An Empirical Study on Performance Evaluation of Service-oriented Government in Border Areas

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Abstract. Government performance evaluation is the benchmark of the government's value orientation, and it is also the baton to guide the government's behavior. Border areas as an important strategic fulcrum of the Belt and Road, the establishment of service-oriented government is its fundamental appeal. This paper intends to take the government of border areas as the research object and take the performance Prismatic index as the frame model, which format the stakeholders (civil servants, organizations) departure-strategic indicators (public services) - process indicators (local construction) - capacity indicators (government internal management) - stakeholder satisfaction (civil servants, the public, enterprises, media) logical causal chain. The system of evaluation index of service type government in border areas are constructed, and the weight and priority of index are measured by AHP method, in order to improve its scientific nature.

Introduction

The so-called "border" or "border area" refers to a certain area that connects the two sides of the boundary line (this article is limited to the land border). China has a total of 22,000 kilometers of land border and 135 border counties. The total area of the border area is 2.21 million square kilometers, accounting for about 22% of the country's total area. The total population of the border area is 20.5 million, accounting for about 1.6% of the country's total population. 1The establishment of the National Security Council in 2014 marked a new era of security, development and governance in China's border areas. General Secretary Xi Jinping first elaborated on the concept of national security and systematically elaborated on the importance of the stability of grassroots political power in border areas. "The border is peaceful, the country is safe," and conversely, "the national strength is strong, the border is stable." In order to give full play to the service function of the grass-roots government in border areas, we should not only build up the service government, but also construct a scientifically applicable performance evaluation index system to evaluate the service government.

Functional Positioning of Grass-roots Service-oriented Government in Border Areas

Service-oriented government refers to a government model or form of government that takes service as the core of the value system of social governance and the center of the functional structure of government under the guidance of the concept of citizen standard and social standard and within the framework of democratic system. 2From the perspective of the evolution of government functions, border regional governments have also experienced the transformation of "dominant-managerial-service"; The corresponding government function model also changed from

1 Shixuehua: "The basic meaning, theoretical basis and construction conditions of" service-oriented government ", Social Science 2010 No. 2: P. 5.
"ruling function-management function-service function". Compared with non-border areas, when the basic service government in border areas is required to highlight the quality function of public services, it adheres to the principle of differentiation. Only by clarifying differences and similarities can a more scientific performance evaluation indicator system be constructed.

**Homogenizing Functions-highlighting Public Services**

As the name implies, the main purpose of constructing service-oriented grass-roots government in both border and non-border areas is to highlight public service functions. Public service refers to the activities, behaviors and processes of the public sector in the production, provision and management of public goods and special private products in order to directly meet the basic public needs of citizens. The "Guidance on Deepening the Reform of Grassroots Institutions" of the Office of the Central Organization Drafting Committee clearly states the important function of "strengthening public services and improving people's livelihood." The strengthening of public service functions is of even greater relevance to border area grassroots government:

Firstly, highlighting the public service function is a necessary condition for the legitimacy of border regional governments. Huntington, an American political scientist, put forward: "In the process of developing countries moving from tradition to modernization, the role of the countryside is a variable. It is not the source of stability or the source of revolution. The overall economic development of the border areas is relatively backward, which provides the government with "specific support"-that is, providing good public services in order to obtain legitimacy. Therefore, the grassroots government in border areas must focus on public services as its fundamental meaning.

Secondly, strengthening public service functions is an urgent requirement for the current changes in the working situation in border areas. For one thing, after the abolition of agricultural tax, the political identity of farmers appears to be complex characteristics, and the strengthening of economic benefit identity, democratic rights identity and political efficiency identity, it is urgent for the border regional government to change from a regulated to a service-oriented government. For another thing, the border areas have been pursuing a development strategy of "making progress while maintaining stability". In recent years, the number of migrants has increased, ethnic relations have become complex, public health security incidents have increased, emergencies have occurred frequently, and smuggling and drug trafficking have become rampant. This requires the strengthening of public service functions, including promoting strategic security transfer payments in border areas and implementing equal public services such as education, medical care and relief at the border.

