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An Efficiency of Resource Allocation Research Based on DEA Within 30 Ethnic Minority Autonomous Prefectures

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Abstract. The 12th Five-Year is an important strategic opportunity period for the economic and social development in ethnic minority regions of China. The development strategy of ethnic minority areas should adhere to Scientific Outlook on Development as a guide, suit the measure to local condition, constantly optimize and improve the efficiency of resource allocation then further achieve economic and social scientific development with the national policy support for ethnic minorities. In this paper, the evaluation index system of input and output efficiency of resource allocation in Minority Autonomous Prefecture is established, and the DEA model is the main analysis tool for comparing China's resources allocation efficiency in 30 Ethnic Minority Autonomous Prefectures, and proposes some policy recommendations on optimization of resources allocation.
Keywords. DEA Model; Ethnic Minority Autonomous Prefecture; Resource Allocation.

1 Introduction

China is a multi-national country composed of 56 ethnic groups. To guarantee the construction and promotion of economic and social development in Ethnic Minority Areas, the Party and the Government design national regional autonomy system according to “Big Mixing-up, Small Inhabit” nation distribution characteristic and the historical evolution of Chinese nation. Among them, the ethnic minority autonomous prefecture is situated between the autonomy region and autonomy county level and unit, but also is a part of our local government. At present, there are 30 ethnic autonomous prefectures in Yunnan, Xinjiang and other nine provinces (see table 1).

Table 1. The Basic Situation of China's Ethnic Autonomous Prefecture.

Serial Number	Autonomous Prefecture	Affiliation	Establishment Time	State Capital
DMU_1	Korean Autonomous Prefecture of Yanbian	Jilin Province	1952-9-3	Yanji City
DMU_2	Tibetan Autonomous Prefecture of Ganan	Gansu Province	1953-10-1	Hezuo City
DMU_3	Hui Autonomous Prefecture of Linxia	Gansu Province	1956-11-19	Linxia City
DMU_4	Tibetan Autonomous Prefecture of Yushu	Qinghai Province	1951-12-25	Jiegu Town
DMU_5	Tibetan Autonomous Prefecture of Hainan	Qinghai Province	1953-12-6	Qiabuqia Town
DMU_6	Tibetan Autonomous Prefecture of Huangnan	Qinghai Province	1953-12-22	Longwu Town
DMU_7	Tibetan Autonomous Prefecture of Haibei	Qinghai Province	1953-12-31	Xihai Town
DMU_8	Tibetan Autonomous Prefecture of Golog	Qinghai Province	1954-1-1	Dawu Town
DMU_9	Haixi Mongolian Tibetan Autonomous Prefecture	Qinghai Province	1954-1-25	Delingha City
DMU_{10}	Bayinguoleng Mongolian Autonomous Prefecture	Xinjiang Province	1954-6-23	Korla City

DMU_{11}	Mongolian Autonomous Prefecture of Bortala	Xinjiang Province	1954-7-13	Bole City
DMU_{12}	Kirgiz Nationality Autonomous Prefecture	Xinjiang Province	1954-7-14	Artux City
DMU_{13}	Hui Autonomous Prefecture of Changji	Xinjiang Province	1954-7-15	Changji City
DMU_{14}	Yili Kazak Autonomous Prefecture	Xinjiang Province	1954-11-27	Yining City
DMU_{15}	Xiangxi Tujia and Miao Autonomous Prefecture	Hunan Province	1952-9-3	Jishou City
DMU_{16}	Enshi Tujia and Miao Autonomous Prefecture	Hubei Province	1983-12-1	Enshi City
DMU_{17}	Qiandongnan Miao and Dong Autonomous Prefecture	Guizhou Province	1956-7-23	Kaili City
DMU_{18}	Qianxinan Buyei and Miao Autonomous Prefecture	Guizhou Province	1982-5-1	Xingyi City
DMU_{19}	Qiannan Buyei and Miao Autonomous Prefecture	Guizhou Province	1956-8-8	Douyun City
DMU_{20}	Xishuangbanna Dai Autonomous Prefecture	Yunnan Province	1953-1-24	Jinghong City
DMU_{21}	Dai-Jingpo Autonomous Prefecture of Dehong	Yunnan Province	1953-7-24	Luxi Town
DMU_{22}	Lisu Autonomous Prefecture of Nujiang	Yunnan Province	1954-8-23	Lushui Town
DMU_{23}	Bai Autonomous Prefecture of Dali	Yunnan Province	1956-11-22	Dali City
DMU_{24}	Tibetan Autonomous Prefecture of Diqin	Yunnan Province	1957-9-13	Zhongdian County
DMU_{25}	Honghe Hani and Yi Autonomous Prefecture	Yunnan Province	1957-11-18	Mengzi County
DMU_{26}	Wenshan Zhuang and Miao Autonomous Prefecture	Yunnan Province	1958-4-1	Wenshan County
DMU_{27}	Yi Autonomous Prefecture of Chuxiong	Yunnan Province	1958-4-15	Chuxiong City
DMU_{28}	Tibetan Autonomous Prefecture of Ganze	Sichuan Province	1950-11-24	Kangding County
DMU_{29}	Aba Tibetan and Qiang Autonomous Prefecture	Sichuan Province	1953-1-1	Barkam County
DMU_{30}	Yi Autonomous Prefecture of Liangshan	Sichuan Province	1952-10-1	Xichang City

