
Internal Mechanism and Anti-poverty Strategy of Impoverished Farmers and Herders in China's Ethnic Area*

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Abstract:

Although the impoverished population has sharply decreased stepping with China's continuous anti-poverty policies, in western ethnic areas which belongs to Qinghai-Tibet Plateau, the large scale poverty may be still serious. After using a mixed method of quantitative and qualitative technologies, this study finishes an empirical research aiming at the southern ethnic county of Gansu Province. The study finds that a wide range of poverty in China's minority region can be clearly observed in their income, property and livelihood, the internal mechanism of impoverishment mainly depends on cultural and structural factors, and current anti-poverty strategies have a serious defect in policy tendency. This study suggests that China should attach more attention to anti-poverty work in western ethnic area, promote the cultural anti-poverty strategy as soon as possible, and gradually strengthen the effectiveness of anti-poverty policy.

Key Words: China's Ethnic Area; Farmers and Herders; Poverty Situation; Internal Mechanism; Anti-poverty Strategy

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1. RESEARCH QUESTION

Poverty is a widely-accepted chronic disease of human society, and to effectively reduce impoverished population with institutional arrangements is the basic goal of social policy in the world, which is especially true for developing countries like China. Since the reform and opening up in 1978, China's impoverished population in rural areas has declined significantly along with the ongoing rapid economic advancement and continuous anti-poverty policies. Calculated in accordance with the international standards of per capita daily income of \$1, China's rural impoverished population from 1978 to 1993 rapidly reduced from 250 million to about 80 million, and the impoverishment rate also decreased from 31.0% to 8.8% (Yang, 1995). In 2007, rural poverty population declined further to about 20 million, with rural impoverishment rate being only 2.5% (Fang & Zhang, 2007). And calculated with China's national standard of 2300 CNY in one year, China's rural impoverished population reduced from 165.67 million to 98.99 million between 1990 and 2012, accounting for approximately 76.1% of the global poverty reduction over the same period (NUDP, 2015). Therefore, it is evident that China's anti-poverty policies have not only effectively improved the living quality of its agricultural population, but also made a great contribution to the worldwide anti-poverty target.

Although a great progress has been finished, China's central government also has to face with a huge task of anti-poverty in some rural areas. In the year of 2015, the vast majority of these impoverished people are distributed in 14 linked destitute regions and 592 state-level poverty-stricken counties in the remote Midwest areas, ethnic areas and border areas. According to the statistics of linked destitute regions, eight regions, such as Shaanxi-Sichuan region, Tibetan autonomous region, four-provincial Tibetan region, south Xinjiang region, Liupan Mountain region, Wumeng Mountain region, Yunnan-Guizhou-Guanxi rocky desertification region and south Yunnan border region, are located in the western minority areas, where their per capita net income is only half of the national average level. As for the state-level poverty counties, 63.345% of them are in China's western provinces, while 59.733% of which are ethnic minority counties, with Inner Mongolia, Guangxi, Ningxia, Qinghai, Sichuan, Guizhou, Yunnan and Gansu being most striking. Data above indicates that the priority must be given to the western ethnic region in Chinese government's combating against rural poverty, and special attention must be paid to the ethnic minority districts in this region. Therefore, the effectiveness of anti-poverty policy will be of great strategic significance not only to the success of China's poverty alleviation but also to the national fusion and social stability.

Frankly to say, Chinese governments have improved their attentions to their anti-poverty strategies in ethnic regions in recent years, with thousands of millions money and special economic incentive policies implementing in all the ethnic areas. As a representative of the minority-inhabited areas, the eastern edge of Qinghai-Tibet Plateau region is one of China's 14 concentrated destitute regions, and is also China's one of the most important anti-poverty

battlefield, this is why nearly eight billions CNY has been put in by Chinese governments in my researching county since 2010. However, existing government's report have found that although the per capita GDP has been advanced of 21.796% annually from 2006 to 2010, a wide range of poverty have been still serious, the per capita income of agricultural population in this region have not reached 50% of the national average, and the poverty rate has still surpassed nearly 60% in 2010, which seems to be a doubtful question in the conflict between the huge investigation and the high poverty rate. At the same time, the anti-poverty effect has also been worsen and worsen recently based on the high rapid economic growth, from 2010 to 2013 the per capita GDP has been improved of 54.558% annually, whereas the poverty rate has also maintained over 30% above, which also puzzled local governments so much. Regrettably, high quality exploration of the impoverishment mechanism of agro-pastoralists in China's western ethnic region and in-depth reflection on the anti-poverty strategy are still far from sufficient in our academia, and two significant practical confusions can not be properly expended, this is why my research wants to focus on this issue.

2. LITERATURE REVIEW

Theoretically, discussion about the mechanism of impoverishment has always been the core issue of international academic research and gradually formed three relatively mature analysis approaches nowadays: (1) Structural paradigm. Related study of this paradigm appeared as early as in the late 19th century, which explores poverty issues by bringing them into the social structure with functionalism, conflict theory and post-structuralism as its major framework of theoretical analysis. Accordingly, such researches either take poverty as an inevitable outcome of the operational process of economic society (Davis & Moore, 1945), or claims that poverty is the result of unequal ownership of the means of production (Lensiki, 1984), or insists that poverty is closely linked with limited labor market (Gordon, 1973). (2) Cultural paradigm. Such paradigm, which centers their discussions around such factors as the cultural cognitions, cultural exchanges or cultural capital of the poor, are relatively traditional, believing that the mechanism of impoverishment is associated with the cultural characteristics of the poor. They generally believed that the "subculture" of the poor is the deep incentives that caused the individual poverty and poverty intergenerational transfer (Harrington, 1962; Levis, 1969; Gans, 1972), holding strongly that the limited cultural capital of the poor intensified their poverty conditions (Bourdieu, 1986). (3) Exclusive paradigm. Originally, this paradigm came from the stratification theory of the structural paradigm, but it has developed into an independent analytical framework after 1990s. On the whole, this paradigm believes that poverty is not only characterized by material shortage, but also by being rejected by the mainstream society (Gordon, 2000; Peace, 2001). It emphasizes that the major causes of impoverishment are the lack of social capital (Narayan, 1999), insufficiency of social opportunities (Sen, 2000) and ineffective social support (Silver, 1994).

