



Article

# Characteristics of the Natural Resource Potential of Rural Areas

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**Abstract:** This article is devoted to the issues of effective use of the resource potential of rural areas, analyzing its economic, social, and environmental aspects. The study developed recommendations for the sustainable development of rural areas based on scientific research conducted in the areas of diversification of agricultural production, increasing employment and protecting natural resources. At the same time, land, together with its soil cover, is the physical basis and an integral component of the terrestrial ecosystem, combined with the concept of "surrounding natural environment", a condition for the existence of biogeocenoses. In the context of the reform of the existing economic system in the Republic of Uzbekistan, land remains the main reliable resource for improving the situation as an integral part of any economic system. The potential of land resources is an important factor in stabilizing the socio-economic situation in the region. The use of agricultural lands in the region is fraught with certain problems, including water shortages, deterioration of the land reclamation status as a result of salinization, the fact that almost half of the collector-drainage systems are in disrepair, erosion, and other reasons. For landowners in the Namangan region, land rental has become a reliable and stable source of replenishment of family budgets. Farmers have a special attitude to renting their land. Landowners, aware of their role in the production of agricultural products, carefully monitor how their land is cultivated. When implementing such large-scale agrarian reforms, it is necessary to implement a number of measures in the region, in particular, to prevent soil erosion in the Chortoq and Yangikurgan districts, and to reduce salinity in the Naryn, Uychi and Namangan districts. Using the example of the Namangan region, the state of use of rural resources was studied, and proposals were put forward to increase the productivity of agricultural lands and their effective use.

**Keywords:** Resource potential, economic, social, rural population, innovative, agrarian, ecological, division of labor, infrastructure, complex.

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## 1. Introduction

At the current stage of market changes in society, the issue of effective use of the resource potential of villages is gaining particular importance. Diversification and multidisciplinary specialization of the rural economy ensure the development of production, services and recreation, and become a guarantee of improving the living standards of the rural population, preserving the natural environment, and the rapid development of agricultural enterprises, and play a leading role in ensuring the sustainable development of the entire village.

The resource potential of villages is a source and means of their reproduction, and plays an important role in determining their tasks, direction and dynamics of development, as well as promoting efficient and competitive production, rational use of resources, saving resources and expanding the reproduction of the rural population,

ensuring an adequate level and quality of employment and life, introducing innovations and improving the regulation of not only rural settlements, but also adjacent territories, activating the activities of rural communities, harmoniously developing the personality of each farmer, fostering a sense of patriotism, awareness of national identity, restoring historicity and forming new cultural traditions, and most importantly, protecting natural resources.

## 2. Materials and Methods

The research methodology and techniques are based on the study of strategic analysis, marketing, the theory of competitive advantage, and the conceptual foundations of state support for the development of rural areas. The research in this area was based on the research conducted by foreign scientists - A. Ansoff, D. Blandford, M. Drabenstot, F. Kotler, N. Cochrane, J. J. Lamben, U. Myers, P. Midmore, M. Porter, R. Rider and others.

Knowledge on the sustainable development of the regional economy, various aspects of rural areas and agricultural production was formed through the scientific work of Russian scientists - L. I. Abalkin, V. M. Bautin, S. N. Bobylev, L. V. Bondarenko, V. V. Kuznetsov, A. V. Merzlov, V. V. Miloserdov, P. M. Pershukevich, V. N. Papelo, A. I. Suchkov and others.

In the research process, the author used comparative analysis, abstract-logical thinking, economic-statistical methods, and four management approaches - systemic, process, situational, and complex approaches.