Decision of the Central Committee on Some Major Issues Concerning Comprehensively Deepening the Reform was adopted at the Third Plenary Session of the 18th Central Committee of the Communist Party of China in which "improving the general transfer payment growth mechanism, focusing on increasing the growth of the transfer payment to minority areas and poor areas, accelerating the improvement of modern market system" have been presented . China's natural resource bases are uneven in minority areas, the development degrees are different, economic and social development of ethnic minority regions are out of balance. This paper applies DEA model for quantitative comparison and analysis the resource allocation in ethnic autonomous prefectures in China in order to optimize the resources allocation, set some efficiency of differentiated support policy recommendations for the relevant government departments.

2 An analysis model of resource allocation efficiency in ethnic minority autonomous prefecture

Under specific product conditions, groups of various production factors inputs possible producing maximum output is the core of the economic production theory. The production possibility boundary which is described by production function in the production theory model is generally called production frontier. The gap between actual production status and production boundary reflects the efficiency level of the production, that is, the technical efficiency, which also is known as resource allocation efficiency, describes a degree of resource allocation for production factors. The study on measure of resource allocation efficiency began in 1957 by economist Farrell

Michaell, who oriented to production frontier ideas, developed and proposed the parametric method and non parametric method for research of the production frontier. Parameter method needs to construct a specific production function, which estimates the function parameters in production frontier, completes constructing the frontier function parameters; The non parametric method does not require prior assumptions and estimate parameters to structure the concrete function form, but observe a large number of actual data according to a certain production efficiency standard to find the relative effective point in production frontier.Non parametric effect of production frontier theory-Data Envelopment Analysis (abbreviated as DEA) is put forward by U.S economist A.Charnes et al to appraise relative validity of decision making unit in 1978,which also is an econometrics method.

2.1 C^2R Model and Comprehensive Efficiency Measure of Data Envelopment Analysis

Use DEA to determine the comprehensive efficiency of resources allocation, the general use of C^2R model was determined and described as follows:

There are n decision making units (DMU), each of which has a m DMU type of "input X", as well as S type of "output Y". Record the input variable of the first j DMU as $X_j = (x_{1j},x_{2j},\ldots,x_{mj})^T$,j =1, 2,... n; the output variable of first j DMU is recorded as $Y_j=(y_{1j},y_{2j}\ldots y_{nj})^T$, j =1, 2,... n.Using $(X_{j,}\ Y_{j)}$ represents the first j decision making unit $DMU_{j,}$ and its data structure is shown in table 2.

Table 2. N Decision Making Unit DMU Input and Output Data Structure.

v	DMU_1	DMU_2	…	DMU_n	u	DMU_1	DMU_2	…	DMUn
v_1	x_{11}	x_{12}	…	x_{1n}	u_1	y_{11}	y_{12}	…	y_{1n}
v_2	x_{21}	x_{22}	…	x_{2n}	u_2	y_{21}	y_{22}	…	y_{2n}
…	…	…	…	…	…	…	…	…	…
v_m	x_{m1}	x_{m2}	…	x_{mn}	u_s	Y_{s1}	Y_{s2}	…	Y_{sn}

