# Research on the Popularization Path of Green Development based on Environmental Economics

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**Abstract:** This paper analyzes and expounds the forming background and practical requirements of the concept of green development, and puts forward that green development under the new normal of economy is a new task and challenge under the new stage and situation of social development. Accordingly, the popularization of the green development concept of effective methods put forward higher requirements. On this basis, the article begins with the analysis of survey questionnaire as the main data source, SPSS 23.0 as the main analytical tools, through the expert evaluation method for the quantitative analysis of the scientific path for utility, eventually to quantitative assessment of the universal path.

**Keywords:** Green development; Popularizing path; The new normal; Popularization of science

#### 1. Introduction

In the face of the new normal economic development, Xi as the core of the CPC central committee timely put forward we need to construction of modernization is the modernization of harmonious coexistence between man and nature, as well as to create more material wealth and spiritual wealth to meet people's increasing need of a better life, also want to provide more high quality ecological products to meet people's increasing needs in beautiful ecological environment. Advocate contracted moderately, green low carbon way of life, oppose extravagance and waste and unreasonable consumption, carry out to create a conservation-minded agencies, green home, green school, green communities and green travel, etc. On the contrary, the public still has the problem of not knowing how to implement the concept of green living in daily life. The idealism of the policy and the realistic problems of the public will inevitably increase the difficulty of implementing the green development concept. Therefore, enough attention should be paid to the research on the effective popularization path of green development to better implement the concept of green development.

#### 2. Domestic Overview

As early as 1982, China established the national environmental protection bureau. In 2008, the state environmental protection administration was upgraded to the ministry of environmental protection of the People's Republic of China. China established the international cooperation committee on environment and development in 1992. The Chinese government has been paying attention

to the implementation of green development, and supporting the effective path of popularization will achieve twice the result with half the effort. Scholars in our country to protect the environment, saving resources and responsibility to realize green development mainly concentrated in two aspects: one is green development responsibility for problems, the second is what are the main effective ways about the popularity of green development. On the first on the one hand, the discussion is more, such as back in 1994 the century of our country in the world take the lead to establish a national agenda - century agenda in China - China century population, environment and development white paper, this paper expounds the China's population, economy, society, resources and environmental protection etc. With the combination of policy and program of action; In 2005, Pan yue, deputy director of the state environmental protection administration, called on enterprises to actively assume social green responsibilities, follow the trend of The Times and follow the path of green development. In 2006, professor Ling-ling Wang is in the development of ethical research in the national social science fund project embarked on green development responsibility of deep thinking, deeply, the severity of this proposition, the urgency and far-reaching research value and significance, and in 2010 for the development of green economy responsibility issues in the perspective of ethics research under the national social science fund project successfully. For the second aspect of the problem, the research is relatively shallow, more is an overview of the path of popularization. For example, in 2016, Shandong university Wu Yaqi in a master's degree thesis "the restriction factor of China's ecological civilization construction and paths for research, are contained in the realization of ecological civilization path, the theme is novel, unique perspectives. The existing ways of green development are mainly from three aspects: system, innovation and participation.

### 3. An Overview of the Path of Green Development

## 3.1. To speed up the formation mechanism of "Green", and promote the development of green universal system construction

To implement green development measures, we must strengthen the rule of law guarantee for green development. Under the background of promoting the rule of law, it is necessary to further establish mandatory, authoritative and efficient system of rules, with the rule of law to adjust the interest structure, standardize the order of behavior, it is the important guarantee to realize green development. According to the requirements of green development, we should enrich the content of China's ecological law, formulate and improve the law on the rational use of resources, environmental monitoring law and other preventive laws. We will promptly formulate and improve laws and regulations on cleaner production and the development of circular economy. We will promptly formulate, revise and improve laws and regulations on ecological construction, environmental protection, cleaner production and the development of circular economy. We will make legislation more targeted, operable and effective. Should strengthen the green development major policy decisions and related legal supervision and supervise on the implementation of the laws and regulations, to ensure that the green laws and regulations of the development of effective implementation and deployment of the implementation of the major policy decisions. We will strengthen judicial protection of environmental resources and ecological development, and punish according to law crimes that pollute the environment and undermine ecological development. For a period of time, many areas of China have been weak in the supervision of ecological environment problems, which makes existing ecological laws and regulations lame. We should strengthen the judicial power of environmental resources and ecological construction, and investigate and punish dereliction of duty or even criminal ACTS that pollute the environment and damage the environment in accordance with the law.

# 3.2. Keeping the popularization of the green development, and expand the development of green innovation advantage

Green development popularization need more novel ways to render, such as in the mainstream media platform to spread propaganda, including but not limited to create a popular science web site, e-books published scientific manual, etc. For example, we can take the star as the carrier and apply the influence of the star in the public to popularize the concept of green development. Such innovative adoption of green development ideas may be more effective.

# 3.3. Firmly establish the concept of green development and increase the participation of the people in green development

Foster a green culture in society as a whole by strengthening it. Green culture is the mainstream value of green development. To widely publicize the protection of nature and the implementation of green development in the whole society is to increase the natural value and natural capital, and to protect and develop the productive forces. Promoting green development is the common responsibility of the whole society. We should inherit and develop the fine cultural traditions of our country, such as the proposition of "all things are one", "people and things are one", "nature and man are one" and "nature and man are harmonious". Only by deepening the mainstream values of ecological civilization and making green development a conscious action of the whole society can green development have the broadest mass base. To green development, ecological civilization knowledge incorporated into the national education system and continuing education system, and a variety of effective ways of carrying out ecological civilization, green culture propaganda and education, make the concept of green development is deeply rooted in the hearts of the people. To organizations, encourage and guide the social organization, volunteers and the masses to actively participate in the development of green public welfare activities and action plan for all the people, and actively carry out building of ecological civilization, to further popularize notions of concept of green, green, green consumption, guiding the people advocating saving, low carbon life, formed in the whole society to respect the natural environment, strong cultural atmosphere to construct ecological civilization.