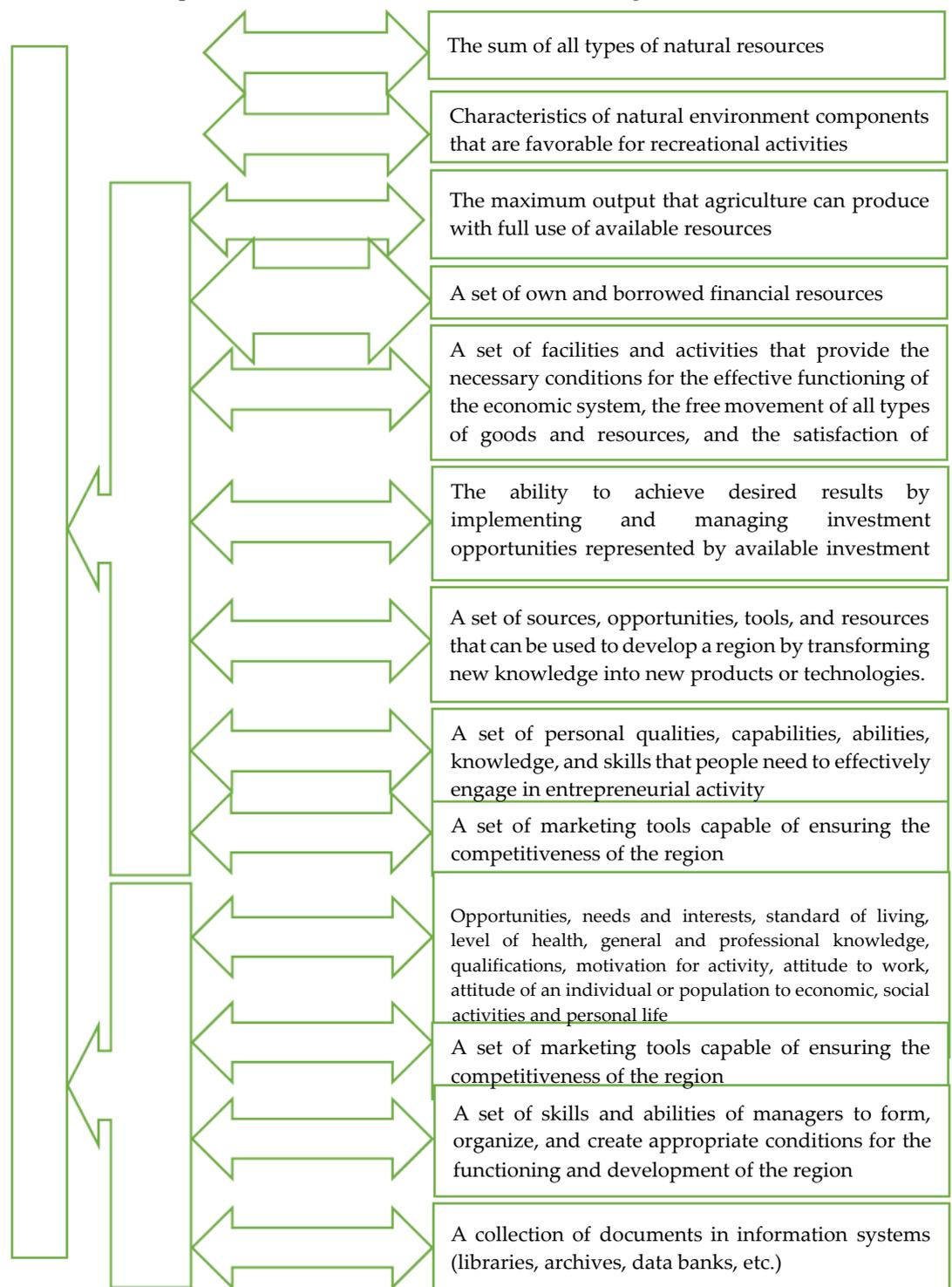
## 3. Results and discussion

One of the urgent problems facing the transition economy today is the effective formation and development of the labor market. The effective functioning and sustainable development of villages depend on the rational use of their resource potential. The uneven development, degradation and irrational use of rural areas and their resource potential have led to the emergence of historically formed settlement structures with all socio-economic, cultural and spiritual infrastructures on the surface of the earth, and the division of territories into settlements.

