

# Evaluation and Innovation for SDGs: Practices and Insights from China

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United Nations Commission on Science and Technology for Development

# United Nations Commission on Science and Technology for Development (UNCSTD)

- **UNCSTD** is a subsidiary body of the UN Economic and Social Council (ECOSOC), which provides the General Assembly and ECOSOC with high-level advice on relevant science and technology issues.
  
- **Science related mandate**
  - Addresses two priority themes, e.g. in 20<sup>th</sup> session:
    - New innovation approaches to support the implementation of the SDGs
    - The role of STI in ensuring food security by 2030
  - STIP Reviews
  - Science related draft ECOSOC resolution
  
- **Review the progress made in the implementation of the outcomes of the World Summit on the Information Society (WSIS).**

# National Center for Science and Technology Evaluation (NCSTE)

- NCSTE, established in 1997, is the first national institute and the leading agency in STI evaluation of China.
- It has more than 100 professional evaluators and network of 10,000 experts.
- It is excellence in conducting evaluations on STI policy, program, project, research institute, public expenditure, and international cooperation, as well as developing evaluation standards and methodologies.
- Evaluation of STI for SDGs has become essential, yet challenging part of NCSTE's business. We appreciate the opportunity of exchanging and sharing information with the international colleagues in NEC.

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# 1. China's effort to implement SDGs

- President Xi Jinping, on Sept. 28 2015, in his first address to the UN, emphasized his belief in the UN.
- He has also dropped the Chinese obligatory of continue participation in building world peace, to contribute to global development, and made commitment in implementation of SDGs.



## 1. China's effort to implement SDGs

- China attaches great importance to the 2030 Agenda, linking it with domestic mid-and-long term development strategies.
- China formulates **China's National Plan on Implementation of the 2030 Agenda for Sustainable Development**.
- With the development concept of innovative, coordinated, green, open and shared development.



## 2. Science, Technology and innovation for SDGs in China



**To establish a sustainable modern agriculture system** by 2020 to develop an environment-friendly modernization production with high output efficiency, promising product safety, and resource saving.

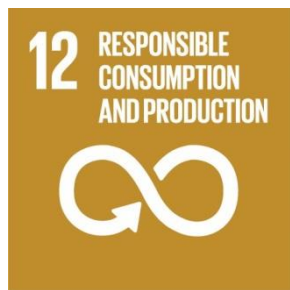
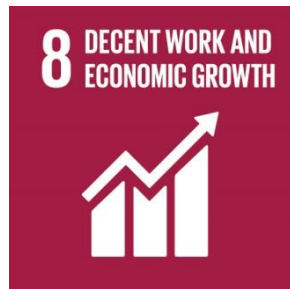


**establish and improve technological system for livelihood improvement and sustainable development including:**

- Ecological and environmental protection,
- Highly efficient resource utilization and recycling,
- Public health,
- New urbanization,
- Public security and social governance.



## 2. Science, Technology and innovation for SDGs in China



### To Promote sustainable regional development:

- 156 national sustainable development experimental zones,
  - SDG innovation demonstration area for 2030
- Agenda:
- Shenzhen, Guangdong province
  - Guilin, Guangxi Zhuang Autonomous Region
  - Taiyuan, Shanxi Province
  - Cluster of 5 cities in northern Jiangsu province.

### National Science and Technology Major Projects

- Water Pollution Control and Treatment,
- New Medicine Research and development,
- Prevention and Control of Infectious Diseases.



## 2. Science, Technology and innovation for SDGs in China



### **National key R&D Programs:**

- The Ministry of Science and Technology has launched 14 programs in the field of social development, seven of which are in the field of resource and environment,

### **Green Technology Bank**

- Established in 2015 as an important platform for implementing the 2030 Agenda in the green development area.

