

# The Rural Isolation Gap: Potential, Obstacles, and Prospects

Solange Kasiba Ngobobo<sup>1</sup>, Espoir Bisimwa Basengere<sup>1</sup>, Sadiki Byombuka<sup>1</sup>, Jean-Berckmans Bahananga Muhigwa<sup>2\*</sup>, Jacques Assani Mutumbwa<sup>3</sup>, Isaac Wilondja Bubala<sup>1</sup>, Didace Kyoto Kaningini<sup>4</sup>, Bibish Wamtu Masoka<sup>4</sup>

<sup>1</sup>Institut Supérieur de Développement Rural (ISDR), Bukavu, Democratic Republic of the Congo

<sup>2</sup>Université Officielle de Bukavu (UOB), Bukavu, Democratic Republic of the Congo

<sup>3</sup>Administration de la chefferie de Wamuzimu, Mwenga, Democratic Republic of the Congo

<sup>4</sup>Institut Supérieur Pédagogique (ISP), Bukavu, Democratic Republic of the Congo

Email: solangekasiba@gmail.com, ebisimwa@yahoo.com, sadikiby@yahoo.fr, \*jeanbahananga61@gmail.com, jacquesassanim@gmail.com, bubalawilondja@gmail.com, cnf.bukavu@gmail.com, inewamtu@gmail.com

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## Abstract

This study investigates the socio-economic conditions in the Wamuzimu chiefdom, Democratic Republic of Congo, a region rich in natural resources but characterized by extreme poverty and isolation. Using a mixed-methods approach of household surveys and focus group interviews, the research reveals a profound disconnect between the area's potential and the precarious living conditions of its population. There are multiple indicators of underdevelopment: dilapidated infrastructure, widespread poverty, poor governance, social exclusion, and a lack of strategic planning. The findings attribute this gap to poor governance, unregulated resource extraction, and dilapidated infrastructure, concluding with a call for an integrated, participatory development strategy.

## Keywords

Rural Development, Isolation, Living Conditions, Potentials, Obstacles, Prospects

## 1. Introduction

Globally, 75% of the poorest people live in rural areas. The Rural Poverty Report (IFAD, 2001) explains that in rural areas, the poor are more destitute than their urban counterparts and their access to basic social services such as sanitation, drinking water, health services, and primary education is much more limited, so

that they suffer in much greater numbers from hunger, disease, and illiteracy. Clearly, almost insurmountable obstacles prevent the rural poor from escaping the cycle of poverty.

In developing countries, this problem is of even greater importance. In Tunisia, the failure of a policy focused on agriculture and, above all, the worsening imbalances between rural and urban areas have led to greater emphasis being placed on rural development in the broadest sense, with measures to develop infrastructure and agriculture alongside research (Eloumi, 2006). Although agricultural activity remains important, it is no longer sufficient for ensuring progress in these areas (Bandarra, 1995). To this end, social (demographics, traditions, customs, services, etc.), economic (productive activities, employment, exploitable resources, etc.) and environmental (climate, soil, vegetation, etc.) aspects are integrated in order to create a new desired image of the future of rural areas (Ines, 2011).

Typical constraints in tropical rural areas include inadequate infrastructure, difficult-to-access and inefficient public and private service providers, precarious land tenure systems, power imbalances, excessive bureaucracy, logistical challenges in reaching potentially unattractive markets, and limited quality of environmental assets that are in constant decline (Barbier, 2010). Removing or at least mitigating these constraints could unlock the individual and collective capacities of local resource users for economic and sustainable development (Descheemaeker et al., 2016).

Rural India, with its vast expanse and diverse population, is the backbone of the country's economy and culture. Several challenges arise from various socio-economic, infrastructural, and institutional factors, which constitute considerable obstacles to equitable growth and development (Edukemy Team, 2024). Many economic activities, particularly those related to agriculture and the extractive sector, take place largely in rural areas. However, some national and local government policies have not always succeeded in meeting the needs of rural communities or harnessing their considerable potential (AUDA-NEPAD, 2022).