Complementing with the western research, researches on the mechanism of impoverishment in Chinese academic circles are relatively mature, and agree to a large extent with those of the

Western academia. (1) Structural paradigm. As the mainstream theory of poverty studies in China since mid 1980s, structural paradigm adheres to regarding poverty as the basic product of social structure, and sums up that the impoverishment in China is mainly due to the shortage of labor capacity (Xu, Liu, & Zhang, 2007), the unsound mechanism of social allocation (Hu, Hu, & Chang, 2006), and the limitations of regional labor market (Zhang, Ouyang & Wang, 2001). (2) Cultural paradigm. Introduced into China by the end of 1980s, this paradigm has also become a major theoretical framework in poverty studies. It generally believes that the issues of poverty in China should be ascribed to the “subculture” of the poor, attributing their impoverishment mainly to the backwardness of their cultural cognitions (Jia, 1999), their resistance to modern cultures (Wang, 2005) and the inadequacy of their cultural capital (Hu & Li, 2001). Of course, in recent years, this paradigm also began to emphasize the helpful effect of the poverty culture on reducing the psychological stress of the poor (Fu & Di, 2002; Fang, 2012). (3) Exclusive paradigm. Since the late 1990s, exclusive paradigm began to spring up in China. It re-interpreted the concept of poverty on the basis of its traditional meaning (Tang, 2002) claiming that the limitations of social capital (Zheng, 2007), the inadequacy of social engagement (Peng, 2006) and the deficiency of social supports (Tang, Zhu, & Ren, 1999) are the main causes of impoverishment in China.

Unfortunately, however, although both international and domestic academic circles had drilled the issue of impoverishment mechanism from three dimensions of the above mentioned paradigms, discussions about the poverty problem of farmers and herdsmen in China's western ethnic region is relatively simple. We can roughly conclude it in three types: (1) Discussion on the poverty situation of agro-pastoralists. Such research focuses on the exploration of the farmers' and herdsmen's income and living conditions with a general description, and always claims that the agro-pastoralists' poverty level is already quite serious (Yan, Wu, & Zhang, 2010; Yang & Li, 2013). (2) The analysis of farmers and herdsmen's individuals capability of overcoming poverty. This kind of research makes a qualitative observation on the agro-pastoralists' consciousness of getting rid of poverty, and finds that their capability of anti-poverty has greater limitations (Lang, 2013; An, 2013). (3) Discussions on anti-poverty policies for farmers and herdsmen. This kind of studies pay more attention to the anti-poverty mechanism of agricultural and pastoral areas under the policy dimension, and tries to reveal the future policy trend through systematic assessment of public policies (Sonam, 2013; Yang & Zhu, 2014). Through these three perspectives, China's academia has taken a preliminary study on farmers and herdsmen in ethnic region, and finished a general description on their poverty situation and anti-poverty ability.

By observing the three research dimensions above, it is not difficult to find that although the existing discussions are helpful in understanding the poverty situation of the farmers and herdsmen, but as a whole, there are still three obvious defects: First of all, from the point of view of research topics, current studies are more likely to adopt descriptive or exploratory research methods to observe the poverty situation or the transformation of livelihoods, but they

are not able to reveal the internal mechanism of the formation of poverty from the perspective of explanatory research, which is obviously adverse to the clear understanding of the inherent logic of anti-poverty in ethnic minority areas. Secondly, from the point of view of research design, current studies of the poverty problem of farmers and herdsmen in China fails to integrated with mature theoretical paradigm, therefore, the existing study could not provide localized test for related theory. This is not only against the comprehensive comparison of the differences among different causes of poverty, but also harmful to rethink the uniqueness of anti-poverty movement in China's minority region. Finally, from the point of view of research methods, the existing researches, due to the great difficulty of investigating farmers and herdsmen, carry out empirical investigation mainly with qualitative research and fail to conduct quantitative discussions, which not only make the represent activeness of the research conclusion doubtful, but also make direct and clear comparisons of the inducement of impoverishment difficult. For this reason, the present study, by employing the above mentioned three analytical paradigms with both qualitative and quantitative empirical investigations, will give an in-depth analysis of the internal mechanism of impoverishment of the farmers and herders, and advance its theoretical suggestions on the basis of examining the existing anti-poverty strategies.

3. RESEARCH DESIGN

3.1 Survey Sites and Sample Data

The data of this study comes from the empirical investigation of Luqū County in Gansu province from July 2013 to March 2015. The survey mainly focuses on the current poverty situation of impoverished agricultural population, the mechanism of their impoverishment, and the effectiveness of governmental anti-poverty policy, with the triangulation process combining quantitative and qualitative research methods. My researching site Luqū County, located in the eastern edge of the Qinghai-Tibet Plateau with an average elevation of 3500 meters, is a typical agriculture-nomad area of western ethnic region, 76.555% of the land total being covered by pasture. As a typical minority-inhabited area, there are two towns and five townships under the jurisdiction and the jurisdiction area is 5298 square kilometers, minority population accounting for over 90% of the total population. By the end of 2010, per capita GDP of my researching site is about 86.129% of the average level of Gansu province, and about 47.499% of the national average. Calculated with the national poverty line 2300 CNY, the poverty rate in 2010 accounting for 59.712%, of which 73.274% is the husbandry population. This research puts target on the impoverished agricultural population, and views the person who enjoy national or provincial social relieve funds as the aiming group.

