

The Research on the Evaluation System of Sustainable Development of Chongqing Economy

Fei LU

Chongqing Academy of Social Sciences, Chongqing 400020, China

ABSTRACT: The sustainable development is the standard of development which has been recognized by countries all over the world. Chongqing city is located in the western underdeveloped region, with a large population, relatively scarce resources and big gap between urban and rural areas. It is significant to implement the strategy of sustainable development, with the mutual coordination and promotion among the economic benefits, environmental benefits and social benefits. To evaluate the sustainable development in Chongqing city and its counties, we should develop the application of the related data systematically, scientifically and frequently to describe, test and evaluate the economy sustainable development of Chongqing city and its counties timely. The author intends to set up a set of appropriate regional economy sustainable development index system to measure and evaluate the development status, level and ability of the regional economy of Chongqing City and its counties.

KEYWORD: The sustainable development; The evaluation system

1 THE CONNOTATION OF SUSTAINABLE DEVELOPMENT OF CHONGQING ECONOMY

The sustainable development includes the ecology sustainable development, economy sustainable development and society sustainable development which is the mutual coordination and promotion process among the economic benefits, environmental benefits and social welfare. [1]The sustainable economy development can encourage economic growth and the later is the premise to realize the former. The ultimate purpose of the sustainable development is to promote the welfare of the society, improve people's both material and spiritual quality living quality. The ultimate goal of sustainable development is to promote the welfare of the society, and improve the people's material and spiritual living quality, which are served by both the economic growth and the protection of resources and environment. The economy sustainable development is the core of the whole system of the sustainable development. The ecology sustainable development is the natural foundation of economy sustainable development. The society sustainable development is the important guarantee for the economy sustainable development. And the economy sustainable development is the material conditions of ecology and society sustainable development.[2] According to the connotation and the requirements

of sustainable development, Chongqing economy sustainable development includes the following five aspects: the level of economy development, the power of economy development, the factor supporting of economy development, the ecological constraints of economy development and the achievement distribution of economy development.

The level of economy development: reflecting the economy development of Chongqing city and its counties from the aspects of total economy output, economy structure, the development level of the three industries, revealing the prominent problems existing in the economy development of current Chongqing city and its counties.

The power of economy development: investigating the power of economy development of Chongqing city and its counties from the three aspects of investment, consumption, import and export, revealing the potential and shortage of each county economy development.

The supporting of economy development: reflecting the development level and potential of the science and technology, information, human resources, land and other factors which support the sustainable development of Chongqing city and its counties. [3]

The ecological constraints of economy development: reflecting the consumption level, environmental protection, resource constraints and other aspects that restrict the sustainable development of Chongqing city and its counties

economy energy, revealing the limitations and constraints of the ecological environment.

The achievement distribution of economy development: reflecting the achievement of the economy development of Chongqing city and its counties, and the economy achievement distribution, such as the income, housing, savings, public services, social security and other social welfare, revealing the final goal of the economy sustainable development is to realize the social welfare.

2 THE EVALUATION SYSTEM OF SUSTAINABLE DEVELOPMENT OF CHONGQING ECONOMY

The author intends to establish a statistical system to measure the sustainable economy development of Chongqing City, whose purpose and function is to discover and describe the major problems in the economy development of Chongqing city. On this basis, we can evaluate the level of sustainable development and make judge on whether the economy development in Chongqing city is closer to or more away from sustainable development objective, then guide the economy development.

2.1 *The Design Principle of the Evaluation Index System*

The structure of regional complex system is mixed and has varied levels, we selected the most sensitive, measurable and meaningful leading indicators as the evaluation index. According to the characteristics and requirements of regional economy sustainable development, we determine the following principles for the construction of index system.

2.2 *The Scientific Principle*

This principle includes two levels of meaning: the first level, as to the choice of indicators, the weight of each indicator, the selection of reference data and the calculation method used for synthesis, we should recognize the scientific theory and take the relevant report, the academic theory, management science and other theories as the bases. The second level, as to the index selection, in addition the scientific conditions, due to that the index system plays a guiding and vital role nowadays and for the future for the development of regional economy, we should pay attention to whether the choice of index in this system is appropriate and overall and whether there are overlapping components among the indexes. If the selection of the index is not comprehensive enough, then the index system cannot reflect the status of regional economy sustainable development; on the contrary, if the index contains are overlap, then it may exaggerate the effect of one aspect while

ignore the other aspects of the development of regional economy.

2.3 *The Principle of Objectivity*

This principle requires that all indexes that the index system involved, we should obtain the relevant data on the basis of fact and obey the objectivity of the scientific results in the calculation and the measurement process.

The principle of Comparability: This principle requires that we should adapt the international or domestic unified standard for the index selection, data acquisition, the method of calculation and measurement and the measurement units in the construction process of the index system to facilitate the relevant aspects of the horizontal and vertical comparison.

The Principle of Matching: The indicator system of region economy sustainable development is not a panacea and applicable to any sustainable development of regional economy. Different development of regional economy has different target content. Even in the cases that the different regions select the same index contents, there is different weight of the each index, which is determined by the concrete situation. So, there lies the matching problem between the development status of regional economy and the index system of sustainable development.

The Principle of Feasibility: The simplest requirement of the principle is that the proposed index and the reference of the index weight can be obtained by a certain effort and is feasible but not some unavailable data and materials.

The Principle of Guiding: This principle requires the explicit purpose of the index system construction of regional economy sustainable development, not only for the evaluation of the status of the regional economy sustainable development, but also to guide the future strategy of the regional economy sustainable development, then to track the evaluation results and point out the deficiency in the development of the economy regional, draw experiences and lessons to guide the future of the region economy sustainable development.