There are 11 rural districts in Namangan region (Kosonsoy, Mingbulok, Namangan, Norin, Pop, Turakurgan, Uychi, Uchkurgan, Chortoq, Chust, Yangikurgan), 9 cities (Namangan, Kosonsoy, Pop, Turakurgan, Uchkurgan, Chortoq, Chust, Hakqulabad and Yangi Namangan districts), 11 towns (Sang, Jomashoy, Toshbulok, Navbahor, Oltinkon, Uygursoy, Chorkesar, Khalqabad, Uychi, Onkhayot, Yangikurgan, Oktash, Chodak), and 99 rural settlements. The number of rural settlements is 387. As of January 1, 2024, the rural population in the region increased by 23.1 thousand people compared to 2023 to 1076.7 thousand people, and the urban population increased from 45.5 thousand people to 1989.4 thousand people. In 2010, the rural population was 799.7 thousand people, while the urban population was 1458.8 thousand people (64.6% of the total population of the region). According to these data, it can be noted that the urbanization process among the population of the region continues in 2010-2024, which, in turn, is also associated with the natural growth of the population. It is worth noting that the rural areas of the region have enormous resource potential, diverse natural-climatic, socio-cultural and economic resources. Its rational, multifunctional use is the most important factor in the sustainable socio-economic development of our country. The resource potential, on which the development of economic and social spheres of human society depends, is formed on the basis of the formation of natural, favorable or less receptive environmental conditions of a particular territory, as well as a combination of labor and material and technical resources that are inextricably linked in themselves.

Resource potential also includes the amount of resources used for production, determines the effectiveness of their joint action and the ability to adapt to changing environmental

conditions. Therefore, the importance of considering the category of “resource potential” of rural areas is that the goals and objectives of achieving effective results in their development are largely determined not by available resources, but by resource potential. Thus, the effective use of resource potential becomes a necessary condition for the balanced development of rural areas in the medium and long term.



**Figure 1. Structure and main components of the resource potential of rural areas.**

Rural areas have a strong resource potential, the fuller, more rational and effective use of which can ensure sustainable multi-sectoral development, full employment, a high standard of living and quality of life of the rural population. The scale, efficiency, level of development of the resource potential of rural areas and its components are interrelated, among which natural resources are the main agricultural production, the functional

direction of rural development is determined by the specialization of rural enterprises (Figure 1).

The most important basis for the economic development of villages is the natural conditions and complex of resources inherent in it. The quantity, quality and spatial combination of resources, the level of their provision determine the natural resource potential of the territory, which is the most important factor in the settlement of the population and its economic activity. Naturally, the resource potential is multi-component and includes land, water, forest, natural and recreational, mineral resources that determine specialization.

Rural areas of Namangan region are among the leading regions of the Republic of Uzbekistan in terms of agricultural production, including the production of livestock products, as well as plant products. Natural resource potential includes a complex of natural resources, which includes the natural resource subsystem, namely land (land resources), water, forest and mineral raw materials. These resources are the key to social development, which is associated with the standard of living of a person and the development of society as a whole. The rational and effective use of any means of production largely depends on the level of implementation of a number of measures aimed at its organization. The more correctly and rationally such measures are organized by the state, the higher the use of land and the development of the economy as a whole. Comprehensive improvement of the land, constantly increasing its fertility and economic efficiency - this is, first of all, the foundations of a scientific system of agricultural management and the use of land with high productivity.

Of course, land is a unique natural resource, the properties and capabilities of which have amazed humanity throughout its existence. That is why it has traditionally been considered the main source of wealth and has become an important and indispensable object not only of economic, but also of social relations. Land is the basis of the existence of human society, the most important source of human wealth, the primary basis of social production, a unique universal factor of any human activity[1].

One of the most urgent issues today is the regulation of land relations, the effective use of land resources and the strengthening of the legislative framework for the prevention of land plunder, and the reform of land resource management by introducing relevant amendments and additions to existing laws and regulatory legal acts on land relations.

In the context of innovative economic reform, improving land reform mechanisms is one of the most important priorities not only for the sustainable development of agriculture, the effective use of farm, peasant and household lands, but also for increasing the efficiency and competitiveness of product production, ensuring food security and increasing the export potential of our republic. After all, it is becoming an objective necessity to improve the scientific and theoretical foundations of the system of using land resources, which are the main means of production in agriculture, and to effectively implement them in practice, in particular, to introduce an equal, transparent and market-based procedure for allocating land plots, to ensure stability in property and legal relations related to land, to protect land, to guarantee the property rights of landowners, as well as to introduce it into free circulation as an object of civil legal relations by determining the economic value of land. At the same time, the annual growth of the population of the republic increases their demand for food products, as well as for constantly improving the standard of living. Especially in today's dangerous world, the growing demand for food products among the population due to the ongoing unrest creates the need to accelerate reforms in the sector, as well as organize and protect rational and efficient use of land, including agricultural land, in particular, by forming an accurate quantitative accounting of land.

