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Innovation Policy for Inclusive Growth in China

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Contents

I. Challenges to Future Development in China

II. Innovation Policy for Inclusive Growth

III. Example: Innovation for Inclusive Growth
I. Challenges to Future Development in China

- No. 2 in terms of GDP (9.1Trillion US$). 2.1% of GDP for R&D in 2013.
- 0.8 million: invention patent applications, domestic 84.0%
- 1.0 million valid invention patents, domestic accounting for 52.7%.
- No. 2 in terms of S&T publications 1.0 million,
- No. 5 in terms of highly cited papers (top 1%), 7.3%
- No. 14 in terms of citation per paper, lower than the world average
- IPR expenditures: -16.71 billion US$ in 2012
I. Challenges to Future Development in China

• 0.6 million Ms/PhD student enrollment in 2013; 1.8 million in universities;
• 7 million: College/Uni. admissions; 24.7 million students,
• Vocational school admissions 7.0 million, 20 million students.
• High school enrollment 8 million, 24 million students;
• Middle school enrollment 15 million, 44 million students
I. Challenges to Future Development in China

China is facing great challenges resulted from the process of 30 years fast industrialization & urbanization.
I. Challenges to Future Development in China

Chinese Social Stratification and Social Mobility

- **Product**: affordability
- **Resource**: accessibility
- **Opportunity**: equality

Capacity for Transition and Promotion

Registered population

Resident population
China is a vision-driven country.

China has raised a series of development goals since 1980s.

1. Well-off society in 1982
5. Harmonious Society in 2005. (inclusive society)
7. Ecological Civilization 2012
Innovation is a complex process of value creation, and a system of value creation, including:

- **scientific value** -------scientific discovery
- **technological value**------technology innovation
- **methodological value**----business model innovation
- **economic value**---------commercialization & applications
- **social value**------------social diffusion & applications
- **culture value**----------cultural experiences
II. Innovation Policy for Inclusive Growth

Innovation Policies should give higher priority to the commercialization/industrialization of technology by exploring/energize people’s potential for innovation.
Chinese government has taken a series of policy measures to promote innovative development, including: The “Outline of Medium and Long Term Plan for National Science & Technology Development (2006-2020)”, and its supportive policies and related 78 detailed policy documents since 2006. Besides,

Policy documents since 2011:

• To promote the balanced development of compulsory education
• The 12th FYP for National Basic Public Service System
• The 12th FYP for National Strategic Emerging Industries
• The 12th FYP for National Innovation Capacity-building
II. Innovation Policy for Inclusive Growth

1. The 12th FYP for National Innovation Capacity-building
1. The 12th FYP for National Innovation Capacity-building

Social Service Sectors

(1) Innovation for Education (low cost/high quality/wide coverage)

• IT for Education. to improve the efficiency and effectiveness of education system, by sharing high quality education resources

• Technology Capacity for Education. To develop technological equipment and system for education, innovation platform and related standardization

• Information System for Education System.
1. The 12th FYP for National Innovation Capacity-building

(2) Innovation in Medicals and Health

- Technological Capacity for Public Health Service
- Fundamental Capacity for Public Health, Medical Service
  --Platform, Standard for Health Information and Medicine, monitoring system for Key Public Health and
- Technical capacity building for prevention, treatment and control of disease
1. The 12th FYP for National Innovation Capacity-building

(3) Innovation for Culture Development

- Innovation fundamental Capacity for Culture
- Technological platform and strategic alliance in the fields of publishing, printing, media, film, online game & music, animation.
- Program for Culture S&T and Innovation.
- Technology-based emerging cultural industrial parks
- Public cultural service network, modern communication system
1. The 12th FYP for National Innovation Capacity-building

(4) Innovation for Public Security

• Technical capacity for monitoring and early warning emergency
  --natural disaster monitoring systems and early warning & forecast information release platform
  --public health emergencies monitoring and early warning network
  --monitoring and control platform for state's major public infrastructure

• Emergency management skills
  - National Emergency platform
  - Emergency management infrastructure database
  - Security key generic tech./equip./systems development
II. Innovation Policy for Inclusive Growth

2. The 12th FYP for National Strategic Emerging Industries

- Information Benefiting People Project
- Broadband China project

20 projects
II. Innovation Policy for Inclusive Growth


(1) reform of personal registration system (HuKou System)
(2) the right to access to fundamental public services in the town education /social security/public employment \ health care services
(3) to optimize and enhance the eastern city cluster
(4) to foster the development of Mid- and west City Cluster
(5) the integrated transport network
(6) the urban industrial employment
(7) public service system in urban
(8) new city construction (green, wisdom, humanities)
(9) innovation in governance of urban society

Four Pillars
• Urbanization
• Industrialization
• Informatization
• Agri-modernization
National Plan for Urban System of China (205-2020)
II. Innovation Policy for Inclusive Growth

4. Innovation-driven Cities Initiatives (NDRC/MOST)
ShanZhen, DaLian, QingDao, XiaMen, ShanYang, XiAn, GuangZhou, ChenDu, NanJing, HangZhou, JiNan, HeFei, ZhengZhou, ChangSha, Suzhou, WuXi, Yantai

Key Tasks:
• Institutional environments
• Regional inno. System
• Industrial innovation
• Smart city/infrastructure
• Social innovation

- Education
- Health
- Public security
III. Example: Innovation for Inclusive Growth

Low-cost Devices Developed by SIAT, focusing multi-function health check bed, portable workstation for GP.
III. Example: Innovation for Inclusive Growth

1. Low cost health project funded by CAS
2. Low-cost health alliance in Shenzhen

3. The low cost primary health system in rural area: portable workstation for GP
III. Example: Innovation for Inclusive Growth
III. Example: Innovation for Inclusive Growth
Innovation and inclusive growth have different motivation. Therefore, it is necessary to keep the tension between the both, which means that it is still necessary to encourage firm/people to be more innovative by means incentive policies on the one hand, and to narrow the gap in resource accessibility and opportunity equality as well as sharing of developmental welfare by means of laws & regulations on the other hand.

Therefore, it is necessary to synergize the effectiveness of diversified policies for promoting inclusive growth.
Thank you for your attention!

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