In the Democratic Republic of Congo, there is a paradox between the mining potential of South Kivu province, its level of economic growth and development on the one hand, and widespread poverty in mining areas on the other. Income from mining is distributed unfairly. As a result, minerals that should be an opportunity for the country's development have turned out to be a curse, a real equation with many unknowns for the local communities affected by mining activities. Indeed, basic socio-economic infrastructure is dilapidated or even non-existent. In addition, almost all communication routes connecting the Territories with the capital city of South Kivu province are cut off. Rural areas make up most of the national territory and are home to nearly 70% of the population. However, this majority of the population and the environments in which they live face enormous and significant challenges related to the precariousness and deterioration of basic services, poor governance in general, and particularly the poor governance of the natural resources on which they depend, as well as the deterioration of living and

working conditions. Only the unorganized mining, artisanal, and agropastoral sectors provide this population with a modest income and an uncertain future.

In South Kivu Province, household living conditions are very poor, with poverty affecting more than eight out of ten households and an urban unemployment rate higher than the national average. The majority of the population works in the informal sector, particularly in agriculture, but the income they derive from it is insignificant (UNDP, 2009).

The study takes an interdisciplinary approach, combining economic, social, environmental, political, and legal dimensions to offer a critical and constructive analysis of local development issues in a context of intense extractive pressure and isolation. The results will support local development plans.

Overall, the study aims to contribute to the definition of a better approach to exploiting and enhancing the available potential for the benefit of the population, considering that improving their socio-economic conditions is a fundamental pillar of sustainable development. Without a real improvement in the well-being of citizens, no development can be considered authentic, stable, or inclusive. The results will inform local development plans in rural areas and provide scientists with insights into the approaches to be taken in highly isolated forest areas.

Specifically, this involves analyzing the socio-economic situation of the households that make up the population of the chiefdom under study; identifying the potential for local development; and identifying the obstacles that hinder the development of the Wamuzimu chiefdom and similar cases.