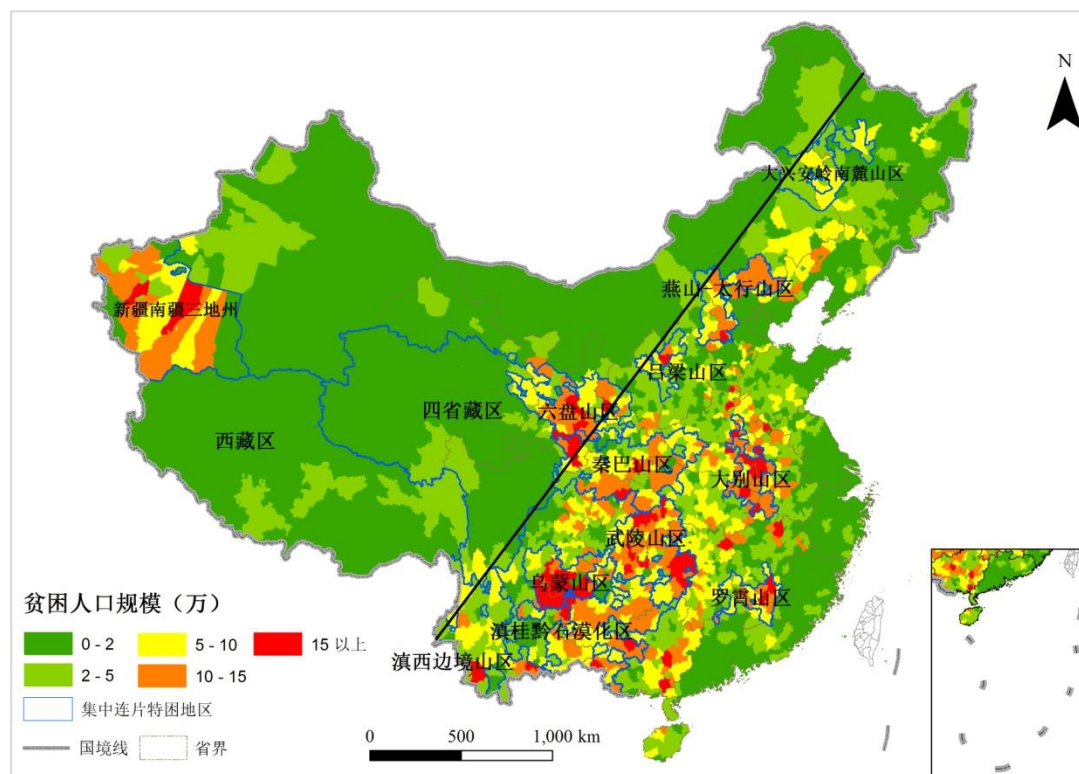
### 3. Three cases of evaluation of STI for SDGs in China

#### ■ Case 1: Evaluation of National Precise Poverty Alleviation Action (NPPAA)

- Evaluation time scope: June 2016 – Aug. 2017
- Implemented by CAS

#### ■ Background information:

- China has a uneven regional development
- The central government has the objective of reducing poverty by 70 million from 2015 to 2020.

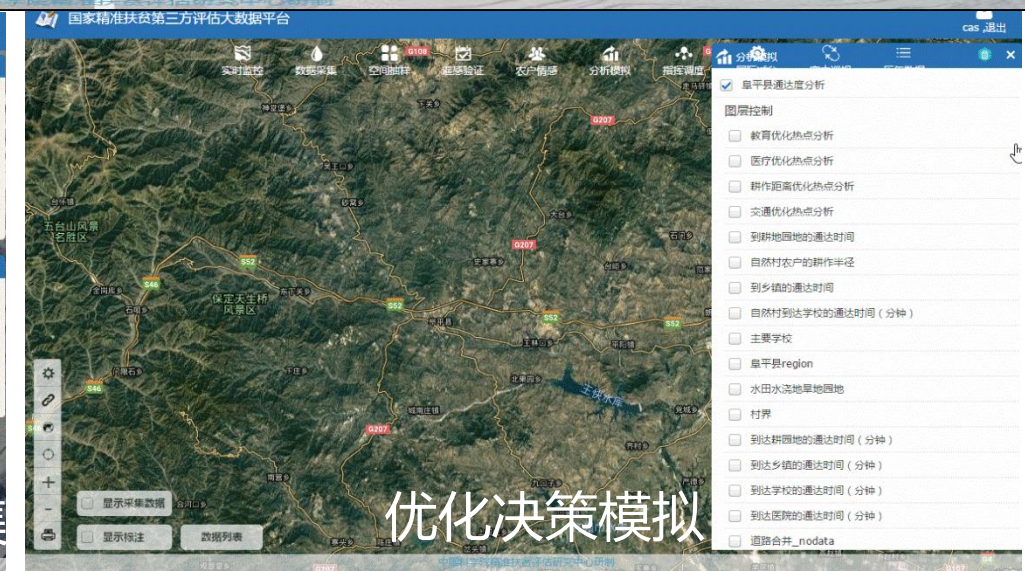
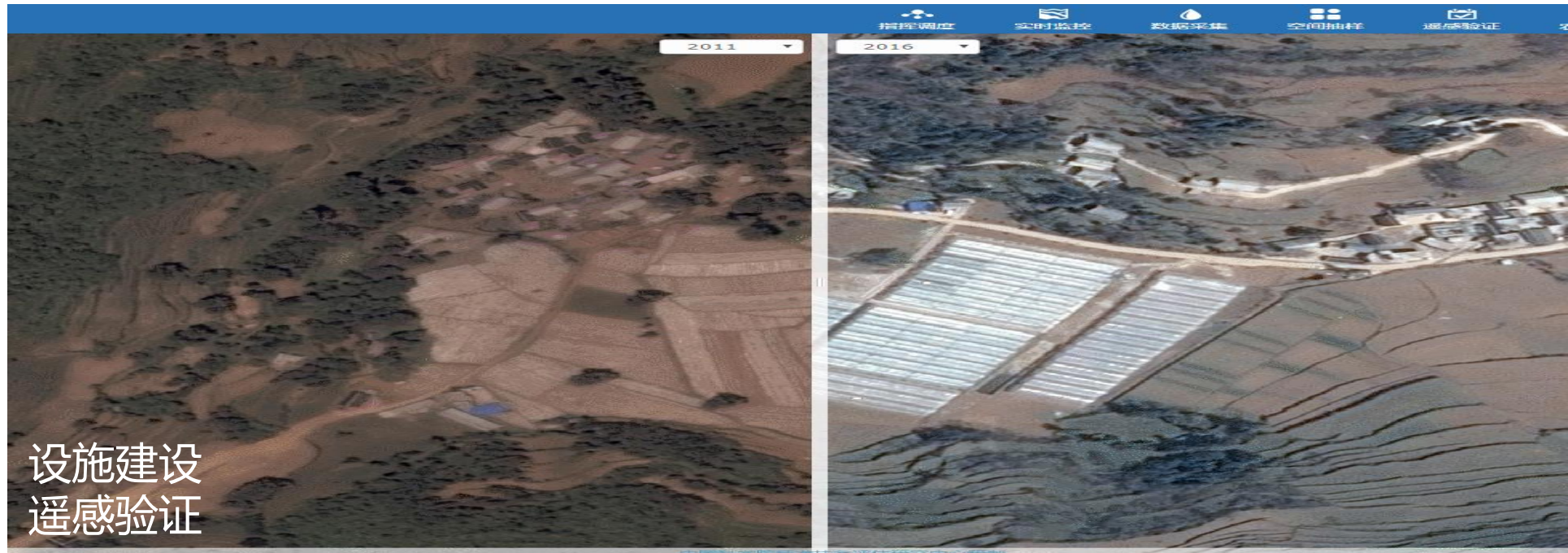


