



Chinese Experience in Implementing SEEA EEA

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Highlights of work achieved so far

- Exploring to compile Natural Resource Balance Sheets
 - ✓ From late 2015 to the end of 2016, pilot compilation of natural resource (water, land and timber) balance sheets at 8 areas in China was completed
 - ✓ Compilation of natural resource (water, land, timber, and mineral resources) balance sheets at national level in China was completed in 2017
 - ✓ Compiling System of Natural Resource Balance Sheets On Trial Basis was formed, which is subject to further improvements.



I Highlights of work achieved so far

- GEP accounting
 - ✓ GEP (Gross Ecosystem Product) initiated by Mr. Zhiyun Ouyang (in 2013) from the CAS (Chinese Academy of Sciences) refers to the sum of value of all goods and services provided by ecosystems for human beings in a region at a given period, of which the value of all goods and services provided by ecosystems for human beings is same as ecosystem service value recommended in SEEA EEA.
 - ✓ Up to now, completed or ongoing pilot areas conducting GEP accounting involve 5 provinces, 7 prefecture cities and more than 50 counties in China.



I Highlights of work achieved so far

- Ecosystem services accounting
 - ✓ From 2014 on, Guangxi began to carry out ecosystem services assessment on trial basis, leading to some preliminary results.
 - ✓ In addition, some studies on measuring ecosystem services in Hebei, Fujian, Zhejiang province were undertaken by some research institutions such as CAS, CASS and so on.



II Problems and challenges

- Problems and challenges in compiling natural resource balance sheets
 - ✓ How to define natural resources asset and natural resources liability?
 - ✓ How to calculate the opening stock of water resources?
 - ✓ How to measure the quality of arable land, forest and mineral resources?
 - ✓ How to measure the general quality of water resources in an area?



II Problems and challenges

- Problems and challenges in measuring ecosystem services
 - ✓ Diversity in concepts, classification and valuation methods of ecosystem types and services leads to differently incomparable results.
 - ✓ Should the value of human labor, such as direct use and comprehensive utilization of seawater, ocean energy, shipping, water supply and electricity generation, tourism services, be included in the value of provisioning services?
 - ✓ How to scientifically assess the measured results of ecosystem service value of an area in general?



III Future plans

- With the support and guidance of the UN (Natural Capital Accounting and Valuation of Ecosystem Services) project team, valuation methods of land, timber, water and mineral resource assets in China will be put forward
- and the monetary accounts of land, timber, water and mineral resource assets at national level will be compiled on trial basis in next two years.



III Future plans

- With the support of the UN project team, Guangxi and Guizhou will separately compile the ecosystem accounts for 2016 to 2017 based on their respective guidelines for ecosystem services valuation, focusing on measuring the physical and monetary ecosystem services of different ecosystem types, and work out separately the standards of ecological compensation by using their ecosystem service valuation data in next two years.



IV Issues to address during revision

- To introduce the concept of GEP parallel to GDP in SEEA EEA.
- To figure out the accounting framework of GEP
 - ✓ Products generated from local ecosystem– Intermediate use of ecosystem = (Use of economic system+ Use of other activities of human being)+(inflow to other regions– inflow from other regions)+Not direct use



GEP Accounting Table Based on Supply and Use of Ecosystem Products

		Intermediate use				Final use			From other regions (-)	Not direct use	Total
		ET1	ET2	ET3	Economic system	Other activities of human being	Other regions			
Generation	Provisioning services	***	***	***	***						
	Regulating services	***	***	***	***						
	Cultural services	***	***	***	***						
	Supporting services	***	***	***	***						
use	Provisioning services					***	***	***	***		
	Regulating services					***	***	***	***		
	Cultural services					***	***	***	***		
	Supporting services	***	***	***	***	-	-	-	-		
		Production approach: GEP=Generation-Use				Final use approach: GEP=∑Components					



IV Issues to address during revision

- To work out the unified classification standards of ecosystem types and services, biophysical processes of key ecosystem services in physical terms as well as the standardized and plausible valuation approaches of key economic services.

Thank you!

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