### 4. Variable Selection and Questionnaire **Question Distribution**

This research, we use questionnaire as the main data source, SPSS 23.0 as the main analytical tools, and through the expert evaluation method for the quantitative analysis of the scientific path for utility, the ultimate goal is to draw a universal path utility value, and carries on the appraisal. We consider the utility value of each popularization path from social value, ecological value and economic cost. The effectiveness in perception, perception of cheap, we expect to confirm degrees to measure social value, and continue to use with propaganda will intend to measure the ecological value, and through to the environmental protection from personnel of course of study to measure the economic costs.

Accordingly, the design of the questionnaire is closely centered on these three aspects. The first part of the questionnaire is mainly personal basic information collection, one of its role is from the basic information to judge the validity of the questionnaire, to eliminate invalid questionnaire, reduce response error and no response error; In addition, another major role of part I is to distinguish between environmentalists and ordinary citizens for follow-up investigation. The second part mainly measures the social value and ecological value of the popularization path. In the second part, the first three questions are mainly used to investigate the perceived effectiveness. The ecological value of each mode of popularization is measured by seven and eight questions respectively. Seven questions reflect the intention of publicity and eight questions represent the intention of continuous use. The third part mainly focuses on the investigation of environmental protection practitioners, hoping to investigate the economic cost of various popular methods.

#### 5. Main Model Construction

#### 5.1. The variable weights

In this survey, 537 questionnaires were collected online and offline, 436 of which were confirmed to be qualified after processing, and the qualified rate was 81.19%. After that, the three variables were evaluated by the expert interview method, and social value, ecological value and economic cost were given 0.2, 0.4 and 0.4 weights respectively. On the basis of the classical theory, the initial theoretical model of this study was established through the interview method to verify the variables.

### 5.2. Reliability and validity analysis of model variables

#### 5.2.1 The reliability analysis

Reliability reflects the degree to which model variables avoid accidental errors. In this project, SPSS 23.0 was used to test the reliability of all variables and questionnaire items. When Cronbach's Alpha value (a value) is not less than 0.7, the data has good reliability. When a value is less than that value, it can be regarded as poor data reliability. The reliability analysis of each variable measure item of this project is shown in the following table.

Table 1. Variable Reliability Test Results

Variate	Measurement items	Total correlation of corrected terms	Item deleted Cronbach's Alpha value	The overall Cronbach's Alpha value	
	Perceived effectiveness	.704	.826	,	
Social value	Perceived cheapness	.692	.819	.831	
	Perceptual clarity	.725	.824		
Ecological value	Propaganda will	.795	.735	.793	
	Willingness to continue using	.683	.784	./93	
The economic costs	Fund utilization	.751	.822		
	Track service status	.804	.817	.862	
	Cost performance status	.699	.858	.802	

It can be seen from the table that the overall a value of all model variables is between 0.793 and 0.862, which meets the requirements of being tested, which indicates that this questionnaire has a relatively good reliability. at the same time, all variables inspection items yourself out of a value less than the overall value of a. Therefore, all 3 variables and 8 measures in this study were retained.

#### 5.2.2 Validity analysis

Validity analysis refers to the extent to which questionnaire measures are not affected by system and random errors in data analysis. In this study, KMO and Barlette tests were carried out on all questions through SPSS 23.0 software using principal component method. When KMO is greater than or equal to 0.5 and the significance obtained by Barlette detection is less than 0.01, it indicates that there is a significant correlation between measurement items, which is suitable for factor analysis.

Table 2. Validity Test Results of all Variables

		Ba	artlett sphere detecti	Overall dilution		
Variate	кмо	The approximate chi-square Degrees of free-dom		Significance level	The eigenvalue	Overall inter- pretation
Social value	0.771	566.237	3	.000	2.8524	73.858%
Ecological value	0.821	464.907	3	.000	2.9645	75.862%
The economic costs	0.726	553.022	3	.000	2.2458	82.475%

It can be seen from the table that the KMO value of each variable is greater than 0.7 and at the tragically significant level below 0.01, the characteristic value of each variable is greater than 1, and the overall interpretation

degree of each variable is greater than 73%. It is concluded that the questionnaire has good validity.

#### 5.3. Model building and conclusions

Of the effective questionnaire part 2 &3 problem by SPSS 23.0 recoding, all rows in the popularity of the first mode gives three points, in second place with 2 points, at last gives one point. And for the second part of the problem of all valid questionnaires from each grade point

averages, for environmental protection practitioners score the third part of the calculation of each universal mode and calculate the weighted score, the results are as follows:

Table 3. Scoring Results of all Popular Paths

	Social value				Ecological value			The eco-	
	Perceived effective- ness	Perceived cheapness	Expectation confirmation	Divide	Propaganda will	Willingness to continue using	Divide	nomic costs	Total value
Path1	2.624	2.102	2.895	2.54033	1.758	1.652	1.705	2.154	2.051667
Path 2	2.832	2.542	1.852	2.40867	2.953	2.854	2.9035	1.654	2.304733
Path 3	2.835	1.327	2.631	2.26433	2.851	2.453	2.652	1.532	2.126467

Since we are copying the five-point likert scale, we take 2 as the median level. Lateral, if only consider the social value and economic cost we can choose the first universal way, and if more important ecological value, the second mode of popularization is more effective. In general, three methods of total score value is above two points, this shows that the popularity of the mainstream way now has its rationality of existence, the three popular way at this stage is relatively good effect. Among them, the second popularization method has the best effect among the three methods, the first is the second one, and the third one is relatively at a disadvantage.

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