Setting $v=(v_1,v_2\ldots v_n)^T$ represents m input indicator corresponding to the weight coeffective vector, Setting $u=(u_1,u_2\ldots u_s)^T$ represents s output indicator corresponding to the weight coeffective vector, so each decision making unit DMU_j has corresponding efficiency evaluation index:

$$h_j = \frac{u^T Y_j}{v^T X_j} \quad j=1,2,\ldots,n \tag{1}$$

Proper choice of the weight coeffective of v and u, makes them meet $h_j \le 1$, j =1,2, …., n. Evaluate the efficiency of j_0 decision making unit DMU_{j0} (X_0, Y_0).For any DMU_j, the production possibility set is :

$$T=\left\{(X,Y)\,\middle|\, \sum_{j=1}^{n} X_j\lambda_j \le X, \sum_{j=1}^{n} Y_j\lambda_j \geqq Y,\ \lambda_j \geqq 0, j=1,2,\ldots,n\right\}$$

Construct the following maximization model$(\bar{p})$):

$$(\bar{p})\begin{cases} \max h_o = \dfrac{u^T Y_0}{v^T x_0} = V_{\bar{p}} \\ \text{s.t.} \\ h_j = \dfrac{u^T Y_j}{v^T x_j} \le 1, j = 1,2\ldots,n \\ v \geqq 0, u \geqq 0 \end{cases} \tag{2}$$

let $t=1/(v^T X_0)$,w = tv,μ= tu, using Charnes-Cooper transformation, $\bar{p}$ can be described as an equivalent linear programming problem(P_1) (that is, C^2R model):

$$(P_1)\begin{cases} \max \mu^T Y_0 = V_{p1} \\ \text{s.t.} \\ w^{\tau} x_j - u^{\tau} Y_j \geqq 0, j = 1,2,\ldots,n \\ w^{\tau} x_0 = 1 \\ w \geqq 0,\ \mu \geqq 0 \end{cases} \tag{3}$$

Given the following C^2R model DEA effective definition:

If Optimal solution of linear programming problem$(P_1)w_0$ and u_0 meet $V_{p1}=u_0^T Y_0=1$,the DMU_{j0} is called weak DEA efficiency; if the linear planning problems (P_1) has an optimal solution of w_0 and u_0 meet the $V_{p1}= u_0^T Y_0=1, w_0>0, u_0>0$, DMU_{j0} is called DEA efficiency

The Non Aqi Mead infinitesimal ε is introduced into C^2R model which is described as $(P_{1\varepsilon})$:

$$(P_{1\varepsilon})\begin{cases} \max \mu^T Y_0 = V_{p1\varepsilon} \\ \text{s.t.} \\ w^{\tau} x_j - \mu^{\tau} Y_j \geqq 0, j = 1,2,\ldots,n, \\ w^{\tau} x_0 = 1 \\ w^t \geqq \varepsilon e^{-T},\ \mu^T \geqq \varepsilon e^{+T} \end{cases} \tag{4}$$

where, $e^{-T}= (1,1, \ldots,1)\in E_m, e^{+T}= (1,1,\ldots,1)\in E_s$, ε is Non Aqi Mead infinitesimal.
Introducing variable s^- And s^+, pairing C^2R model $(D_{1\varepsilon})$ is:

$$(D_{1\varepsilon})=\begin{cases} \min[\theta-\varepsilon(e^{-T}s^-+e^{+T}s^+)]=V_{D1\varepsilon} \\ s.t. \\ \sum_{j=1}^{n} X_j\lambda_j - s^- = \theta X_0 \\ \sum_{j=1}^{n} X_j\lambda_j - s^+ = X_0 \\ \lambda_j, j=1,2,\ldots,n \\ s^-\geqq 0, s^+\geqq 0 \end{cases} \quad (5)$$

Suppose the optimal solution of C^2R model $(D_{1\varepsilon})$ are λ^*, s^{-*}, s^{+*}, θ^*, when $\theta^*=1$, and $s^{-*}=0$, $s^{+*}=1$, the DMU_{J0} is DEA effective; when $\theta^*<1$ or $s^{-*}=0$, $s^{+*}\neq 1$, the DMU_{j0} is non DEA efficiency. According to $\mathbf{C^2R}$ model operation results $\theta(0\leq\theta\leq 1)$ is comprehensive efficiency of decision making unit.