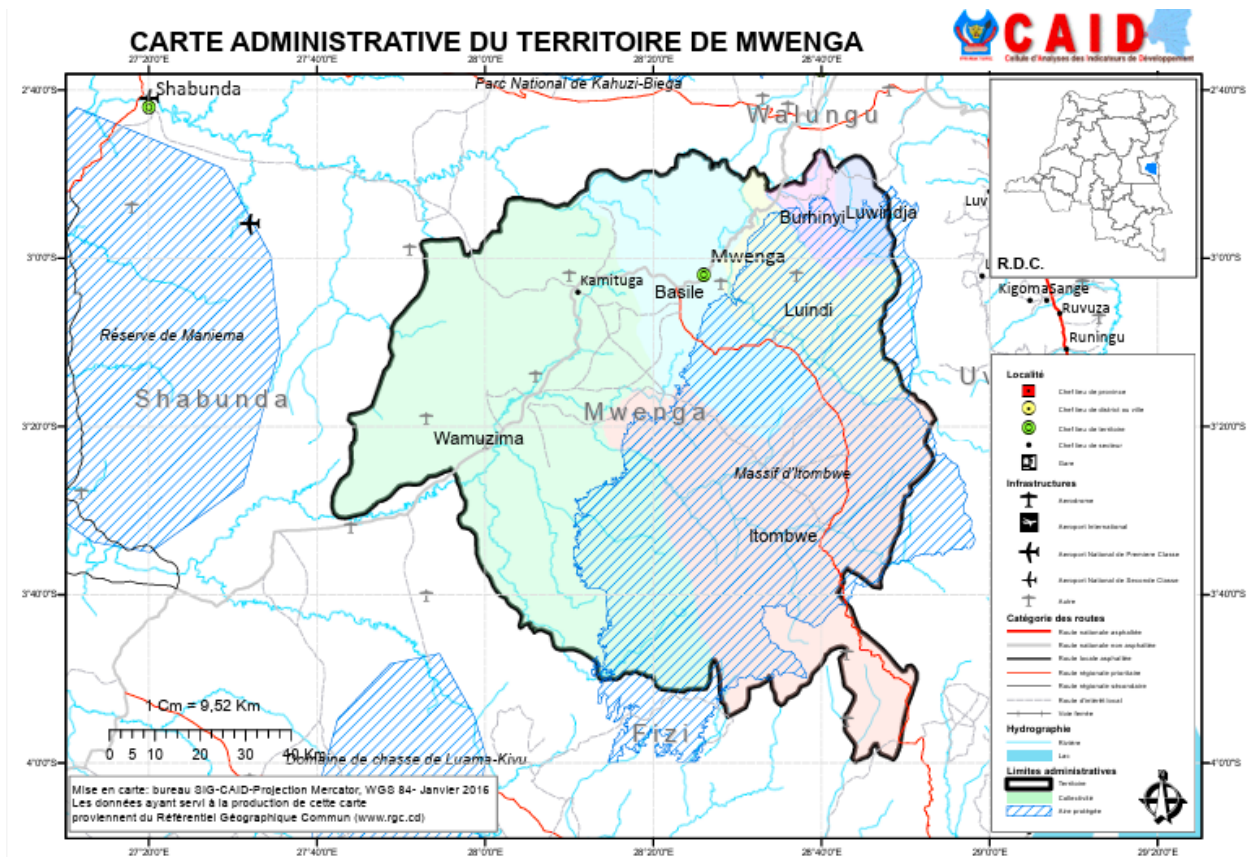
## 2. Methodology

### 2.1. Study Area

The Wamuzimu chiefdom is one of six chiefdoms that make up the Territory of Mwenga in South Kivu Province. It covers an area of 3,112 km<sup>2</sup> and is located between 2°52'27" and 3°31'40" Latitude and between 27°42'52" and 28°28'55" Longitude<sup>1</sup>.

Its terrain consists of plains with highly arable land, but also alluvial soil. The northern part consists of plateaus, while the southern part is suitable for agriculture and livestock farming with its plains and savannahs. The chiefdom enjoys a humid tropical climate with two seasons during the year: the dry season from June to the end of August and the rainy season from September to May; with 1600 mm of rainfall per year. The temperature varies between 21 °C and 37 °C in most of the Territory. The hydrography is sufficiently dense. It includes large rivers such as the Elila, which has several tributaries. There is significant potential for hydroelectricity. The subsoil of the chiefdom is rich in deposits of gold, cassiterite, tungsten, and coltan. In terms of infrastructure in general, such as roads, is completely dilapidated; a few schools and health facilities exist.

<sup>1</sup>MUKUNDA, A. Dry rice farming in the Wamuzimu/Mwenga community, T.F.E. in geography, I.S.P/BUKAVU, 1974, p.2.



**Figure 1.** Administrative map of Mwenga Territory, including Wamuzimu chiefdom in the green area. Protected areas are shaded in blue.

The Wamuzimu chiefdom (**Figure 1**) has a total population of 570,673. It is an agricultural area. People mainly grow food crops such as corn, cassava, beans, rice, palm trees, beans, yams, peanuts, and corn, in a subsistence farming mode. Cassava is the main crop and constitutes the staple food in the region. Goats are raised in a free-range system. Hunting is also one of the activities in the chiefdom, as it is located in a forest area rich in game, situated in the primary forest which is home to a wide variety of wildlife including monkeys, antelopes, ibex, elephants, snakes and porcupines. Forestry is another important economic activity, but one that can cause environmental problems if strict regulations are not enforced. Small-scale trade is another common economic activity, often linked to agriculture and mining.

## 2.2. Data Collection

### *Interviews*

This study adopted a quantitative methodology for the socio-economic aspects of households, coupled with a qualitative method with focus group interviews. Convenience sampling was used to select the 90 household leaders for individual interviews, conducted with the Elila basin Divisions, because of difficult accessibility elsewhere. A focus group was held in nine Divisions (the administrative level

below a chiefdom). The following categories were included: community leader, village chief, member of local development organizations, religious leader, public administration official, young people (one boy and one girl), two farmers (one man and one woman), a trader, a miner, and a logger. A total of 135 people participated in the focus groups, in addition to 90 heads of households who were interviewed individually. The focus group was held in the headquarters of each Division. Additional information on the management and exploitation of the potential available in the chiefdom was collected through individual interviews with ten urban key informants from the area. This brings the total number of people surveyed to 235.

### *Survey questionnaires*

#### 1) The household survey questionnaire

Identification of respondent: Division, village, gender; Socio-economic status of household: Household size, monthly income, main sources of income, number of meals per day, savings capacity, staple foods, water sources, number of school-age children, children in school, distance to school, level of education of head of household, access to healthcare, type of latrines, access to energy, types of housing, means of transport, investment capacity, access to agricultural land, and domestic equipment.

