

# **Research on Inclusive Innovation Mode of Sustainable Development in Three Gorges Reservoir Area**

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#### Abstract

Poverty is one among the three famous P problems in today's world including (Poverty, Population, and Pollution), it has become a serious challenge the world today is facing and there are major tasks that must be done to resolve them. Since the establishment of the Three Gorges Project, the country has increased its effort on supporting reservoir area; the Three Gorges immigrants brought unprecedented development opportunity to Chongqing Three Gorges Reservoir Area. In recent years, Chongqing reservoir area's economy development has lagged, hollowing out industrial development, people living in poverty etc, and these problem has been effectively reversed. But, Three Gorges Reservoir Area across two provinces (city) of 26 districts (counties, cities), is the poverty region merging of the country. The economic development and the poverty alleviation development also appear after the immigrants in the Three Gorges Reservoir Area moved to the relocation of shaking off poverty phenomenon; poverty alleviation and development is highlights diminishing marginal benefit; Three Gorges Reservoir Area widening gap between rich and poor is leading to the increasing of poverty; illegal used of anti poverty funds, discipline violation, frequently corruption phenomenon problem etc. Overall, Poverty alleviation and development work in the economic growth function is not strong; the conventional means of poverty alleviation works too slowly, poverty in the Three Gorges Reservoir Area is still remain a serious phenomenon. While inclusive innovation as a kind of brand-new theory and its aim is to expand productivity and employment, Increase in infrastructure construction in poor areas and investment in education and human resources development, to let people be able on balance and sharing opportunities, enhance the ability to get rid of poverty, walk up the same direction of development. Therefore, breakthrough the traditional thinking, innovating development model, both previous work on poverty alleviation is one kind of inheritance, breakthrough and innovation, to achieve political stability at the Three Gorges Reservoir Area, social harmony, ecological safety also has very importance significance.

**Key words:** Three gorges reservoir area; Poverty alleviation; Inclusive innovation

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### 1. THEORETICAL BASIS OF INCLUSIVE INNOVATION AND POVERTY ALLEVIATION DEVELOPMENT

#### **1.1 Theoretical Basis of Poverty Alleviation** Development

The problem of poverty it is an object fact that cannot be eliminated and unavoidable, causes of poverty can be

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profound nature, economically, social and historical can be the root factors, in the process of reduction of poverty, the practice of poverty alleviation and development cannot be done without theory of poverty alleviation as the theoretical basis for guidance. Therefore, the development of human society in different historical stages, there is different related theory of fighting against poverty, local and foreign scholars has to explain in depth about poverty and anti poverty alleviation strategy through research, and formation of some influential theories.

#### 1.1.1 Regional Development Theory

Poverty problem first of all it is a regional problem, it needs to start from the fundamental in order to solve the problem of poverty, present poverty area distribution showing a strong geographical and directional characteristic. Poverty alleviation not only helps people in the view of regional theory, also to support industries and regional environment, from empowerment of poor population, optimize the industrial structure and the overall quality of the regional environment, urge of the regional system throughout the bottleneck of its development, to maintain the sustainable development toward evolution, formation of full range of the poverty alleviation structure.

#### 1.1.2 "Theory of the Human Capital" Schultz

"Theory of the human capital" it was raised by American economist Theodore W. Schultz (1964), the human capital theory integrate into the transformation of traditional agriculture, carries on the rural poverty alleviation work guidance. Human capital theory consider as, the root cause of poverty produced is not a physical scarcity, But because of the scarcity of human capital and their contempt for human capital, physical capital does not match with the human's ability, thus may set back the economic growth, High quality labor force to increase the contribution to economic growth than the average increase in the labor force more significant contribution.

#### 1.1.3 Amartya's Theory of Poverty

Traditional theory thinks that poverty is the result of low income, Amartya Sen around the ability, he rights and welfare of the development theoretical system, the rights and welfare of the poor to build a competency-based development concept. He defined the concept of poverty as a lack of capacity but not because of low income, proposed that using people is enough to acquire some basic content and people can get to understand the poverty and deprivation of liberty. This theory emphasizes lack of rights and opportunities, the ability of deprivation is the major cause of poverty. Sen seems that, alleviate and eliminates the road of poverty governance, is to rebuild the individual ability, strengthen the equality of rights and to protect the rights of justice.