As for the sample data of the study, the distribution of the indicators basically conforms to the predetermined sampling frame: (1) Regional distribution. The surveyed population in Gahai, Langmusi and Maai, the three more developed towns, occupied 31.927% of the total, while in Larenguan, Shuangcha, Xicang and Ala, the four relatively backward areas, nearly accounted

for 70%. The distribution of the sample basically matches with the overall proportion of the poor. (2) Ethnic distribution. The proportions of the surveyed population of the Han nationality is 0.456%, the Hui 1.140%, and the Tibetan 98.404 %, slightly higher than its ratio of the total population. (3) Gender distribution. Since the chances of men as the main labor force are higher than that of women, so the proportion of male respondents occupies 81.072% of the overall proportion and the proportion of female respondents is 18.928%. (4) The scale of family. The ratio of surveyed families with 3 members or below is 17.446%, with 4 to 7 members roughly reaches 74.572%, with 8 members or above is 7.982%.

3.2. Index System and Variable Design

From the perspective of index system, the index design in this research combines the dependent variable and independent variable, in which the dependent variable refers to the poverty level of the farmers and herdsmen. At present, there are some cognitive differences in the definition and measurement of poverty level, but mainly in three dimensions, namely income orientation, assets orientation and livelihood orientation. (1) Income-oriented assessment criteria advanced by Rowntree in 1901, now has generally been recognized as an official standard for poverty measurement after being adjusted by different scholars (Geodhart, 1977; Bernard, 1980) and, it has also been adopted by China's official poverty alleviation institution. (2) Assets orientation comes from Sherraden (2005) who insists that assets, instead of income, is the sole criterion for testing poverty and regards assets as the basic means of measuring poverty. (3) The livelihood orientation is mainly from such scholars as Townsend, Sen and etc., which often perceives the material and spiritual deficiency as poverty (Townsend, 1979) and uses livelihood deficiency as the main evaluating index in the actual process of measurement (Sen, 1976). Based on existing poverty measuring standards and the property accumulation pattern, this research tries to define the dependent variables from three above-mentioned aspects. The measuring formula of the poverty level of each farmer and herdsmen can be expressed as $Y = y_{income} + y_{asset} + y_{livelihood}$: the higher numerical value is, the more limited the agro-pastoralists' poverty level will be.

The design of independent variables, by contrast, is relatively complex (as in table 1). This research, on the basis of the analytical paradigms of impoverishment discussed in literature review, set the independent variable as control variable, structural variable, cultural variable and exclusive variable, which can be expressed as: $Y = \alpha_0 + \alpha_1 \chi_1 + \alpha_2 \chi_2 + \alpha_3 \chi_3 + \alpha_4 \chi_4 + \varepsilon_i$. Among them, the control variables (χ_1) mainly inspects demographic factors and stresses the observation of the impacts of such variables as regional, nationality, gender and population factors on poverty; Structural variables (χ_2), by incorporating with the basic theories of Davis, Lenski and Gordon, use human capital, means of production and labor market as the main evaluation indices. Cultural factors (χ_3) pay more attention to the observation of the association between poverty and culture. Combined with related views of Bourdieu, Lewis and Harrington, the current study subdivides independent variables into cultural capital, cultural idea and cultural exchanges. The exclusive variables (χ_4) mainly focus on the exclusion of agro-pastoralist from the mainstream society.

Integrated with the viewpoints of Narayan, Sen and Silver, the study chooses social capital, social inclusion and social support as indexes under test.

3.3. Research Method and Numerical Calculation

Traditionally, there is a wide range of disputes between quantitative and qualitative methods in social sciences. The former can deduce the whole by analyzing some representative samples, but it is difficult to obtain more in-depth information. The latter is conducive to explore the deep-seated causes of a certain social event, but the conclusions are not always universal. Recent years have witnessed the rising of Triangulation method which combines both quantitative and qualitative methods. This method is helpful to reconcile the contradiction between the two methods and patch up each other's problems. Therefore, my study also adopts it as the research methodology. In the process of data collection, this research mainly takes the method of stratified sampling, with poor agro-pastoralists of 7 towns of Luqū County as its observation object. The questionnaire is done in the way of investigators' assisting to fill in the answers and recalling on the spot with the coordination of the local government. Results 900 questionnaires were and 877 effective recalled, effective rate being about 97.444%. In the process of qualitative data collection, this study adopts unstructured interview, communicating with the respondents via the research team's Tibetan interpreters. And makes discourse analysis of the interview data of 30 people primarily from government staffs, wealthy agro-pastoralists and poor agricultural population.