#### 2) Focus groups questionnaire

The questionnaire comprises three main sections: a) The development potential available in the chiefdom; b) The main obstacles to the development of the chiefdom; c) Development prospects in the chiefdom. A consensus was sought, using Likert scores for each statement to determine whether it was true in their environment: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree, 5 = completely agree.

**The descriptors of the Potential** included the availability of land (favorable land tenure, fertile farmland, sufficient land); agricultural potential (favorable climate, food and cash crops, opportunities to invest in agricultural cooperatives, and improve sustainable agriculture and value chains); natural resources (forests, mines, hydroelectricity); available human capital; tourism (natural beauty, attractive culture, potential for cultural projects); Communication (modern telecommunications and internet infrastructure); mechanisms for the valuable exploitation of resources; infrastructure and transport; existence of social organizations (CSOs, churches, administrative services, NGOs, institutions); social infrastructure (schools, health facilities, radio, stadiums, markets, shops); processing infrastructure (rice mills, oil mills)

**The descriptors of Barriers to development** included the occurrence of insecurity and instability (widespread armed conflict, illegal exploitation of natural resources, lack of protection by local institutions); poor utilization of natural resources; poverty and unemployment (insufficient income, youth unemployment); weak infrastructure (roads and transportation, energy, drinking water); Climate disruption; poor access to services (health, education, gender equality, and other administrative services); rural exodus of intellectuals and elites; land conflicts (de-

mographic pressure on land, land grabbing by concessionaires); excessive dependence on artisanal mining; lack of vocational and technical schools; environmental degradation (deforestation, climate change); beliefs in witchcraft causing the flight of important human capital; geographical isolation (poor access to information, lack of connectivity reducing interactions with other regions, limiting economic opportunities and cultural exchanges); institutional weakness and governance.

**Prospects parameters** included securing family land through improved land tenure (modern and customary); developing the natural resources existing in the Elila basin; building road infrastructure and rehabilitating agricultural access roads; reforesting denuded sites and implementing more sustainable forestry practices; creating jobs by exploiting available natural potential; Massive investment in basic infrastructure and promotion of access to services; strengthening security and local governance; creation of vocational and technical schools; Education and awareness-raising on the harmful effects of false beliefs; Diversification of sources of income.

The data were collected using Kobo Collect both during Focus groups and household individual interviews.

3) Interviews with ten urban key informants natives of Wamuzimu

**Respondent demographics:** gender; age; current occupation or position; level of education; occupation; **variables:** link between resource exploitation and living conditions; indicators of underdevelopment; ways to improve living conditions; causes of blockages (economic, social, cultural, political, and legal); actions already taken; changes observed in the community as a result of the actions taken and the actors involved; effective strategies; personal commitment of the interviewee; recommendations to decision-makers and the community; existence of a development plan (content, authors); opinion on the involvement of women and youth; priority actions by the authorities (local, provincial, and central). The Interviews with ten urban and local key informants natives were transcribed in full.

### 2.3. Data Analysis

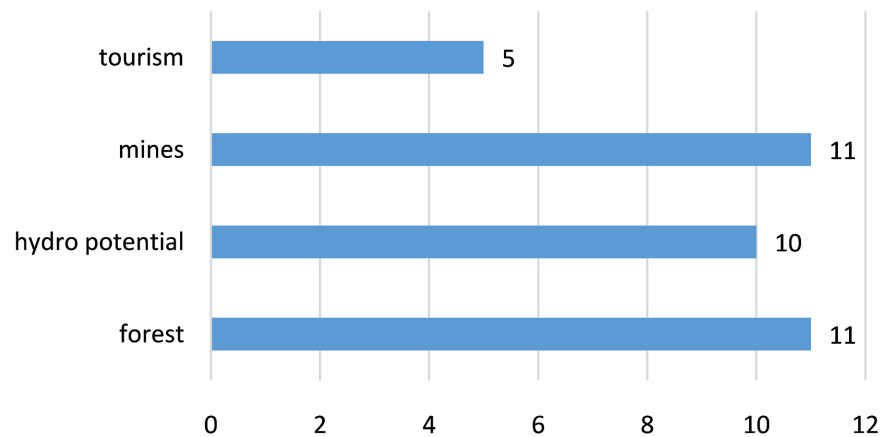
For the Focus groups, Kobo Collect generated the scores for the various items, based on the Likert scale for each statement to determine whether it was true in their environment: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree, 5 = completely agree. Bar graphs of the qualitative score frequencies were drawn in Excel. The data from individual interviews were analyzed using Jamovi software. Descriptive statistics were computed (frequencies, means and standard deviations) and graphs drawn.