**Differentiating Functions-highlighting Border Features**

The basic level of the border area has its particularity in terms of geographical location, population distribution, and economic development. The specific manifestations are as follows:

Firstly, priority should be given to the provision of basic public services. Border areas generally have low levels of social development and relatively backward economic development. The current shortage of public goods is mainly reflected in infrastructure, disease prevention and control, control of illegal movement of people, family planning, and basic education. In addition to tangible public goods, intangible public goods are needed, such as policy laws, border trade regulations, and regulations for the management of floating populations. The provision of tangible public goods is promoted by the national recognition of public policies; The provision of intangible public goods will enhance the national recognition of the institutionalization of the country.

Secondly, special funds for financial transfer and payment in border areas. The opening of the post-tax era has also weakened the financial payments of grassroots regimes in border areas. Most of them only rely on transfer payments from higher levels of finance to maintain their daily expenses. It

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is unlikely that there will be excess energy to provide other public services. Therefore, there is not only a modest fiscal transfer, but also a need to ensure the provision of dedicated public services.

All in all, clarifying the function of the basic service government in the border area can provide the most basic basis for setting up the government performance indicator system.

Service-oriented Government Performance Indicator System in Border Areas

Government performance evaluation is one of the public management tools in the background of new public management. It was widely popular in Western countries in the 20th century. Local governments in China also began to explore government performance evaluation at the end of the 20th century. Government performance evaluation is based on performance goals, using a comprehensive evaluation indicator system and scientific evaluation methods. Activities that measure the results of the performance of public sector functions and their social effects according to a rigorous evaluation process, rank performance, propose performance improvement plans and apply the results of the evaluation to improve performance. Government performance evaluation has played a great role in improving the quality of public service, developing government responsibilities, and reducing administrative costs. The present situation of the performance indicator system of the border area government can be studied from two aspects: one is the current situation of theoretical research, and the other is the special applicability of border areas. Specifically:

Present Situation of Construction of Government Performance Indicator System

At the end of the 20th century, domestic scholars began to pay attention to government performance evaluation and initially introduced basic theories and Western practices. In recent years, with the rise of positivism, domestic scholars generally focus on how to construct the local government performance evaluation index system, and at the same time formed a relatively influential local government performance evaluation indicator system. As shown in the following table:

As can be seen from Table 1, the academic community is currently concerned with the design of a system of common indicators that can be used as a reference for grass-roots service-oriented governments in border areas, but cannot be replaced.

Special Applicability of the System of Performance Indicators in Border Areas

Of the 22,000 kilometers of land border, 19,000 kilometers are in ethnic minority areas, and 107 of the 135 border counties are ethnic autonomous areas. The border county borders 14 land countries, and more than 30 ethnic groups live with the same ethnic group abroad. Therefore, when constructing the performance indicator system of the basic service type government in the border area, we should not only consider the situation of the border area, but also take into account the ethnic characteristics of the border area.

Research Design

Establishment of Evaluation Index System Based on Performance Prism Model

As long as the system of performance indicators of the service-oriented government in the border area is constructed, the service-oriented government in the border area can be evaluated. Therefore, according to the five dimensions of the performance prism, the performance evaluation index system of the service type government in the border area is established, and the weight of the index is calculated by the AHP method.

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Figure 1. Performance Prism Model.

Table 1. Indicator System for Performance Evaluation of Basic Service Type Government in Border Areas.

<table>
<thead>
<tr>
<th>Level one indicators</th>
<th>Level two indicators</th>
<th>Level three indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contribution indicators (A1)</td>
<td>A11 Administrative management costs as a proportion of fiscal expenditure.</td>
</tr>
<tr>
<td></td>
<td>Public service indicators (A2)</td>
<td>A21 New rural cooperative medical coverage rate.</td>
</tr>
<tr>
<td></td>
<td>Process indicators (A3)</td>
<td>A31 Government information management level</td>
</tr>
<tr>
<td></td>
<td>Capacity indicators (A4)</td>
<td>A41 Emergency Response Capacity</td>
</tr>
<tr>
<td></td>
<td>Satisfaction indicators (A5)</td>
<td>A51 Civil service satisfaction</td>
</tr>
</tbody>
</table>