From the perspective of quantitative data analysis, the study starts its discussion through descriptive statistics, means analysis and logistic regression analysis. The descriptive statistics is used in the calculation of basic data and mainly focuses on the comparison between specific proportional relation; means analysis lays particular emphasis on the measurement of the average of groups and mainly quantifies the poverty level of different groups; logistic regression analysis is applied to causal explanation, mainly being used to discuss the impoverishment inducements of farmers and herdsmen. In the descriptive statistics, the study calculates poverty optimization range of the class populace i compared to the class j populace by percentage mode. The formula can be expressed as $p_{i-j} = (p_i - p_j) / p_i$ ($0 \leq p_i \leq p_j$). In the process of means analysis, the study gets anti-poverty index by aggregating the three sub-variables, the higher the score the lower the poverty level of the individual. And in the measurement of the logistic regression, the score of dependent variables is divided into binary variables in accordance with the limit of 50%. Samples with score less than 50% of the scoring rate (Y') are assigned to zero; samples with score equal to or higher than 50% is assigned to 1.

4. EMPIRICAL ANALYSIS AND IN-DEPTH DISCUSSION

4.1. Poverty Situation of the Respondents

The quantitative research on poverty degree of 877 respondents finds that their income, assets and living conditions are all threatened by poverty: (1) Individual income. The per capita

income of the current respondents is only 1898 CNY in one year, a gap of 21.166% compared with the national minimum poverty line 2300 CNY. From the perspective of per capita income distribution, about 14.139% of families' per capita income is below 1700 CNY, and 78.107% of families' per capita income is in the range of 1701 CNY to 2000 CNY. In the measurement of seven towns and townships, per capita income fluctuates within the range of 1798 to 2005 CNY, which proved that the overall income is relatively limited. (2) Family assets. The study finds that the per capita assets of respondents is 2330 CNY, of which the ratio of assets being below 2,000 CNY is 30.673%, between 2001 to 4000 CNY 66.933%, while over 4001 CNY only 2.394%. In the measurement of 7 towns and townships, the per capita assets ranges are all between 2031 and 2639 CNY, the general situation of each township being similar. (3) Poverty condition. The per capita housing area of respondents is 15.870 square meters, about 24.287% of whose per capita area is 10 square meters below, while 58.609% being around 20 square meters or below; the average residential length of the respondents in the whole county is 15.281 years, among which those having moved in within 10 years only account for 26.454% of the total number, and those having moved in more than 30 years take up 12.087%. At the same time, the proportion of electricity, water, ventilation in each village and towns are respectively 88.940%, 35.804% and 10.034%, the average proportion of possession of television, refrigerator and washing machine being respectively 54.048%, 7.982% and 5.359%.

Qualitative research results are similar. The study finds that the differentiation of economy of farmers and herdsmen in this region is exceptionally severe, and poor farmers and herdsmen have showed definite fragility in the measurement of sub index: (1) Individual income. The rich farmers and herdsmen tend to have an annual income of more than 50000 CNY, their income mainly comes from the pasture, house lease, Chinese caterpillar fungus and herding, and often operate in the manner of agricultural cooperative. The annual household income of poor farmers and herdsmen is roughly 10000 to 15000 CNY, mostly relying on grassland leasing, grass subsidies and social relieves as their main incomes. Considering the general family member in this region is 5 or above, their per capita income is often less than 2300 CNY. (2) Family assets. Currently, assets of wealthy farmers and herdsmen are not abundant due to their living habits being more inclined to consumption rather than accumulation. The vast majority of them have limit amount of assets except very few specific families can reach 200000 CNY. At the same time, the assets of poor farmers and herdsmen are not optimistic. The deposits of most poor households are less than 5000 CNY, and the number of cattle and sheep is also very limited and they often have had to rely on national subsidy. (3) Poverty condition. Rich peasants and herdsmen are far ahead of other people in the adequacy of household facilities. They not only have housing facilities such as kitchen, toilet, other types of facilities are also complete in terms of the domestic installation and production facilities except computers (the reason may be that there is no stable network) and electric vehicles (because the demand is not strong). In contrast, the houses of poor farmers and herdsmen tend to have been occupied for more than 20 years, and they generally don't have other household electrical appliances except televisions and mobile phones, and the living and production facilities are very simple.

4.2 Mechanism of Impoverishment under the Perspective of Quantitative Study

The study of impoverished farmers and herdsmen discovers that the poverty situation of this group is more severe and they are faced with greater risks in terms of income, assets and livelihood status. However, a simple overview description cannot produce an in-depth analysis of the mechanism of impoverishment behind the poverty phenomenon but still needs quantitative techniques to analyze the impoverishment process of agro-pastoralist, so as to provide theoretical guides to the future anti-poverty policies.

Research first finds that (shown in Table 2) impoverishment causes of agro-pastoralist in my researching site gradually reduce in the sequence of cultural factors, structural factors and exclusive factors: (1) According to the analytical results of model 1, cultural factors have the most universal influence on poverty, its three sub-indices all presenting the significance of 0.000 and the optimized amplitude reaching 11.102%, 8.426% and 7.018% respectively, which demonstrates that the cultural factor is the most universal impoverishment causes of farmers and herdsmen. Structural factors have much influence too, with its three sub-indices presenting 0.037, 0.000 and 0.000 of significance in the analysis of stage 3, the latter two indicators also have a regression significance of 0.000 in the measurement of the whole mode. Together with their optimization of 28.120% and 14.663%, it indicates that structural factors also have a strong impact on the formation of poverty. The effect of exclusive factors is the most limited one, with the regression significance of its three sub-indexes being respectively 0.219, 0.710 and 0.168, and group optimization being only 0.955%, 2.140% and 3.480%. (2) Measurement results of classification model further imply that farmers' and herdsmen's income subjects to a wide influence of structural factors, cultural factors and exclusive factors. Among which, the results of the first two are similar to the overall model, but the exclusive factors generally present a negative causal relationship, which implies that going out as migrant workers or joining in agricultural cooperatives has no more help for their own income. Promoting their integration into modern production mode blindly is detrimental to the improvement of their income before they change their cognitive competence. In the analysis of assets issue, the study finds that the impact of various factors on the farmers and herdsmen is limited; the underlying reason is that the accumulation of the wealth of farmers and herdsmen still gives priority to material accumulation. Instead, the livelihood of farmers and herdsmen is strongly affected by structural and cultural factors. The significance of the sub-indexes has all reached 0.05 below, optimizing range are all above 10%. It shows that the living condition of farmers and herdsmen has a greater association with the access to resources and cultural cognition. (3) In the area of control variables, we can also argue that the poverty level of agro-pastoralist group subjects significantly to family population. The total means significance and optimizing range are respectively 0.000 and 19.107%, and the regression significance in the measurement of its three sub-models accounts for 0.064, 0.000 and 0.001. It shows that family population has a clear negative effect on the poverty governance of the farmers and herdsmen and children born in poor families can easily become their economic burden rather than effective productivity.