2.2Data Envelopment Analysis BC2 Model and Scale Efficiency and Technical Efficiency Measurement

The scale efficiency and technical efficiency of resource allocation were determined by DEA, and the BC^2 model was used.

There is a hypothesis in prior C^2R model $(D_{1\varepsilon})$: C^2R model $(D_{1\varepsilon})$ is scale invariant, the hypothesis is very strict, and difficult to meet this condition in practice. So, adding a convexity assumptions in the C^2R model $(D_{1\varepsilon})$: $\sum_{j=1}^{n}\lambda_j=1$, then production possibility set becomes as follows:

$T_{BC^2}=\{(X,Y) \mid \sum_{j=1}^{n} X_j\lambda_j \leq X, \sum_{j=1}^{n} Y_j\lambda_j \geqq Y, \sum_{j=1}^{n}\lambda_j=1, \lambda_j\geqq 0, j=1,2,\ldots,n\}$

After removing cone condition in C^2R model, make DEA efficiency evaluation which is the input of the DEA model— the BC^2 model (P_2), bases on the production possibility set $T_{BC}^{2:}$

$$(P_2)\begin{cases} \max(\mu^t Y_0+u_0)=V_{P_2} \\ s.t. \\ w^T X_j-\mu^T Y_j-u_0\geqq 0, j=1,2,\ldots n \\ w^T x_0=1 \\ w\geqq 0, \mu\geqq 0 \end{cases} \quad (6)$$

And dual problem DEA model -- BC^2 model (D_2)

$$(D_2)\begin{cases} \min\theta=V_{D_2} \\ s.t. \\ \sum_{j=1}^{n} X_j\lambda_j\leq\theta X_0 \\ \sum_{j=1}^{n} Y_j\lambda_j\geqq Y_0 \\ \sum_{j=1}^{n}\lambda_j=1 \\ \lambda_j\geqq 0, j=1,2,\ldots,n \end{cases} \quad (7)$$

Introduce Non Aqi Mead infinitesimal ε in DEA model—BC^2 model,get BC^2 model$(P_{2\varepsilon})$:

$$(P_{2\varepsilon})\begin{cases} \max(\mu^T Y_0+\mu_0)=V_{P_{2\varepsilon}} \\ s.t. \\ w^T X_j-\mu^T Y_j-\mu_0\geqq 0, j=1,2,\ldots,n \\ w^T X_0=1 \\ w^{T\geqq\varepsilon e^{-T}}, \mu^T\geqq\varepsilon e^{+T} \end{cases} \quad (8)$$

Where, $e^{-T}= (1,1, \ldots,1)\in E_m, e^{+T}= (1,1,\ldots,1)\in E_s$, ε is the Non Aqi Mead infinitesimal.
when introduction of variable s^- and s^+, dual BC^2 model $(D_{2\varepsilon})$ is :

$$(D_{2\varepsilon})\begin{cases} \min[\theta-\varepsilon(e^{-T}s^-+e^{+T}s^+)]=V_{D_{2\varepsilon}} \\ s.t. \\ \sum_{j=1}^{n}\lambda_j X_j+s^-=\theta X_0 \\ \sum_{j=1}^{n}\lambda_j Y_j-s^+=Y_0 \\ \sum_{j=1}^{n}\lambda_j=1, \lambda_j\geqq 0, j=1,2,\ldots,n \\ s^-\geqq 0, s^+\geqq 0 \end{cases} \quad (9)$$

In which, $e^{-T}= (1,1, \ldots,1)\in E_m, e^{+T}= (1,1,\ldots,1)\in E_s$, ε is the Non Aqi Mead infinitesimal.

Suppose the optimal solution of C^2R model $(D_{2\varepsilon})$ are λ^*, s^{-*}, s^{+*}, θ^*, when $\theta^*=1$, and $s^{-*}=0$, $s^{+*}=1$, the DMU_{J0} is DEA effective; when $\theta^*<1$ or $s^{-*}=0$, $s^{+*}\neq 1$, the DMU_{j0} for non DEA effective.

In short, the previous $\mathbf{C^2R}$ model represents the comprehensive effect of the evaluated object, while the BC^2 model represents the technical efficiency of the evaluated object, that is, the BC^2 model operating results $\theta(0\leq\theta\leq1)$ is to be evaluated technical efficiency.