The organization of effective use of agricultural land, the development of rural areas are one of the important factors in ensuring the economic development and stability of the

state. For this reason, in order to ensure the country's economic growth, it is necessary to conduct a rational policy to increase the efficiency of the use of agricultural land, and for this, to consider the issues of regulating land relations in agriculture as a priority. Modern requirements for the organization of agricultural production include, first of all, the rational and highly efficient use of agricultural land and other natural resources.

Despite the fact that there is a sufficient amount of unused land in our republic for the development of industry, services and trade, in most cases the organization of these areas of activity on fertile irrigated lands is taking a serious turn. In this case, the reason for the remoteness of unused land from settlements and the lack of infrastructure is indicated. If the infrastructure is a man-made object, fertile soil is considered a gift of nature, and it takes 100 years to form 1 cm of soil. Modern technologies are also not able to create natural soil. According to the Land Fund of the Republic of Uzbekistan, between 2015 and 2022, irrigated arable land decreased by 44.2 thousand hectares (1.4%). In our republic, the issues of changing the land fund categories of agricultural and forest fund lands are being implemented in accordance with the Resolution of the President of the Republic of Uzbekistan dated April 12, 2022 No. PQ-204 "On measures to improve the procedure for allocating land plots for engineering communication networks".

It should be noted that for the 2022 harvest, 3.2 million hectares of irrigated arable land are planted with agricultural crops, and 44% of this land is saline to varying degrees (1.8% is highly saline, 11.8% is moderately saline, and 30.4% is slightly saline). Irrigated arable land accounts for 7.2% (3,247.9 thousand ha) of the available land area in our republic. This indicator, when divided by the population of our republic (35.4 million people), corresponds to only 0.09 hectares per capita. As of January 2023, the population of our republic was 36.3 million people, with an average growth of 2.1% over the last three years. If population growth continues at this rate, it will reach 50.6 million people in 2040 and 63.5 million people in 2050. When calculating the consumption demand of the current population: in 2023, according to the norm approved by the Cabinet of Ministers, 4.3 million tons (in 2040 - 6 million tons, in 2050 - 7.6 million tons), according to the norm of the Food and Agriculture Organization of the United Nations (FAO) - 6.4 million tons (in 2040 - 9 million tons, in 2050 - 11.3 million tons) of vegetables; According to the norm approved by the Cabinet of Ministers in 2023, 2.6 million tons (in 2040 - 3.7 million tons, in 2050 - 4.6 million tons), according to the norm of the Food and Agriculture Organization of the United Nations (FAO) - 3.6 million tons (in 2040 - 5 million tons, in 2050 - 6.3 million tons) of fruits and vegetables will be required.

In particular, if the change in the category of agricultural land continues in this way, irreparable problems may arise in terms of food security in the near future. In particular, although in 2022 our country produced 11.6 million tons of vegetables, by 2030 this product will be enough only to meet the needs of the population. Although 3 million tons of fruits and vegetables are grown in our country, according to FAO standards, a shortage of 700 thousand tons of products is observed in 2023 to meet the consumption of these products, while 1.4 million tons in 2040 and 2.7 million tons in 2050 will be required to produce additional products. The conducted analyses show that the importance of agricultural land in ensuring food security is the main means of production in agriculture, and it is necessary to further strengthen important legal requirements aimed at preserving and special protection of these lands, increasing soil fertility, and preventing the development of negative processes.

#### 4. Conclusion

In the division of labor of the Namangan region, the cultivation of agricultural products and the efficient use of land resources are of great importance. Of the minerals found in the Namangan region, the Chodak gold deposit, mountain quartz, antimony, copper, oil, gypsum, limestone and other building materials, and healing mineral waters

(in Chartok) were found. The temperature of the Chust-Pop groundwater is 50 ° (it comes out from 1300 m). The water contains iodine and bromine. Hydrogen-sulfide water with a temperature of 23 ° comes out of Chodaksay (from a depth of 450 m). The waters of Chartok, Shahand, Kosonsoy, Uchkurgan are not inferior in their degree of mineralization and nature to the famous Matsesta, Chakrak, Tal waters.