Table 3 further demonstrates that different types of areas have a significant difference in terms of the mechanism of impoverishment: (1) Studies find that farmers and herdsmen of pure pastoral areas¹ have 1.459% anti-poverty advantages compared with those from farming – pastoral regions, which are mainly reflected in the livelihood indicators on 11.841% margin. From the perspective of per capita assets and per capita income, thus, farmers and herdsmen of pure pastoral areas are respectively with 14.663% and 3.085% of disadvantages, illustrating that they are more often inclined to consumption rather than wealth accumulation. (2) Agro-pastoralists of farming – pastoral region are affected less by structural factors, and regression significance of its three indexes are 0.220, 0.631 and 0.497, amplitude of group differences are 1.393%, 28.399% and 3.518%. All data above indicate that the influence of overall effect is limited except for the means of production. The impact of cultural variables is more common, with a regression significance of cultural capital and cultural exchange being both 0.000, and the magnitude of the difference between the two are up to 24.307% and 13.840%. The effect of exclusive factors is slightly small, the differentiated significance of its three indicators are 0.002, 0.114 and 0.150, and the magnitude of the difference are respectively 6.225%, 3.245% and 0.767%, showing that farmers and herdsmen with experiences of outgoing tend to have stronger anti-poverty ability. (3) Structural factors have a strong impact on pure pastoral areas. The significant effect of means of production and labor market has reached 0.001 and 0.000 respectively and the magnitude of the impacts are 28.416% and 6.306%, reflecting that farmers and herdsmen with better means of production and being more competitive in labor market are more likely to have the advantage of anti-poverty. The differentiated significance of cultural capital and cultural cognitions are 0.092 and 0.012, combining with the optimizing amplitude of 7.155% and 5.751%, we can find that the optimization of both have prominent effect on reducing the poverty situation of the farmers and herdsmen of this type. However, exclusive factors don't show any remarkable significance in actual measurement, which reflects that the influential effect of this factor is limited.

Two basic rules have also been found in Table 4 through the analysis of the farmers and herdsmen who are in different trade with two logistic models: (1) Although the overall poverty causes are affected strongly by cultural factors, the two kinds of people still have obvious differences in the mechanism of impoverishment. The study finds that cultural cognitions and cultural capital can form regression significance of 0.000 and 0.000 for the poverty of the agricultural population, the amplitude of group difference having reached 11.263% and 24.682% respectively. Meanwhile, the impact of social capital on the agricultural population is also relatively clear, and its regression significance of 0.001 and group differences of 6.497% show that the impact of this index is more definite. On the contrary, the differences existing in the structural factors within the group is very limited, three indexes presenting a regression

¹ The definition of farming-pastoral region and pure pasturing area in this study derived from *The Five-year Implementation Plan of Eliminating for the Important Districts of Luqū County's Anti-poverty Project*, including agricultural and pastoral areas of Xicang, Allah and Shuangcha township, pure pastoral areas for Langmusi town, Gahai township, Maai town and Larenguan township.

significance of 0.144, 0.640 and 0.202 respectively which can be concluded that its structural factors have little effect. (2) At the same time, the influencing elements are mainly concentrated on the cultural and structural factors in the measurement of herdsmen, of which cultural cognitions and cultural capital present a regression significance of 0.001 and 0.079 respectively, and the impact of labor materials and labor market on pastoralists respectively can reach 0.000 and 0.002. It shows the dependence of herdsmen on pasture resources is more urgent compared with the agricultural population, and also, has greater demand for the maturity of labor market and infrastructure construction. (3) Family size has different effect on the two categories of people. It is found that the effect of family size on the agricultural population is negative. With a significance of 0.000 and a regression coefficient of -0.285, it indicates that family population growth will become an economic burden on the group, which reflects that the limited land area and land production often cannot promote the newborn agricultural population into effective labor force. The case of herdsmen group is more optimistic: its significance level is not under 0.1 and its regression coefficient has reached 0.069, indicating that the impact of the animal husbandry population growth on the group is not big, which reflects that more pasture area and lower threshold for production mode enables the family population to transfer into effective labor.

4.3 Mechanism of Impoverishment under the Perspective of Qualitative Study

The impoverishment mechanism is dominated by structural factors and cultural factors based on the quantitative research, exclusive factors seems to be so limited, and there are certain differences between different types of agro-pastoralists, which demonstrates the unique intrinsic logic of anti-poverty issue in China's western ethnic region. On this basis, the study hopes to explore further the mechanism of impoverishment of farmers and herdsmen by qualitative research, aiming to look into the overall causes of poverty through a three-dimensional perspective of the governors, rich population and impoverished population.