#### 1.2 Theoretical Basis of Inclusive Innovation

The Asian Development Bank in 2007 proposed inclusive growth concept, the greatest benefit emphasize on

economic growth to be able to benefit all the people, the core meaning is to realize the equality of opportunity and participation. But in worldwide, more than 4 billion population are still living on the bottom pyramid economically and social (Base of the Pyramid, BOP), they rarely enjoy the benefits of globalization and economic growth. Have to bear the social unrest and environmental degradation and various other bad consequences. While Prahalad and Prahalad pointed out insightful, these have been long excluded from the normal market economic system of BOP actually contains a huge commercial potential within the group, if the private sector enterprises put the low-income as emerging markets will be able to explore the value of diversity while creating a social and economic environment, however, There is a big difference due to BOP groups in which senior market environment and the top of the Pyramid (TOP), enterprises must change the thinking and adopt new models and methods to succeed. This not only highlights the innovation to explore the importance of BOP markets, BOP market itself constitutes the drive of innovation sources and opportunities. George thinks that, the overall welfare innovation oriented BOP groups and market can upgrade the poor at the same time creating economic wealth ability income and standard of living and improve the BOP community, from the macro level it helps to achieve inclusive growth, so that you can put this kind of innovation as inclusive innovation.

#### **1.2.1 Inclusive Innovation Characteristics**

Characteristics of inclusive innovation comes mainly from the BOP market compare with population characteristics

#### 1.2.1.1 Systematic of Innovative Thinking

Systematic innovative thinking is the inherent requirements of inclusive innovation. In the BOP market, inclusive innovation oriented object and environment is more complex and uncertain, in the economic, in all social and cultural aspects ere is a big difference between TOP markets, such as the poor people income is low and unstable, low quality of education, geographical dispersed, inadequate infrastructure, lack of clear property rights and a complete legal system and enforcement. All these factors are intertwined, has common influence on the poor people in production, life and consumption activities.

#### 1.2.1.2 Innovative Forms of Diversity

Due to the existence of different type and nature of the BOP market Obstacles and constraints, need to deal with various forms of innovation can be coped with overcoming respectively. Therefore, inclusive innovation includes not only the development of new products / services, also includes systems, organization, value chain, channel and creating of marketing strategies, adjustment and transformation. Different forms of innovations promoting each other, mutual complement, sometimes need to work together to realize the value of diversity plays a role in the creation and sharing.

#### 1.2.1.3 Opening Up of Innovation Process

For an inclusive in terms of innovative organizational, BOP market represents a new innovation environment, this makes the whole from idea to market Innovation process of knowledge required, resources and the capacity all of them will not be produced inside organization. Therefore, the focus is not inclusive innovation research development system, but in order to have effectively identification, External absorption and utilization knowledge of the environment and resources, requires organizations to focus on the accumulation of external social capital and enhance learning and absorption capacity. This will open innovation process not only in reducing the innovation cost and shorten the innovation period, but also can make the innovation scheme itself is more flexible and inclusive.

#### 1.2.4 The Unique Innovation Mechanism

Anderson and Markides proposed against BOP group conduct innovation of 4A framework (Affordability, Acceptability, Availability and Awareness), inclusive and innovative of the internal mechanism is performance on how to solve problems of 4A by finding ways and means. Affordability as an example, because of the poor people cannot afford the high prices of products and services, organizations in innovation at the beginning carry out the work of a certain price limit constraints, this leads to inclusive innovation is to follow the logic of (Price - profit = cost instead of the usual cost + profit = price). Therefore, the focus is concentrated on innovative cost reduction, triggering of the material, a series of factors such as the structure and process of selection and reconstruction. This price constraints and BOP environment in other rigid constraints constitute inclusive innovation boundary conditions, which may produce a unique BOP market and innovative mechanisms.

#### 1.2.5 Sustainable Innovation Results

Bottom of the Pyramid of the social and ecological systems is the basis for the existence of BOP market, poor production, consumption and trading activities and local social norms and ecological balance is closely related, and obviously this is relatively closed within geographic area. Therefore, simply to create economic value but destroyed or damaged in the local natural environment, Cultural practices and social ecology of innovation are not truly inclusive innovation, is not facilitated BOP population, communities and their own long-term interests. Considering the vulnerability of BOP market environment, economically, Social and ecological sustainable development has become an important feature of inclusive innovation.

### 2. POVERTY STATUS IN THREE GORGES RESERVOIR

#### 2.1 Basic Overview of the Three Gorges Reservoir

The Three Gorges Reservoir area refers to Yangtze River Three Gorges Project inundated area, and there are migration tasks of 20 counties (cities). Reservoir area is located in the Sichuan Basin and the Yangtze River Basin which joint of plain rivers, across Chongqing, two cities and province of Hubei. It is concentrated into a piece of impoverished areas, and tourist-rich region, more is the ecological environment is fragile area. Reservoir resettlement of poverty, related to the effective implementation of immigration policy, but also to social harmony and stability of the reservoir.