3 Evaluation indicators system of resource allocation efficiency in ethnic minority autonomous prefecture

Efficiency refers to the relationship between input and output or cost and benefit, and its essence is the general name of effective resources allocation, input versa output capability. the efficiency of evaluation object ,according to different purposes of study ,can be divided into technical efficiency, scale efficiency and comprehensive efficiency. Among them, the technical efficiency reflects the ability of the maximum output, while the scale efficiency reflects the suitability of the investment scale. Using $\mathbf{C^2R}$ model to determine the comprehensive efficiency and utilization $\mathbf{BC^2}$ models to determine the technical efficiency, can get scale efficiency = comprehensive efficiency/ technical efficiency, and then comprehensive measure evaluated object scale efficiency, technical efficiency and overall efficiency as well as efficiency comparison in similar evaluated object.

3.1 Input Indicator

Resource allocation efficiency of the input indicators mainly include three aspects of human, financial and material resources, capital investment and human capital which constitute the basic elements of economic development, especially the contradiction between economic development and demand for talent becomes an important factor restricting in minority areas. Generally selecting the number of people with a certain degree of education as a measure of indicator, this paper replaces permanent resident population as this indicator. China has increased the financial support to the minority regions, such as high speed growth of fixed assets investment and the scale of fiscal expenditure. Therefore, selection of permanent resident population, financial expenditure, fixed assets investment as Input Indicators to measure the efficiency of resources allocation.

3.2 Output Indicator

Local fiscal revenue is an indicator of regional comprehensive strength, which shows the financial resources of local government as well as a very important role in measuring the efficiency of resource allocation in a region. Average capita fiscal revenue is an important indicator to measure economic development and economic strength for a country or a region. GDP reflect the new creation value, and it is the final outcome of the national economic activities. Urban disposable income and rural per capita net income indicate free disposable income of urban residents and the development of rural economy, respectively. Therefore, in this paper, selection of local fiscal revenue, GDP, per capita income, urban disposable income ,rural per capita net income as output indicators for measure of resource allocation efficiency. The concrete index system is shown in Table 3

Table 3. Evaluation Index System of Resource Allocation Efficiency in Minority Autonomous Prefecture.

Primary Index	Secondary Index
Input	Permanent Resident Population
	Plant Asset Investment
	Per Capita Fiscal Expenditure
Output	Local Fiscal Revenue
	GDP
	Per Capita FiscalRevenue
	Urban Disposable Income
	Rural Per Capita Net Income

4 Determination of resource allocation efficiency based on the c2r model and bc2 model inminority autonomous prefecture

Import input indicators and output indicators data for 30 Minority Autonomous Prefecture into DEAP2.1 software, resource allocation efficiency results based on $\mathbf{C^2R}$ and $\mathbf{BC^2}$ model are showed in table 4.

Table 4 shows that the technical efficiency of the 30 minority autonomous prefecture is 0.918, the average technical efficiency is 0.949. From its resource allocation efficiency score, it’s known that a total of 18 ethnic autonomous prefectures are DEA effective, which represent resource allocation efficiency optimized when input fixed.

Among them there are 12 Minority Autonomous Prefecture of resource allocation with non DEA effective, DMU14, DMU15 pure technical efficiency value is 1.000, which indicate that the 2 Mnority Autonomous Prefecture with non DEA effective because of low scale efficiency, requiring reasonable control scale of investment to improve the efficiency of resource allocation; the comprehensive technical efficiency and pure technical efficiency of DMU_2, DMU_3, DMU_4, DMU_5, DMU_{16}, DMU_{17}, DMU_{19}, DMU_{21}, DMU_{28}, DMU_{29} do not equal to 1. 000, indicating that the non DEA effective results from not only inappropriate scale of inputs but also lower output level. According to the 10 Minority Autonomous Prefecture, the improvement measurements are put forward by introducing slack variables into DEA model. Analysis for Resource allocation efficiency in 30 Minority Autonomous Prefecture, non DEA effective accounts for 40%, which shows that there is a great potentiality in resource allocation in the Minority Autonomous Prefecture.

Table 4. Efficiency of Input-Output in China's Minority Autonomous Prefectures.