## 3. Results

### 3.1. Local Potential

Forests, mines, and hydroelectric potential score highly in terms of natural resource potential in the Wamuzimu chiefdom (**Figure 2**). Tourism, on the other hand, is perceived as having half the potential of forests, mines, and hydroelectric

power.



**Figure 2.** Perceived scores of local potentials in natural resources.

Details have been provided on some communities in terms of their significant development potential. The Bagunga Division has significant hydroelectric resources (waterfalls over 20 meters high).

The Basimbi Division is in the early stages of constructing a mini power plant (work suspended due to lack of funding), fertile soil, cassiterite, coltan, tourmaline, and gold mines. The Banampute Division is rich in mineral resources. The Banakyungu Division has vast tracts of land (forests), waterfalls that could be used for tourism, and a market open to other territories.

The climate is favorable for all crops, even in the dry season. The Bakute Division has large areas of land with potential for grazing and fish farming. The Bingili Bazala Division has a huge forest, mines, wonderful trees, and a climate favorable to agriculture. In the Basimbi group, construction work on a mini power plant has already begun, but due to a lack of funding, the work has been suspended.

### **3.2. Indicators of Non-Development and Precariousness in the Wamuzimu Chieftdom**

There are multiple and converging indicators of non-development in the Wamuzimu chieftdom. In terms of infrastructure, roads are impassable, schools are dilapidated, health centers are inadequate, and access to drinking water and electricity remains limited. Economically, households live in chronic poverty, with low incomes, massive unemployment, and a lack of structured economic activities. The agricultural fabric is severely degraded, particularly by the destruction of agricultural land and fish ponds and the lack of support for family farming. The environment suffers from pollution, deforestation, and loss of biodiversity, exacerbated by unregulated mining. Institutionally, local governance is weakened by a lack of accountability, failure to comply with specifications, excessive centralization of mining permits, and corruption. Finally, social inclusion is limited, with low participation by women and youth in development initiatives and the absence of a

known or implemented local development plan.

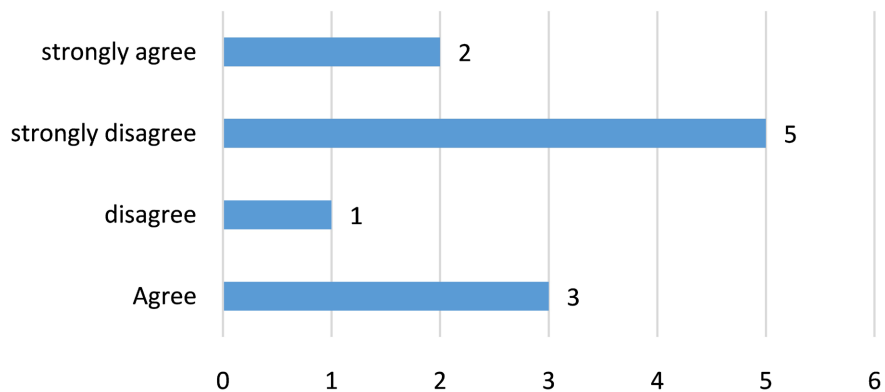
#### ***Economic conditions and food security***

Monthly incomes are very low: 90% of households live on less than USD 50 per month. The local economy is based mainly on subsistence agriculture, livestock farming, and artisanal fishing (79% of income sources). The capacity to save is virtually non-existent: 70% of households report that they are unable to save or invest. Food is insufficient: 58% of households have access to two meals and 38% have only one meal, which is well below their physical needs. These are not substantial meals. Only 3% of households have access to three meals. Income is mainly based on agriculture and livestock farming.

Diets are dominated by cassava, corn, and vegetables, with very low consumption of animal protein and fruit. Cassava and corn pasta is the staple food, accompanied by vegetables. Rice is the most common secondary food. Yams, sweet potatoes, and potatoes come in third place. Meat, eggs, poultry, and fish are the scarce sources of animal protein. Only 22% of households consider themselves to have the capacity to save. Income is very low and households live from day to day, without savings.