The Principle of Development: According to the actual economy situation of the regional economy sustainable development, the existing indicators should be adjusted and revised continuously to keep synchronous progress with the regional economy.[4]

2.4 *The Indexes of the Regional Economy Sustainable Development*

According to the connotation and requirements of sustainable development, the evaluation index system of the economy sustainable development of Chongqing is as following.[5]

Table 1 The Evaluation Index System of Chongqing Economy Sustainable Development

The 1st class indexes	The 2nd class indexes	The 3rd class indexes	The 4th class indexes	
The level of economy development	The total amount and structure of economy	The total level	GDP per capita	
			Revenue per capita	
			The total investment in fixed assets	
			The total retail sales of social consumer goods	
			The social total retail sales of consumer goods	
			The urbanization rate	
		The structure optimization	The proportion of output value of the second and the third industry	
			The proportion of the production workers of the second and the third industry	
	The agriculture and rural	The agricultural investment and benefit	The productive fixed asset investment of the agricultural population per capita	
			The agricultural investment benefit	
		The construction of rural economic organizations	The number of ten-thousand rural cooperative economic organization	
			The proportion of the reform of the property right system of the collective economic organization	
			The number of feature center of the town	
			The market rate of the agricultural product	
		The factor of the rural resources	The electricity consumption per capita of the rural population	
			The aging degree of the rural population (the ratio of rural labor above 51-year- old)	
			The quality of the rural labor force (the average number of education years)	
		The industry	The industry benefit	The value added of the industrial total output per 10-thousand Yuan
				The rate of cost to profit
	The overall labor productivity of industrial enterprises			
	The scale and clustering degree of the industry		The number of industrial enterprises above designated size	
	The development level of high and new technology industry		The ratio of high technology manufacturing industry production value (high technology industry production value /GDP)	
	The total output and efficiency of the state-owned and private economy		The proportion of added- value of the state-owned and private industrial enterprises	
			The ratio of cost to profit of the state-owned and private industrial enterprises	
	The modern service industry		The industry benefit	The added-value of third industry total output value per ten-thousand Yuan
		The tourism	Tourism income	
		The culture	The added-value of cultural industry	
		The logistics	The total freight volume	
			The port cargo throughput	
		The airport throughput		
The business (wholesale and retail)		The commodity sales of the wholesale industry corporate enterprise (wholesale)		
The finance		The number of listing Corporation		
	The issuance of corporate bonds			
The power of economic development	The investment	The benefit of investment	Investment contribution rate	
			Investment multiplier	
	The investment structure	The ratio of the real estate development to the total social investment in fixed assets		
		The consumption	The level of consumption	The proportion of the consumer spending and the total expenditure of rural residents
	The proportion of the consumer spending and the total expenditure of urban residents			

		The consumption structure	The proportion of consumption expenditure and the net income of rural residents in the districts and counties
			the proportion of the annual expenditure and the annual income of the urban residents
			The expenditure of the educational entertainment products and services of the rural residents in districts and counties
			The expenditure of the household equipment and services spending of the rural residents in districts and counties
			The expenditure of the household equipment and services spending of the urban residents
			The expenditure of the educational entertainment products and services of the urban residents
		The consumption potential	The expenditure gap between the living consumption of the rural high-income households and rural low-income households
			The living consumption level gap of the rural household high-income groups
			The living consumption gap between the urban high-income households and urban low-income households
			The living expenditure gap between the urban high-income households and urban low-income households
Import and export	The total amount	The total imports and exports	
		The net total imports	
	The structure	The degree of dependence on export	
		The actual completion amount of the foreign contracted projects and labor service cooperation FDI	
the support of the economy development	The science and technology	The technology innovation	the staff number of R &D
			the proportion of R &D input and the GDP
			The amount of technology capital
	The information technology	The network popularization	The fixed network users
	The human resource	The amount of labor The quality of labor force	The population between 14-60 years old The population owning education of college and above per 10 thousand
The land	The land supply	The land scale for rural construction	
The ecological constraints on economy development	The energy consumption and environmental protection	The production energy consumption Investment in environmental protection	The energy consumption per unit of GDP The proportion of the environmental protection investment and the GDP
	Resource constraints	The energy dependence The resource potential	The energy external dependency rate Per capita water resources reserves The basic reserves of the major mineral resources per capita The ecological capacity
The achievements and distribution of the economy development	The production results	The production value	The proportion of personal income (employees' compensation) and GDP
	The results' distribution	The income The housing The saving The public service The social security	The urban resident disposable income per capita The rural resident net income per capita The income ratio of urban to rural resident per capita The Engel coefficient The urban housing construction area per capita The savings deposits per capita The cultural and educational assets (the full-time teachers per 10-thousand) The healthy and technical personnel per 10-thousand The number of urban community service facilities The green land per capita (ecological coverage) The endowment insurance

2.5 *The Conclusion*

In general, the total economic output of Chongqing showed a rising trend, the development of the regional economy and the unbalanced. The economic structure is not reasonable, especially the first industry and the third industry development is slow, the overall economic development level is not high. Lack of city infrastructure construction, social security and health status also need more improvement. The atmosphere and water environment situation is still not optimistic, centralized sewage treatment, garbage harmless treatment and disposal of hazardous waste serious shortage of capacity, especially the rural ecological environment. Further efforts are needed to achieve

the sustainable development of economy, society, environment!

REFERENCES

- [1] Introduction to regional sustainable development, the science press, 2014, 7.
- [2] Environment and sustainable development introduction to science, China Press, 2014, 9.
- [3] Sustainable economics, the China Social Sciences press, 2007, 1.
- [4] Zhouliqin; The indicator system of regional sustainable development; contemporary finance 2013, 05.
- [5] Liu Yi; Regional sustainable development status and classification of China; geography; 2014, 05.