Decision Making Module	Technical Effective	Pure Technical Efficiency	Scale Efficiency	Appraisal Result	Scale Efficiency State
DMU_1	1.000	1.000	1.000	DEA Effective	Invariable
DMU_2	0.593	0.678	0.874	NonDEA Effective	Decreasing
DMU_3	0.603	0.620	0.974	Non DEA Effective	Decreasing
DMU_4	0.663	0.881	0.752	Non DEA Effective	Decreasing
DMU_5	0.779	0.817	0.954	Non DEA Effective	Decreasing
DMU_6	1.000	1.000	1.000	DEA Effective	Invariable
DMU_7	1.000	1.000	1.000	DEA Effective	Invariable
DMU_8	1.000	1.000	1.000	DEA Effective	Invariable
DMU_9	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{10}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{11}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{12}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{13}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{14}	0.943	1.000	0.943	Non DEA Effective	Decreasing
DMU_{15}	0.988	1.000	0.988	Non DEA Effective	Increasing
DMU_{16}	0.778	0.780	0.997	Non DEA Effective	Increasing
DMU_{17}	0.813	0.900	0.904	Non DEA Effective	Decreasing
DMU_{18}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{19}	0.899	0.942	0.955	Non DEA Effective	Decreasing
DMU_{20}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{21}	0.973	0.978	0.995	Non DEA Effective	Increasing
DMU_{22}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{23}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{24}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{25}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{26}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{27}	1.000	1.000	1.000	DEA Effective	Invariable
DMU_{28}	0.623	0.902	0.691	Non DEA Effective	Decreasing
DMU_{29}	0.818	0.979	0.836	Non DEA Effective	Decreasing
DMU_{30}	1.000	1.000	1.000	DEA Effective	Invariable

Average Value	0.918	0.949	0.964		

In 30 Minority Autonomous Prefecture, 18 0f which are scale efficiency invariable , 9 of which keep decreasing state,3 of which keep increasing state, and the proportion are 60%, 30% and 10% respectively.

Those show that the scale efficiency of the 30 minority autonomous prefecture keep the same or increasing state. The reason is that in recent years, China government increase input in Minority Autonomous Prefecture. For the Minority Autonomous Prefecture of decreasing scale efficiency, it should be appropriately controlled to increase output efficiency. For the Minority Autonomous Prefecture with increasing scale efficiency , it should be appropriate to expand the scale of investment in order to improve the efficiency of input-output.

5 Policy suggestion

From the above analysis, this paper proposes some suggestions to optimize Minority Autonomous Prefecture resource allocation efficiency.

5.1 Adhere to the Principles of Classified Guidance

The reasons for non DEA effective in Ethnic Minority Autonomous Prefecture resource allocation are different, therefore, we should first find out the factors ineffective of resource allocation, then optimize resources allocation measures in the Minority Autonomous Prefecture to improve the efficiency of resource allocation. In view of the low efficiency of resource allocation, the investment scale of fixed assets should be controlled, guide direction of investment, optimize the structure of fiscal expenditure and establish the regional economic and social development to match the personnel training plan, strengthen the construction of talent team according to the actual need; for resource allocation problems resulting from pure technical efficiency, not only need reasonable adjustments of fixed assets, fiscal expenditure scale and structure, but also pay attention to strengthen the building of local resources, maintain a certain economic growth rate, improve urban disposable income and rural per capita income to improve the efficiency of resource allocation.

5.2 Implement of Differentiated National Support Policies

China's natural resource bases in ethnic minority regions are with traits of uneven, different levels of economic and social development, weak self accumulation capacity, especially require funding support. But the "GSP" financial support without considering the actual needs of local, the pertinence is not strong. Therefore, it should differentiate national funds support policy, establish national regions transfer payment mechanism according to the input redundancy and output shortfall analysis results; determine funding support level according to actual demands. All those can effectively improve the efficiency of resource allocation in minority regions.

5.3 Multiple Supports for Economic and Social Development in Minority Areas

The factors that affect the efficiency of resource allocation in ethnic areas from many aspects, such as insufficient investment scale, irrational industrial structure, uneven educational level and the difficulty of talent introduction, which affect their economic and social development. Resource allocation in minority areas needs national policy support, financial support, education and personnel support, but in every minority area of specific performance is not identical from only unilateral financial support to a full range of support. Therefore, when the state and the government take specific support steps for the minority regions, it is necessary to consider natural resource endowment, the degree of market development, economic and social development level, self accumulated ability factors. The implementation of multiple support programs, abandoning "foot painful medicine foot" and "headache medicine head".

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