#### ***Links between resource exploitation and living conditions***

Although the exploitation of natural resources in the Wamuzimu chiefdom has the potential to promote development, it is perceived by the majority of respondents as a source of socio-economic imbalance. Despite the Territory's wealth of gold, cassiterite, timber, rivers, and agricultural land, the living conditions of the population remain precarious. This contradiction can be explained by the often unregulated and illegal mining carried out mainly by foreign companies, which destroys agricultural land, fish ponds, and forests without compensation. The income generated is not reinvested locally, resulting in a lack of basic social infrastructure such as roads, schools, and hospitals.



**Figure 3.** Perceived Scores of benefits of mining activities.

Opinions are divided on the crucial question of whether mining benefits the people in their communities (**Figure 3**). The agreement has a score of 5, while disagreement has a slightly higher but almost similar score of 6. In addition, environmental degradation, soil pollution, and the disappearance of fish from rivers

are exacerbating the situation. The flight of agricultural labor to the mining sector contributes to declining food production and increasing famine. Some respondents nevertheless recognize specific socio-economic effects, such as the emergence of small businesses and slightly improved housing, but these changes remain marginal and disproportionate to the wealth extracted.

#### *Education and human capital*

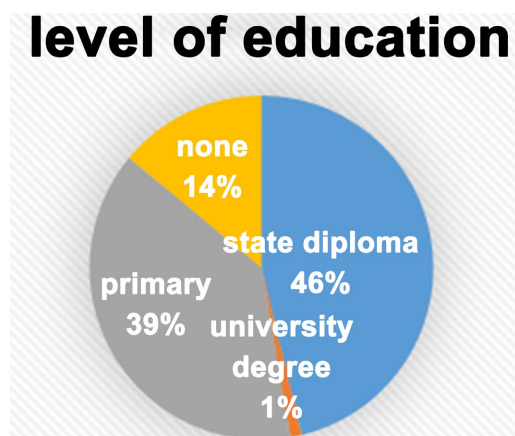
In 95% of cases, household size ranges from 5 - 9 people (Table 1). The average household size is 5 - 9 people, with a high proportion of school-age children (70%). Thus, households are dominated numerically by children, who are dependents, consumers, and non-producers. The school enrollment rate is 82%, but 18% of children remain outside the education system.

**Table 1.** Values of parameters of household size and school attendance.

Parameters	n	Range	Minimum	Maximum	Average	Standard deviation
Household size	93	12	3	15	6.71	2.014
School-age children per household	93	12	0	12	3.53	2.552
Number of school-age children enrolled in school	93	9	0	9	2.78	2.206
Distance (km) between school and home	93	12	0	12	1.55	2.438

The level of education among heads of households is low: more than half have not progressed beyond primary school. Distances to schools vary between 0.5 and 12 km, with an arithmetic average of 1.6 km, which is an obstacle to regular school attendance in the remotest areas.

Many heads of households have not completed or have exceeded the 6-year primary education level (53%). Almost as many have completed secondary education, whether or not they have graduated (Figure 4). Distances to school vary mainly between 0.5 - 3 km, although there are villages where children travel 4 - 12 km to reach school. The distances traveled between school and home range from 1 to 4 km, with an average of 1.6 km. There is near unanimity on the availability of human capital to ensure production.



**Figure 4.** Levels of education of household heads.

***Social participation and inclusion***

Community engagement is low. Only 11% of heads of households participate in collective actions. Women and young people are marginalized in development initiatives, despite their demographic weight. Very few heads of households are involved in community actions (11%).

***Housing and mobility***

Most dwellings are precarious: 88% of homes are built with rudimentary materials (straw or sheet metal). There are no means of transport: 94% of households have no mechanical means of transporting their products to market. Donkeys and horses are unknown in the country.

Among the types of housing, huts with clay walls and thatched roofs (44%) predominate (Figure 5, Figure 6). Brick houses account for only 9%. Overall, these dwellings are very poorly equipped.