As the undertaker of anti-poverty work, government staffs frequently show their strongest consent to cultural factors' being the major causes of the impoverishment of agro-pastoralists. *"I believe two matters result in the impoverishment of the agro-pastoralists: first, no skills. Many of them are not skilled except grazing. The second is lazy. No matter how the government mobilized them, and to be true, sometimes the government really exerts great efforts in mobilizing them, but they just have no reaction--just don't do anything. Who do you think should be blamed for their poverty?"* said Mr. Ma, a government staff, who expressed his greater consent to the cultural factors' impact on the agro-pastoralists' poverty, believing that the lack of cultural capital and backward cultural cognitions are the primary causes of their poverty. *"Causes for agro-pastoralists' poverty are various: on one hand, they are poor at skills due to less educational opportunity and low educational level, so they lack ways of getting rich and only rely on herding passed down from generation to generation. On the other hand, most of them have no ideas about what economy means but seek after pleasures, plus, they are very closed, so they can only live on flocks and herds as well as ecological subsidies,"*

said Mr. Li, another government staff, who expressed the similar ideas to that of Mr. Ma, reflecting that government staffs share views to this issue. And, of course, some of the staff's viewpoints, such as Mr. Ye', reflect structural characteristics, which attributed the main cause of poverty to the factors such as industrial structure, means of production, etc., and made classifications of pastoral area and farming-pastoral area. *"Our County is sparsely populated with a relatively large jurisdiction and the level of economic development is limited. Some farming pastoral areas are too remote with very low agricultural production, so there is a lot of poverty. The difficulty in some pure pastoral areas is also huge: they are, with high altitude, low temperature and heavy snowfall weather, more prone to natural disasters, plus weak infrastructure and high cost of living, and easy to cause poverty."* On the whole, the government staffs tend to summarize the major causes of poverty as cultural factors, structural factors having also been slightly involved, but exclusive factors never been mentioned at all.

Observed from the perspective of rich agro-pastoralists, this study can find cultural and structural factors are still the most frequently mentioned causes of poverty, and also, exclusive factors were mentioned slightly. *"Illness, lacking of labor forces, injuries and disability result in the poverty of some minimal assurance families. Most of today's young people choose to graze because of stability, while some people are forced to do so due to the lack of funds to starting a business."* Mr. Gongqu, a village cadre who has worked for more than 20 years, thought the poverty of agro-pastoralists was caused by structural factors and regarded inadequacy of human capital and means of production as major reasons of poverty. This viewpoint was partly agreed by the agro-pastoralists of older generation, such as Mr. Xiangga, the head of a large agricultural cooperative, also considered structural factors as an important cause of poverty: *"The reasons of poverty for agro-pastoralists are various: some are prodigal, some too old to work, some addicted to gambling. Some content with things as they are, so there are not much people in our region working in the city. Even though they work out, they would choose Maqiu county or Hezuo City which is not far away from our hometown. The main reason is they are generally illiterate and with low educational level. Locals used to laugh at the one who go out to work, but now they seldom do that again."* Young people, however, hold an opposite idea. Wealth hotshot Mr. Lamao, for example, takes cultural factors and a small amount of exclusive factors as the main factors of poverty: *"Poverty of farmers and herdsmen are mainly caused by cultural reasons, since Tibetan people tend to have very strong cultural self-confidence and reject external economic development. Now farmers and herdsmen are seldom go out to work, for on one hand, they are not willing to work outside, on the other hand, it exists certain discriminations outside, so few of them are really working in the city"*. The study has found that wealthy peasants and herdsmen tend to attribute the poverty inducements to structural or cultural factors and there is a certain difference between different generations of my respondents on this issue.

To reflect the poverty mechanism from the perspective of self-horizon, this research has found that cultural factors and structural factors are more frequently mentioned in our dialogue with

impoverished population. *"Cattle and sheep are our property. We sell them only when we are in urgent need of money. Usually, we just wait for someone coming to purchase. I did not go out to work, because both cultural conventions and languages are different and, more importantly, I am quite satisfied with my current life, so I do not want to make a change."* We can see from the interview with Mr. Jiadu that cultural cognitions and cultural capital are still the most important inducements of poverty. Poor farmers and herdsmen do not expect a synchronous docking with market economy and they are used to living in psychological comfort brought by traditional customs. Similar to Jiadu's viewpoint, Mrs. Zhuoma expressed a clearer superiority in terms of culture. *"I have no land now and have to rely on the country. But I am very satisfied with the current situation and don't want to make any change. We will probably not go out to work, and it has nothing to do with the degree of education or suffering discrimination, but we have been grazing since ancient times. We like the carefree grazing life for it has always been our life."* Different from the former two interviewees, Mr. Cimu, more than 60 years old, has the will of change, but he is not equipped with the ability. *"I am older now with a bit low blood pressure and can not work anymore. Twenty Chinese mu (3.29 acres) of land are in idle due to the lack of labor force. People seldom go out to work and not many young people could speak Chinese. Most of them continue grazing, because they don't have much education, have no workmanship and don't have enough work forces. Of course, it's changing now. Before everyone made fun of you if you go out to work, but now they don't, and there is no discrimination, either."* We can find from the speech of poor farmers and herdsmen that poverty is mainly attributed to cultural factors as well as structural factors to some extent.