### 3. Three cases of evaluation of STI for SDGs in China

#### ■ **Method:**

- Use big data and remote sensing to accurately target the poor
- Use GIS information system to follow the alleviation process

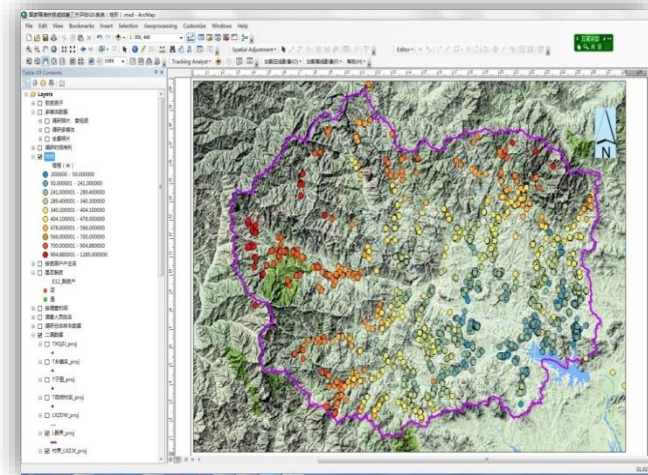
# Big data platform for evaluating the NPPAA



# GIS information system

➤ Use remote sensor to locate the target poor group, tracking related files.

➤ Monitoring and updating the new roads, schools, and facilities related to poverty alleviation.



### 3. Three cases of evaluation of STI for SDGs in China

#### ■ Case 2: Evaluation of national sustainable development experimental zone (NSDEZ)

- **Time scope:** February, 2014 — March, 2015
- **Evaluant:** 156 national sustainable development experimental zones



- Distributed across 30 provinces in the nation, with administrative levels across prefecture-level cities, urban areas (or suburbs), county-level and township levels.

### 3. Three cases of evaluation of STI for SDGs in China

➤ **Main evaluation method**

- Carried out 5860 interviews with structural questionnaires on street
- 3046 valid questionnaires returned
- Cover 22 provinces and 41 cities and districts
- 65.3% of male and 34.7% of female
- Age range : 18-70 years old
- Interviewees from variety of jobs

