Among the cities specifically designated in the state plan, the investment scale in Dalian was the largest. The investment amount in provinces in central and western China was far higher than that in provinces in eastern China. This coincides with the feature of distribution in terms of number of projects. Compared with the second batch of demonstration projects, the investment scale in most regions increased substantially, while the investment scale in Beijing, Inner Mongolia, Henan, Guangxi and Liaoning decreased to different extents.

According to the comprehensive analysis of the average investment amount of projects in all regions, Dalian, Ningbo, Beijing, Hebei Province and Qingdao ranked the top five in terms of average investment amount, and the average investment amounts in those five regions were RMB 15 billion, RMB 9.5 billion, RMB 7.5 billion, RMB 5.5 billion and RMB 4.6 billion. Specifically, the investment of two projects in the sectors of transport and municipal engineering in Dalian reached RMB 30 billion; the investment of two projects in the

industry of transport in Ningbo reached RMB 19.1 billion; the investment of 6 projects in Beijing was RMB 45.3 billion, mainly from the sectors of transport and municipal engineering; the investment of 31 projects in Hebei was RMB 170.4 billion, mainly from the sectors for transport, comprehensive urban development and municipal engineering; the investment of 5 projects in Qingdao was RMB 22.9 billion, mainly from the sector of municipal engineering.

Figure 15 Regional distribution of the second and third batches of demonstration projects in terms of number

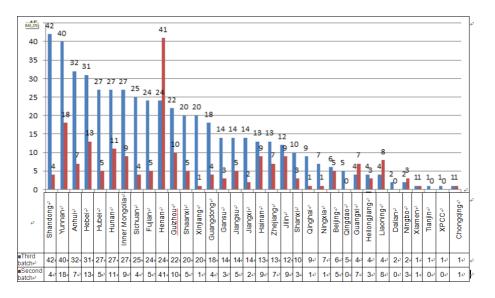
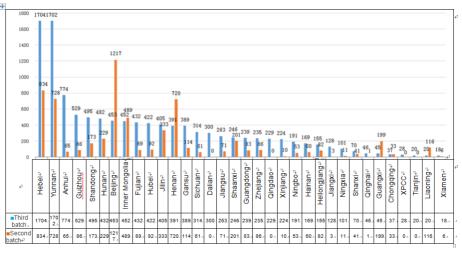


Figure 16 Regional distribution of the second and third batches of demonstration projects in terms of investment



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