

Practical experience, conclusion and Enlightenment of China's innovation and entrepreneurship demonstration base evaluation

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Background and work achievements

Special economic zones have played a crucial role after reform and opening up in China. Since 2016, the Chinese government has begun to focus on building 120 national mass innovation and entrepreneurship (MIE) demonstration bases to promote economic development in key regions and industries. National Academy of Innovation Strategy has continuously evaluated these bases for several years, utilizing the advantageous resources of local CAST and 210 societies. With systematic organizations, gradually grasping the current characteristics, trends and issues of China's innovation and entrepreneurship development.

As a high-level science and technology innovation think tank, CAST has been commissioned by the General Office of the State Council and the Development and Reform Commission since June 2015 to carry out relevant strategic research work through third-party evaluation of MIE and MIE demonstration bases. MIE evaluation has been commented by Premier Li Keqiang twice. As for the evaluation of MIE demonstration bases, National Academy of Innovation Strategy (NAIS) organized 21 local scientific associations, 25 national societies, 12 third-party institutions, and more than 1160 times of experts to participate in, successfully completed the evaluations.

Demonstration base development trends

Main Index	2016	2017	2018	Average annual growth rate
Average number of newly established market entities	11740	12158	13598	7.6%
Average number of high-level personnel at the national level	59	589	603	219.7%
Average size of incubation platform carriers (square meters)	60	74	105	32.3%
Average number of research centres above provincial level	38	49	51	15.8%
Patents granted	285	289	309	4.1%
Number of cooperation between universities and institutes of higher education and enterprises	582	714	775	15.4%
Number of joint projects between enterprises and local governments	128	142	367	69.3%
Number of cooperative projects between enterprises	6707	8239	8994	15.8%
Innovation and entrepreneurship projects of research institutes	168	592	1296	177.7%
Number of people covered by training, lectures	13440	16155	20209	22.6%
The average investment for dual education and activities in each university (10,000 yuan)	1417	1768	2046	20.2%
Newly employed urban population (10,000 persons)	91.6	141.1	146.1	26.3%

Classification of demonstration sites

Each base has its own unique characteristics, with different resource endowments, location advantages, industrial layout and development paths. According to the document, the demonstration bases are divided into three categories: regions, universities&institutes and

enterprises, but after long-term research and evaluation practice, they should be studied from at least 11 sub-categories. Regional demonstration bases can be divided into four categories: urban areas, new areas, high-tech zones & economic and open areas, and counties; university and institute demonstration bases can be divided into five categories: universities of S&T, comprehensive universities, special colleges and universities, institutes of the Chinese Academy of Sciences, and institutes of the Ministry of Industry and Information Technology; enterprise demonstration bases can be divided into two categories: state-owned enterprises and private enterprises. The relative commonality of each subcategory is outstanding.

4.Relevant assessment findings

- 1) First, the construction of bases is growing rapidly.
- 2) Secondly, technological innovation leads high-quality development.
- 3) Third, entrepreneurship-led employment has been effective. The number of jobs in various demonstration bases has increased sharply during 2016 to 2018.
- 4) Fourth, we have actively promoted reforms at the institutional level. Some of the demonstration bases have explored institutional-level reform and innovation, which has effectively promoted innovative entrepreneurial work on the ground.
- 5) Fifth, a number of typical figures of innovation and entrepreneurship have emerged.

Practical experiences of evaluation organization

- 1) Full utilizing local associations, national societies and other scientific research institutions, forming a large professional team and group of experts.
- 2) Organization of expert groups with due regard to professional and operational complementarities
- 3) Using evaluation as a platform for exchange and cooperation to facilitate demand matching
- 4) Tapping a number of grassroots operational backbone

Several problems that need to be tackled

- 1) Lack of communication channels and exchange mechanisms between the different types of demonstration sites in the East and Midwest.
- 2) Lack of incentives for professional service providers and personnel
- 3) Insufficient effective clustering and integration of innovative resources
- 4) Institutional constraints to development
- 5) Corporate credit system construction needs further improvement
- 6) Maintain the vitality of innovation and entrepreneurship while addressing basic livelihoods such as employment.