省份	实验区名称	行政级别	街面访问 (个)	网络调查 (个)	总计
	无锡市江阴市(县)	县级	150	57	207
上海	徐汇区	地级市区	72	133	205
浙江	台州市温岭市(县)	县级	137	104	241
	绍兴市杨汛桥镇	镇级	160	100	260
	金华市东阳市横店镇	镇级	177	84	261
北京	怀柔区	县级	165	101	266
	西城区	地级市区	82	177	259
河北	石家庄市正定县	县级	68	143	211
河南	安阳市林州市	县级	173	35	208
	新乡市辉县市孟庄镇	镇级	163	38	201
	郑州市巩义市竹林镇	镇级	128	74	202
山西	晋城市泽州县	县级	125	84	209
安徽	毛集可持续发展实验区	县级	193	37	230
	合肥市包河区	地级市区	196	54	250
湖北	荆门市钟祥市(县)	县级	177	26	203
	武汉市江岸区	地级市区	73	142	215
陕西	渭南市华阴市(县)	县级	173	30	203
	宝鸡市渭滨区	地级市区	172	32	204
四川	德阳市广汉市(县)	县级	166	36	202
	成都市金牛区	地级市区	67	136	203

### 3. Three cases of evaluation of STI for SDGs in China

#### ➤ **Effectiveness of NSDEZs**

- The experimental zone provides theoretical and practical support for the implementation of national development strategy and the formation of development goals in different stages.
- The construction work of the experimental zone actively explores the implementation mechanism of the local sustainable development in China.
- The construction of experimental zone has promoted the ability of regional sustainable development, promoted economic development and social harmony, and generated social and economic benefits for local residents.



### 3. Three cases of evaluation of STI for SDGs in China

#### ■ **Case 3: Evaluation of national science and technology major project for prevention and control of major infectious diseases**

- **Time scope:** September, 2015 — December, 2015
- **Evaluant:** National science and technology major project for prevention and control of major infectious diseases, such as AIDS and viral hepatitis
- **Objective**
  - Evaluate the overall progress and find major constraints.
  - Organize the implementation results and show the major achievements.
  - Sum up pilot experience and support management system reform.
  - Dissect the problem and serve the goals set by the 13th Five-Year Plan.

### 3. Three cases of evaluation of STI for SDGs in China

- **Methods:** Comprehensively adopted several methods and tools, such as field visit, document review, focus group meeting, achievement investigation, questionnaire survey, Technology Readiness Level (TRL) assessment, patent analysis, policy analysis, etc.
- **Effectiveness of project implementation**
  - Special project promoted the new emergent infectious disease prevention and control ability to continue to strengthen.
  - Effectively guaranteed social stability and economic development.
  - Advances in the prevention and treatment of major infectious diseases provided technical support for population health.

### 3. Three cases of evaluation of STI for SDGs in China

#### ➤ Challenges

- Lack of relevant capacities in the core technologies for vaccine research, HIV testing, TB diagnosis, hepatitis prevention, etc..
- Problems such as unclear evaluation indicator, incomplete evaluation indicator, and constraints for critical technology breakthrough exist in the top-level design, organization, and implementation of the project.

#### ➤ Recommendations

- At the top level design and organization, strengthening the top-level design, improve open sharing and collaboration to promote, strengthen queue maintenance, quality control, and major project coordination, etc.
- Strengthen the central science and technology fund policy in funding management and usage, especially funding management policies for major projects. Work on promoting and interpreting suggested policies to the financial sectors, deliver training sessions to improve the efficiency, and further deliver partial access authorization to lower level administrative departments.

## **4. Strengthening international cooperation for SDGs**

- Sustainable development has become an important global issue, and the areas involved, such as environment and health, are common problems facing the world.**
- The realization of SDGs of developing countries, including China, will be the key to the successful implementation of 2030 Agenda.**
- The 2030 Agenda calls for the course for national development endeavors and international development cooperation.**

## 4. Strengthening international cooperation for SDGs

### ■ Sustainable development is inseparable from policy support, and the evaluations of policy will greatly improve the effectiveness of policies:

- It is necessary to carry out cooperative evaluation on the financing policies and talent policies of various countries, so as to promote mutual coordination and reference.
- It is necessary to conduct in-depth cooperative evaluation from a global perspective on the efficiency, effectiveness, and impact of innovation policies of all countries:
  - **Good Policy:** Beneficial to the innovation development of the country and other countries
  - **Medium Policy:** Only beneficial to national innovation development
  - **Bad Policy:** Neither beneficial to the innovation development of the country nor other countries

## 4. Strengthening international cooperation for SDGs

- **Therefore, it is necessary to carry out international cooperation and promote the coordination and reference of each other to achieve the sustainable development goals.**
- **Set up international cooperation network and working mechanism in science and technology innovation evaluation**, provide decision-making reference to national governments based on international vision and national conditions.
- **Conduct joint innovation and evaluation on existing bilateral, multilateral cooperation mechanisms and actions**; Summarize experience, find deficiencies, make recommendations, and promote the quality and efficiency of cooperation.
- **Conduct evaluations on issues of international common interest**, present evidence-based and practical solutions.

**Many thanks for you attention!**

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