In agriculture, land simultaneously acts as a natural resource and a natural object, is the main means of production, the spatial basis of activity, acts as the main fund, has unique properties characterized by soil fertility. The uniqueness of land is that it cannot be replaced by another resource, it is limited within the framework of economic provision. The socio-economic significance of land as a natural resource determines the priority of its functioning as the main means of production and subject of labor in agriculture and forestry, a source of ensuring the food needs of the population.

At the same time, the land with its soil cover is the physical basis and an integral part of the terrestrial ecosystem, combined with the concept of "surrounding natural environment", a condition for the existence of biogeocenoses. In the context of the reform of the existing economic system in the Republic of Uzbekistan, land remains the main reliable resource for improving the situation as an integral part of any economic system. The potential of land resources is an important factor in stabilizing the socio-economic situation in the region.

An indispensable condition for conducting high-yield agricultural production is the prevention of degradation processes, the preservation and increase of soil fertility, which is largely determined by the efficient use of land.

Today, the land of the Republic of Uzbekistan is an important resource from the point of view of socio-economic and ecological approaches. More than 95% of food production in the republic, more than 65% of consumer goods are produced through the use of land resources. At the same time, the share of land resources in the total composition of the country's productive forces is about 40%. In addition, land accounts for about 20% of the value of production funds[2].

The composition of land intended for agriculture is divided into:

agricultural land types - irrigated and fallow arable lands, pastures, hayfields, fallow lands, reserve lands and perennial forest plantations;

types of land not used in agriculture - engineering and communication networks, internal economic roads, household lands, lands under reclamation construction, lands occupied by forest trees.

According to the Land Fund of the Republic of Uzbekistan, as of January 1, 2023, land intended for agriculture amounted to 24 million hectares. The basis of land resources of the Namangan region is land used in agriculture. While the existing land resources have been mainly specialized for cotton cultivation for many years, today wheat cultivation is being expanded in the region in order to ensure grain independence in the republic. In addition, the development of horticulture, viticulture, melon cultivation, vegetable cultivation, fodder crops and potato cultivation is also evident in a number of farms in the northern districts. According to the Cadastral Agency, the total area of Namangan region is 7.44 thousand km<sup>2</sup>, and the land area is 718.1 thousand hectares.

In addition to the high potential for the cultivation of agricultural products, Namangan region is experiencing water shortages due to climate change and there is no possibility of full use of agricultural land. The main water needs of the region are provided by the Rezaksoy, Karasuv, Zhiydalisoy, Chartok, Varzik, Koksaroy, Eskiye, Zarkent, Yertikon, Kosonsoy reservoirs and the Syrdarya. Environmental changes occurring under the influence of the human factor cannot fail to have their impact on the valley. In particular, climate change, the absence of normal annual precipitation, and global warming phenomena indicate that the normal balance of nature is being disrupted. All

this, of course, is leading to a further increase in areas with water shortages and is also having an impact on the agricultural sector. Today, improving the sustainability of land and water resources on a regional scale, the effective and targeted use of each fertile land, and the development of effective measures to protect land resources are among the urgent issues in increasing the income of the population.

In this regard, in accordance with the Decree of the President of the Republic of Uzbekistan "On measures for the effective use of land and water resources in agriculture" No. PF-5742 dated June 17, 2019, the issues of further deepening structural reforms in agriculture, encouraging direct investment in the sector, and developing public-private partnerships in agriculture have been identified.

As a result of this policy, the development of agriculture in the region, including arable land, has achieved extraordinary indicators that can be compared with developed countries of the world.

For landowners in the Namangan region, land lease has become a reliable and stable source of replenishment of family budgets. Farmers have a special attitude to renting their land. Landowners, aware of their role in the production of agricultural products, carefully monitor how their land is cultivated.

The use of agricultural lands in the region is fraught with problems due to water shortages, land reclamation due to salinization, almost half of the collector-drainage systems are in disrepair, erosion, and other reasons. When implementing such large-scale agrarian reforms, it is necessary to take measures to prevent soil erosion in a number of regions, in particular in the Chortoq and Yangikurgan districts, and to reduce salinity in the Naryn, Uychi, and Namangan districts.