# 2.2 Basic Characteristics of Poverty in the Three Gorges Reservoir

**2.2.1 Single Industrial Structure, Poor Economic Benefit** Rural migrants in the basic of production of selfsufficiency status of provide for oneself, decentralized management, in addition to low culture level of immigrants, lack of agricultural technology, the startup and risk, therefore, most of them content to run in the traditional agricultural operations, less cash crops.

# 2.2.2 Poor Infrastructure, Production Efficiency Is Not High

In consequence of the complex topography of Three Gorges Reservoir Area, most of the region are mountainous or hills, scattered land, no suitable conditions for mechanized production; therefore, local farmers are still dominated by traditional manual labor, backward mode of production. Especially in the rural immigrants land is more scattered, never mention on industrialization and modernization, only carry out the traditional manual labor. In addition, the reservoir road density is an inadequate, compared with lower quality, traffic is sluggish for reservoir production life of the residents has brought a lot of inconvenience. Reservoir energy facilities are relatively backward, less generators with large capacity, unable to meet the demands of economic development in the reservoir area.

# **2.2.3** Poverty Population With Low Quality, Lack of Skills Labor

The Three Gorges Reservoir area human capital development level is low, most of the immigrants received a lower level of education, poor skills labor. Reservoir area farmers thought and ideas are weak, lack of competition and innovation consciousness, this brings up the basic obstacle for their survival poverty.

### 3. CAUSE ANALYSIS OF THE THREE GORGES RESERVOIR AREA POVERTY

The problem of poverty has roots in social objective, as well as personal subjective reasons. Poverty is not only reflected in the economic poverty, but also in the environmental poverty, social poverty, it is the result of the mutual influence of environment, economic and social interaction, poverty problem has its complexity and comprehensive. The main reasons for the poverty of Three Gorges Reservoir area are as follows.

#### 3.1 Influence of Poor Living Space

To examine the poverty from the economic geography and population perspective, poverty is caused by lack of living space or closed by. Specifically in the following three areas; First, bad in natural conditions, Reservoir area poverty population is mainly distributed in to two big areas the Daba mountain and Wulong mountain, most of these areas are mountains, mountains, rock and hills, poor weather conditions, natural disasters, farmland and barren, drought and water shortage, the crop yield is low, poor quality, and a single structure, the remote area is far away from the city or market, it is difficult to form a commercial production. Second, transportation, communication and other infrastructure conditions are poor, commodity, talent, technology, poor information exchange, secondly, difficulty of the third industrial development, reservoir industrial base is weak. Third, population pressure. Focus on national poverty counties natural population growth rate is much higher than the reservoir metropolitan area, rapid population growth, the living space is more and more close to even exceed the carrying capacity of the environment.

# 3.2 Resource Endowments and Utilization Impact on Poverty

Reservoir area poverty population owned land, labor force, capital and other resources endowment difference, without sufficient effective use which led to poverty. Specifically in the; First, the anti-poverty funds allocated for state and local governments do not really use in the most poverty alleviation, Poverty alleviation funds were diverted or misappropriated where the problem is guite serious. Poverty alleviation funds allocated by the government departments progressively at all levels, when it reaches the community again assigned by local cadres, Poor people do not have power on decision-making, resulting in the high turnover rate, effect is more and more low. Second, the degree of utilization of labor resources has highly improved, the largest contribution to growth on the income of the farmers, but the quality of the population is low, labor force resources development is not enough insufficient. Third, is the land resources in the reservoir area utilization rate is very high. Have already or approaching the carrying capacity of the land. Only to improve the economic and environmental benefits through Structural adjustment.

#### 3.3 Effect of the Quality on Poverty

Personal quality determines the individual employment, income and social status, individual quality drawback to poverty. Poor population is received low quality education, rarely have contact with what occurred around the world. lack of entrepreneurial spirit, and relying on government support and relief. Poverty key counties in the reservoir area of every hundred ordinary middle school number are lower than the national county a mountainous area county, National mountain areas counties and ethnic County. The key counties in poverty alleviation and development level of education are lagging behind, low quality of the population, leading to low personal income.