- A12 Wages of civil servants on duty as a proportion of fiscal expenditure.
- A13 Expenditures on selected public projects.
- A14 Public utility expenditure as a proportion of public expenditure.
- A15 Average length of training for civil servants.
- A16 Lead Team Learning and advice.
- A22 Proportion of educational institutions at all levels (primary, secondary and kindergarten).
- A23 Average annual skill training for farmer labourer.
- A24 Nine-year compulsory school dropout rate.
- A25 The degree of improvement about road, water, electricity, etc.
- A26 Social security coverage rate.
- A27 Rate of poverty reduction.
- A28 Public security.
- A29 Incidence of ethnic group incidents.
- A30 Number of compulsory drug addicts.
- A32 Level of organizational structure at the grass-roots level.
- A42 Institutional and Party Building Management Capacity.
- A43 Village Autonomy Guidance Capacity.
- A44 Maintenance Capacity.
- A45 Learning Capacity.
- A52 Satisfaction with the quality and level of administrative services.
- A53 Public interest realization satisfaction.
- A55 Satisfaction with government policies.
- A56 Media exposure correction rate.
- A57 Satisfaction with government information disclosure.

The application idea of the model: to clarify the contributions of stakeholders (to identify major stakeholders, analysis of their needs) - Organizational strategies adopted to meet stakeholders - Key business processes adopted to complete the organizational strategy - Corresponding organizational capabilities, To carry out the established process - The contribution of the stakeholder needed to develop the corresponding organizational capacity. 

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system of the basic service government in border areas, it means starting from the stakeholders (civil servants, organizations)-strategic indicators (public services)-process indicators (local construction)-capacity indicators (government internal management)-stakeholder satisfaction (civil servants, the public, enterprises). The logical causal chain of media. At the same time, the specific constructed indicator system is shown in Table 2 below:

**Construction of Mathematical Model**

Firstly, construct a judgment matrix. After the completion of the service government performance indicator system in border areas, it is necessary to construct the corresponding judgment matrix. In this paper, the construction of the judgment matrix uses T. Sita's 1-9 ratio scale method (relative importance scale) to quantitatively assign any two factors to the relative importance of a certain criterion, thus quantifying the decision maker’s subjective judgment. When the importance of the two comparative factors can be demonstrated by specific figures, the merits of the factors can be judged. T. Star's 1-9 ratio scale and meaning are shown in Table 3.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Comparison of indicator I and indicator J</th>
<th>instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$k_i$ and $k_j$ just as important</td>
<td>both are of equal importance to the goal</td>
</tr>
<tr>
<td>3</td>
<td>$k_i$ than $k_j$ slightly important</td>
<td>the difference between the two is slight.</td>
</tr>
<tr>
<td>5</td>
<td>$k_i$ than $k_j$ obviously important</td>
<td>the difference between the two is obvious</td>
</tr>
<tr>
<td>7</td>
<td>$k_i$ than $k_j$ strongly important</td>
<td>there is a strong difference between the two</td>
</tr>
<tr>
<td>9</td>
<td>$k_i$ than $k_j$ extremely important</td>
<td>the difference between the two is extreme</td>
</tr>
<tr>
<td>2, 4, 6, 8</td>
<td>the median value of the above two adjacent judgments</td>
<td>The judgment is between the two.</td>
</tr>
<tr>
<td></td>
<td>reciprocal factor $k_i$ and $k_j$ Comparative judgment $k_{ij} = 1/k_{ij}$</td>
<td></td>
</tr>
</tbody>
</table>