For the effective use of agricultural lands in the Namangan region, the following measures are required:

It is necessary to maintain an accurate inventory of agricultural lands;

It is necessary to reconstruct the collector-drainage networks of irrigated areas, and reconstruct (repair) the rest;

It is necessary to establish scientifically based salt leaching standards for leaching existing saline land areas, taking into account the salinity level, mechanical composition, and water permeability properties of the soil;

it is necessary to fully introduce the use of water-saving technologies in the irrigation system in the next 3-5 years;

it is necessary to increase the area of perennial trees;

it is necessary to carry out crop rotation of agricultural crops;

regular organization of monitoring of agricultural lands will give positive results in the future.

In accordance with the analyzes conducted, the following are proposed in order to protect agricultural lands and organize their rational and effective use:

consider the transfer of irrigated arable lands to another category of the land fund by the Legislative Chamber of the Republic of Uzbekistan;

determine the procedure for changing the categories of the land fund of agricultural and forest lands;

We believe it is necessary to establish a special land fund for irrigated lands and maintain separate accounts for it, dividing it into groups based on soil quality, soil health, and water supply.

## REFERENCES

1. O. I. Gutorov and T. Ye. Chereda, Land resources management: Lecture, Kharkiv National Agrarian University named after V.V. Dokuchaev, Kharkiv, 2013, 56 p.
2. S. D. Luchik, "Vliyaniye transformatsionnykh izmeneniy v ispol'zovanie trudovogo potentsiala sela," *Ekonomika APK*, no. 3, pp. 149-153, 2009.
3. O'zbekiston Respublikasi Prezidentining "Muhandislik kommunikatsiya tarmoqlari uchun yer uchastkalarini ajratish tartibini takomillashtirish chora-tadbirlari to'g'risida" gi PQ-204-son qarori, 12-aprel, 2022.
4. O'zbekiston Respublikasi Prezidentining "Qishloq xo'jaligida yer va suv resurslaridan samarali foydalanish chora-tadbirlari to'g'risida" gi PF-5742-son Farmoni, 17-iyun, 2019.
5. R. X. Ergashev, Qishloq xo'jaligi iqtisodiyoti (Darslik), Tashkent: EXTREMUM PRESS, 2011, 416 p.
6. A. A. Mamatov, A. F. Xurramov, and M. A. Mamatov, Qishloq ishlab chiqarish infratuzilmasi iqtisodiyoti: O'quv qo'llanma, Tashkent: Sanostandart, 2016, 296 p.
7. O'zbekiston Respublikasi Prezidenti huzuridagi Statistika agentligi ma'lumotlari.
8. O'zbekiston Respublikasi Iqtisodiyot va Moliya vazirligi huzuridagi Kadastr agentligining O'zbekiston Respublikasi Yer fondi to'plami ma'lumotlari.
9. W. R. Freudenburg and R. Gramling, "Natural resources and rural poverty: A closer look," *Society & Natural Resources*, vol. 7, no. 1, pp. 5-22, 1994.
10. K. Deavers, "What is rural?," *Policy Studies Journal*, vol. 20, no. 2, 1992.
11. M. Plotnikova, "Innovative character of rural territories social potential realization," *Journal of Rural Development*, 2014.
12. H. Meaza, A. Frankl, J. Poesen, A. Zenebe, J. Deckers, V. Van Eetvelde, ... and J. Nyssen, "Natural resource opportunities and challenges for rural development in marginal grabens – The state of the art with implications for the Rift Valley system in Ethiopia," *Journal of Arid Environments*, vol. 147, pp. 1-16, 2017.
13. B. Shiferaw and M. C. S. Bantilan, "Agriculture, rural poverty and natural resource management in less favored environments: Revisiting challenges and conceptual issues," *Food, Agriculture and Environment*, vol. 2, no. 1, pp. 328-339, 2004.
14. S. Lurie and C. A. Brekken, "The role of local agriculture in the new natural resource economy (NNRE) for rural economic development," *Renewable Agriculture and Food Systems*, vol. 34, no. 5, pp. 395-405, 2019.
15. J. M. Baland and J. P. Platteau, *Halting Degradation of Natural Resources: Is There a Role for Rural Communities?*, Food & Agriculture Organization, 1996.