4.4. The Overall Design of Anti-Poverty Policy

Seen from the conclusions of quantitative and qualitative study, the poverty level of farmers and herdsmen are presented explicitly in all aspects, and the mechanism of impoverishment mainly lies in cultural and structural factors. On this basis, combining with relevant anti-poverty policies of government, the study hopes to clarify the experience and deficiency of current governmental anti-poverty strategy and explore the future direction on anti-poverty policies.

Research first finds that local governments in my researching region attach great importance to the work of anti-poverty because economic development is the core task of regional construction. Since 2010, with 7.737 billion CNY of the national poverty alleviation and 601 million CNY of the local supporting funds, Luqū County has made a lot of meaningful attempts in eight aspects such as entire-village advancement, infrastructure construction, industry cultivation, offsite relocation, labor migration, ecological poverty alleviation, technological support and social security, which sharply reducing the number of poor farmers and herdsmen. By the end of 2013, agro-pastoralists' per capita income had promoted 47.321% compared to the same period of 2010, the proportion accounting for the national average has risen by 1.190%. And, the scale of poor farmers and herdsmen dropped 11,610 people, the poverty rate fell to 31.560%, showing that its anti-poverty policies has obtained good effects. At the

beginning of 2014, Luqū County Government Work Report clearly put forward its fundamental direction— *“To grasp development opportunities in Tibetan region, we should mobilize the entire county to push resolutely ahead with poverty relief, and promote our economic development with a clear direction of poverty alleviation plan.”* (Yang, 2014). In addition, the county established anti-poverty leading group initiated by the county government.

From the perspective of anti-poverty design of Luqū County in the past five years, its policy system has basically covered all the causes that can lead to poverty (as Table 5). In the design of structural anti-poverty measures, eight concrete measurements have been incorporated into the process of overall institutional arrangements. Namely, perfecting social support, enhancing the level of family planning, reinforcing disaster prevention, reforming the property rights of husbandry, intensifying infrastructure construction, optimizing the industrial structure, promoting the relocation of poverty alleviation and highlighting ecological poverty relief. Meanwhile, cultural poverty alleviating measures provide greater supports for cultural facility construction, market awareness improvement, technological poverty relief and educational development. And also, exclusive anti-poverty measures are directed to reinforcing labor training, perfecting the counterpart-assistance, intensifying financial support and improving public service. Such an anti-poverty network matches well with the complexity of impoverishment mechanism and it has a good effect on dealing with a wide range of poverty affairs. Of course, the study also found that in the process of system designing the local government currently still has certain loopholes. Above-mentioned conclusions have shown that although the three impoverishment causes have exerted more or less a particular influence on the poverty of farmers and herdsmen, the cultural factors are the most critical one, then the structural factors, and exclusive factors the weakest. Therefore, in the process of policy designing, officials should make targeted policy design based on the features of poverty occurrence. However, it turned out that the structural factors had been attached the maximal importance in governmental anti-poverty network. The eight specialized policies have ensured protection of the human capital, means of production and the labor market while the emphasis given to exclusive factors and cultural factors are relatively limited, each enjoying only four special policies. It shows a great contrast to the impoverishment mechanism which gradually descends from cultural factors to structural and then to exclusive factors, and indicates the responsiveness of policy design still has some shortcomings, this is the main problem of China's ethnic anti-poverty strategies.

5. CONCLUSIONS AND DISCUSSION

5.1. Research Findings

Since the reform and opening up, with the rapid growth of China's economy and the continuous development of anti-poverty policy, there has been a significant decline in the number of impoverished population in rural areas of China. In the minority-habited region and China's other western rural regions, however, extensive poverty can still be clearly found, thus it has a

great value to conduct an in-depth academic exploration of this issue. Centering on farmers and herdsmen in the eastern edge of Qinghai-Tibet Plateau, this study made a deep analysis on the internal mechanism of impoverishment and the effectiveness of anti-poverty policy through the combination of quantitative and qualitative methods, and finally got three basic conclusions:

(1) The current situation of poverty: the study finds that large scale of poverty still widely exist in my researching region, which are reflected in impoverished population's incomes, assets and livelihoods. Quantitative results show that per capita income and per capita assets of respondents were only 1898 CNY and 2330 CNY respectively; while the proportion of electricity, water, gas were 88.940%, 35.804% and 10.034%, the average ratio of possessing household appliances such as televisions, refrigerators and washing machines were 54.048%, 7.982% and 5.359%; all of these data imply that economic vulnerability of the poor farmers and herdsmen is severe. The results of qualitative research are basically identical: it finds that the income and assets of my respondents are relatively limited, the sample proportion of people counting on state relief is comparatively high, and the poverty level of livelihood situation is more serious.

(2) Mechanism of impoverishment: The study finds that deeper causes of poverty are basically in the sequence of successive decreasing in accordance with the cultural, structural and exclusive factors, with the first two factors as the mainstay. Quantitative studies show that cultural capital, cultural cognitions and cultural exchanges have formed a positive impact on the farmers and herdsmen's anti-poverty ability, the regressive significance of these three all reaching 0.000, which reflects a more explicit restrained force. Coincidentally, structural factors such as means of production and labor market also formed a significant influence of 0.000 on the poverty of farmers and herdsmen, which means that the abundance of production materials and the optimization of the labor market are important supports for agricultural population to get rid of poverty. However, exclusive factors are not clear in actual measurement and the regressive significance of its three sub-indexes presents 0.219, 0.710 and 0.168 respectively. Quantitative research also shows that impoverished farmers are more vulnerable to the influence of cultural factors and the growth of population will also become an obstacle for overcoming poverty and achieving prosperity. While poor herdsmen only engaging in pure animal husbandry are more susceptible to the dual effects of structural and cultural factors, and the impact of population growth is more positive. Three dimensional qualitative study further reflects that the mechanism of impoverishment are mainly cultural and structural factors and causes like inadequate cultural capital, backward cultural cognitions, insufficient cultural exchanges, limited labor capacity all become the key elements preventing the farmers and herdsmen to cast off poverty. Moreover, the impact of exclusive factors on the agro-pastoralists' poverty problem in the interview is rarely mentioned.