Secondly, level single sorting and one-time inspection. Calculating the hierarchical single ranking of each indicator, that is, determining the ranking weights of all factors in the same level relative to the relative importance of an element in the previous level. Through all comparisons, the importance weights of each layer are finally obtained. The value of the element reflects people’s understanding of the relative importance (merits, preferences, strengths, etc.) of each factor at the previous level. Finally, the total ranking is based on the single ranking data of each level, and the final ranking result is the combined weight that affects the performance evaluation. The core problem in AHP is to calculate the corresponding eigenvectors of the judgment matrix. The commonly used mathematical methods include "multiplication power method", "square root method", and "and product method". This paper proposes to adopt the square root method. The calculation process is as follows:

1. Calculate the geometric mean of all elements per line of the judgment matrix,
   $\sigma_i = \sqrt[n]{\prod_{j=1}^{n} a_{ij}} \quad i = 1, 2, \ldots, n$ (1)
   
   $\sigma_i = (\sigma_1, \sigma_2, \ldots, \sigma_n)^T$ (2)

2. $\sigma$ will be normalized, that is, calculated,
   $\omega_i = \sum_{j=1}^{n} \sigma_j \quad i = 1, 2, \ldots, n$ (3)

3. Calculate the maximum eigenvalue of the judgment matrix
Obtained $\mathbf{\sigma} = (\omega_1, \omega_2, \ldots, \omega_n)^T$, which is the approximate value of the desired feature vector, is also the relative weight of each factor.

(4) Check consistency. In order to test the consistency of the judgment Matrix, we first need to calculate the consistency index: $C.R. = \frac{C.I.}{R.I.}$, inside, $C.I. = (\lambda_{\text{max}} - n)/(n - 1)$ to compare matrix consistency indicators, $R.I$. For average random consistency indicators, the value is obtained by looking up the table(Table 3). When $C.R. < 0.1$, it can be judged that the hierarchical single sorting results have satisfactory consistency, otherwise the values of the elements of the judgment matrix need to be readjusted.

Table 3. R.I. Values for Multiorder Comparison Matrices.

<table>
<thead>
<tr>
<th>Order</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.I.</td>
<td>0</td>
<td>0</td>
<td>0.52</td>
<td>0.89</td>
<td>1.12</td>
<td>1.26</td>
<td>1.36</td>
<td>1.41</td>
<td>1.45</td>
</tr>
</tbody>
</table>

Through the above calculation, which analyses the performance indicators of grass-roots service-oriented governments in border areas, yields the following:

A1(0.2571), including 6 sub-indicators: A11(0.1861), A12(0.2093), A13(0.1628), A14(0.1395), A15(0.1861), A16(0.1162).

A2(0.2286), including 10 sub-indicators: A21(0.1143), A22(0.0857), A23(0.1000), A24(0.0715), A25(0.0857), A26(0.1000), A27(0.0857), A28(0.1143), A29(0.1285).

A3(0.2000), including 2 sub-indicators: A31(0.4667), A32(0.5333).

A4(0.1714), including 5 sub-indicators: A41(0.2308), A42(0.2051), A43(0.2051), A44(0.2051), A45(0.1539).

A5(0.1429), including 5 sub-indicators: A51(0.1667), A52(0.1458), A53(0.1250), A54(0.1042), A55(0.1458), A56(0.1667), A57(0.1458).

Summary

Combined with the above analysis and research, as a service-oriented government in the border areas, strategic planning can be made in the following areas:

Firstly, we need to re-organize and build a "mobile government." "Mobile government" refers to the government's initiative to send services to achieve the goal of "seamless" public services.

Secondly, personnel reform to improve the "government-civilian ratio." Due to its special geographical location and ecological environment, the government agencies in the border areas are not expanding as seriously as the developed areas, and some functional departments still have gaps.

Thirdly, we need to improve fiscal transfer capacity. Financial transfers must be considered in the short term for the financial capacity of the border areas. This includes basic public services (including basic government operating expenses, basic medical care, basic education, public health, etc.) and special public services (public security, stable petition, anti-AIDS, non-mobile population, border trade, etc.).

This paper constructs the service government performance index system in the border area through the performance mausoleum model, and uses the AHP method to assign weights and order, and finally proves its feasibility from the aspects of mobile government, personnel reform and financial transfer payment. As an exploratory research, it has a certain theoretical value and practical operation space.

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