#### 3.4 Effect of Social Justice for the Poor

Specific performance in: (1) Employment and social security system is not fair. Rural and urban labor market segmentation, especially the migrant workers suffer from discrimination in employment in many different degrees, such as residence restrictions, unequal pay for equal work, don not comfort losing job, health care, Pension and other social insurance and minimum living allowance. As migrant workers have no health insurance, no money to treat serious illness. Often leads to decrease and even loss of ability to work, due to poverty and illness. (2) Property right system is unfair. Migrant workers operate land belongs to the community ownership, managerial authority is belong to migrant workers, But the migrant workers right to operate is neither complete nor safe, facing all levels of government expropriation risk and operating limits, land rights and interests are damage, farmers invest in legitimate businesses closed due to policy factors, losses are often not appropriate compensation. (3) The political system is not fair. In the existing political structure basically no poverty population "right of expression" even the various non-governmental organizations and farmers association, Poverty population is rarely involved in, the lack of influence. Poor people's advice, suggestions and requests are few channels to reflect, and more rarely been adopted.

## 4. THREE GORGES RESERVOIR AREA INCLUSIVE INNOVATIONS FOR POVERTY ALLEVIATION DEVELOPMENT MODEL

Inclusive innovation theory in Three Gorges Reservoir area requires changing concepts in poverty, full respect and trust of the poor out of poverty willingness and ability, efforts to control the market failure and irrational system, to eliminate the social exclusion, For the poor especially poor families of the next generation of cultivation and improvement of human capital, to participate in social created to provide the necessary public services, create a fair competitive environment, and to provide the necessary protection and fair social security system for the poverty population.

#### 4.1 Cultivate and Improve the Farmers of Human Capital, to Create a Fair Environment for the Value of Human Capital

The realization of inclusive growth and the reform and development of education are closely related, improve the poor level of education and culture quality, not only to strengthen the poverty reduction effect of the Three Gorges Reservoir, To reduce the incidence of dependent get rid of poverty, but also to enable people to get a fair value of human capital. Improve the quality of workers, even though to promote comprehensive development of man's necessary requirement, is the important guarantee to realize the economy of inclusive growth. So that the majority of people enjoy a wide range of political, economic and cultural rights and basic human rights, achieve true freedom to use and extend. From the perspective of inclusive innovation, the Three Gorges reservoir areas need to do the following: development and integration of high-quality educational resources, to promote farmer human capital value, progressive realization of educational equity; combination of vocational skills training and access to vocational qualifications, the formation of the whole society in many aspects of talent cultivation mode; vigorously develop vocational education of farmers, Enable combination of local higher education and adult vocational education, cultivate on both ability and qualifications, skills and potential of farmers elite.

#### 4.2 Enhanced the Fairness of the System and Policies, Creating a Fair Social Security Environment

The meaning of inclusive innovation is the most basic fairness. Fairness is a necessary prerequisite for the vast majority members of the society to share achievement of economic growth, only fair can be promoted in the domains provincial between urban and rural areas, Mutual tolerance between high and low income earners, in order to promote and achieve coordinated economic growth and social development. From a practical perspective of the Three Gorges Reservoir, Social equity problem is mainly in rural areas, a breakthrough must be in the countryside. Building a fair policy regime includes the following aspects: First, is to construct the system of justice. The institution of justice can provide a fair and reasonable development space for farmers, system can provide incentives innovation behavior of each farmer, ensure social security and public welfare, individual freedom to make choice on any job you want. Secondly, is to construct individual opportunity of equality mechanisms. Inclusive and innovative concept which focuses on equality of opportunity, but not structure of equality, concept requires the elimination of barriers to individual widely shared achievement of social development outcomes, promote equal development opportunities for farmers, Based on distributive justice, the right to a fair and equal opportunity based social security systems and mechanisms. Thirdly, is to promote fair of migrant workers and rural public service system. Promote science continues to push economic growth based on "Poverty alleviation". Improving the rural education, health and other aspects of inequality, how the public can enjoy the equal protection of urban and rural public service is an important issue of civil rights obtained.

# 4.3 Establishment of the Fair Protection of Security System, to Create Inclusive Social Welfare Environment

The imperfect social security system is the outcome of economic growth in the Three Gorges reservoir cannot be fully realized an important reason for the fair share. Social security system is not perfect, achievement of economic growth does not benefit the vulnerable groups in society, and it is easy to cause some unstable social problems, influence on construction of socialist harmonious society. The establishment of a fair protection security system has three main areas of work to do: First, to strengthen economic growth while gradually expanding the coverage of social security in the Three Gorges reservoir area, Is to put unemployed urban workers, and other low-income rural residents into the social security system, to achieve full coverage of social security as soon as possible; Secondly at the same time to strengthen economic growth and gradually increase the level of social security, Narrowing the income gap, advocate the vulnerable groups is more convenient and more to share the achievement of economic growth; Third is to strengthen the economic growth while maintaining a wide coverage, cover the basic, multi-level, and sustainable principles. Strengthen in social insurance, social relief, social welfare and coordination of benefits, which ensure that the basic living of the masses of the people.

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