(3) Anti-poverty policy: This research also finds that grass-roots' governments has high enthusiasm in anti-poverty awareness, but there exists obvious deviation on the effectiveness of the system design. The study finds that local governments have strong anti-poverty motivation,

more abundant enthusiasm for the work of ethnic anti-poverty, and strong organizational advantage on the hierarchy design of institutions of anti-poverty. At present, local governments cover all the underlying causes of poverty in system designing, thereby form a comprehensive anti-poverty network containing 16 main policies. Obviously, it provides the foundation for the future work of anti-poverty. However, the study also finds that the overall design of the current anti-poverty policies attach more importance to structural factors while the specific design for cultural factors is relatively less, which reveals that the overall system designing gives priority to observable anti-poverty programs, such as infrastructure, immigration project and optimizing industry, but gives limited support to deeper-level cultural anti-poverty. Therefore, local governments' anti-poverty policies at present are not fully corresponding to the existing mechanism of impoverishment, so failed to form a targeted and responsive institutional social policy system, which makes the whole anti-poverty system have obvious defects in acceptability in the process of implementation.

5.2 In-depth Discussion

Theoretically, poor farmers and herdsmen's impoverishment mechanism is more accord with cultural theory and structural theory, whereas has certain gap with exclusive theory. Structural mechanism of impoverishment shows that the possession of production materials and sound regional market are still need to be considered in anti-poverty strategy. Based on Lenski and Gordon's theory, it reflects that limited resources have significant constraints on improving the anti-poverty capability of farmers and herdsmen, and the arduousness of anti-poverty work under the severe conditions in China's ethnic region. The study also finds that exclusive mechanism of impoverishment has not become an important reason for poverty in the minority-habited region, which denied the assumptions of Sen, Narayan and other people and, gives us the following conclusion: Chinese Han population doesn't have obvious sense of exclusion to ethnic population, large scale of social integration barriers for farmers and herdsmen to join in the mainstream society is not formed, the estrangement with mainstream society is probably stemmed from self-discipline on the basis of cultural confidence. Cultural mechanism of impoverishment reflects that farmers and herdsmen in this region are easily wandering between modern cognitions and traditional cognitions, the former can provide more opportunities for getting rich, while the latter can offer consolations of self-complacent. Different cognitions will not only solidify the gap between the rich and poor in ethnic region, but also easily make the relevant policies aiming at the poor agro-pastoralists difficultly to be carried out. So this issue is the key point for the anti-poverty work in the future.

To solve the core problem, however, is extremely difficult in practice, which is also the reason why the current policies are mainly around structural factors: (1) From the perspective of policy design, cultural anti-poverty work in minority areas often goes with strong political sensitivity in China. Impoverished minority agro-pastoralists relatively isolated cultural cognitions and non-marketing communication mode make them vulnerable to a greater risk of poverty. However, this particular culture of poverty is often rooted in their cultural self-confidence and

their traditional lifestyle, therefore, cultural anti-poverty policy tends to express sharp conflicts with the work of national cultural protection. (2) From the perspective of policy risk, cultural anti-poverty work can easily discontent some people. Poor people are often the firm guardians of national tradition, and poverty culture can give the poor great psychological comforts, which would make some people feel very uncomfortable when putting away the national culture dross, and thereby significantly reduce the acceptability of anti-poverty policy. (3) From the perspective of policy assessment, cultural anti-poverty strategy is not easy to be highly valued by the government based on China's administrative system. Under the existing performance review and promoting assessment system, rapid, visible and efficient anti-poverty measures would often be able to reflect the performance of anti-poverty in a most direct way. Thus, the government more easily favors structural policies like infrastructure, relocation and industrial restructuring. In contrast, the cultural anti-poverty policy, which need a long-term to bear fruit, are much less attractive to the government under the current performance review system.

5.3. Main Advices

Based on the above analysis, this research mainly has three suggestions as follows: (1) Strengthen the cognition of objective laws of anti-poverty policy in China's minority areas. Currently, high attention has been paid to the anti-poverty issue of the western ethnic region by the government, and it has become the annual core task of the local government. However, in the understanding of the mechanism of impoverishment and the laws of anti-poverty, both academic and practical circles have serious deficiencies at present. Thus, it is still necessary for both to jointly carry out more systematic research. (2) Promote cultural anti-poverty strategy actively. The present study finds that cultural anti-poverty methods have distinctly important value and are confronted with serious difficulties in policy design, policy risk and policy assessment. In order to improve the developmental environment of farmers and herdsmen through long-term cultural promoting, local governments should define the specific areas of cultural anti-poverty, relieve the risk and strengthen its recognition. (3) Effectively reflect the characteristics of the anti-poverty policy in ethnic areas. Learning from the anti-poverty experiences of other rural areas cannot solve local problems of economic growth in ethnic region once for all. This is because the foundation of poverty alleviation in minority regions cannot be completely compared with other poor areas. Besides, the impact of culture, customs, cognitions of ethnic areas on anti-poverty work can not be neglected. Therefore, the western ethnic region's anti-poverty policies certainly need to integrate with local conditions, labor forces and special culture to form long-term strategies.

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