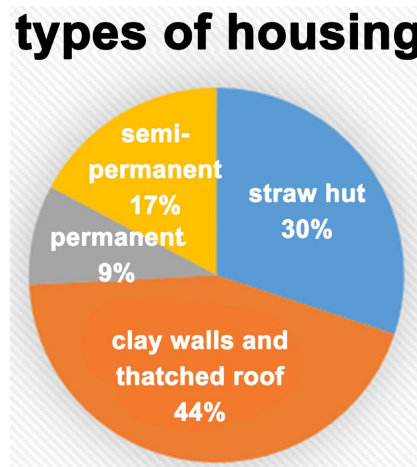


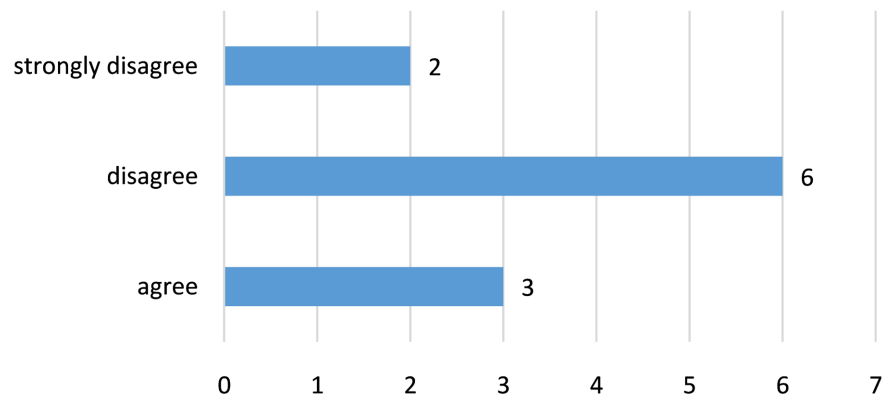
Figure 5. Types of houses.



Figure 6. The most typical house type; huts with clay walls and thatched roofs.

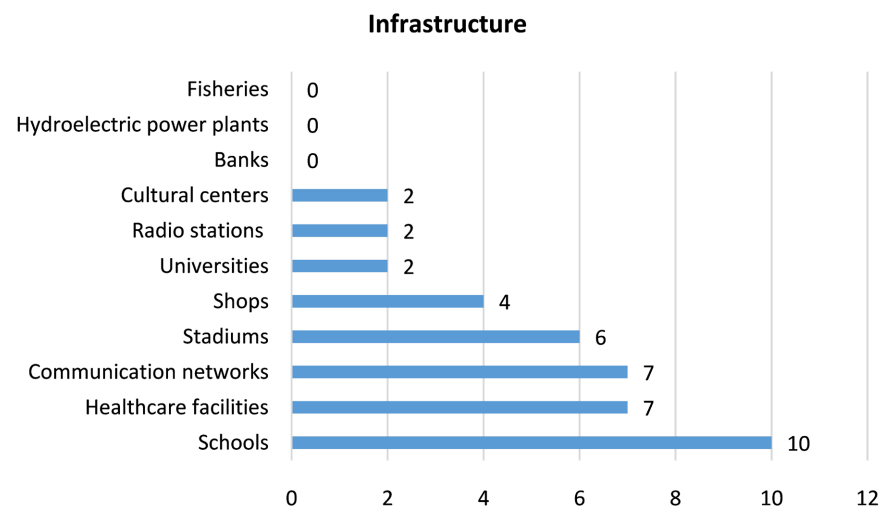
### *Domestic equipment and transport*

In the local context, there are no horses, donkeys, carts, cars, or bicycles to transport products to markets. Everything is carried on the backs or heads of women and, sometimes, men. Domestic equipment is scarce. Only radios are commonly found. Many households depend on river water (46%) with all the predictable health risks. Only 54% have access to a spring, a well, or, more rarely, a standpipe (18%). Road infrastructure is perceived as impassable except in less than one-third of communities (Figure 7). The same is true of the lack of small and medium-sized businesses, which are only perceived in one-third of communities.



**Figure 7.** Perception of the existence of passable road infrastructure.

Schools are the most visible infrastructure (Figure 8). Health facilities, communication networks, and soccer stadiums, although undeveloped, come in second place. There are a few shops, but very few universities, local radio stations, and cultural centers. There are no banks, hydroelectric power plants, or fisheries in Wamuzimu, despite many large rivers.



**Figure 8.** Visibility of infrastructure types.

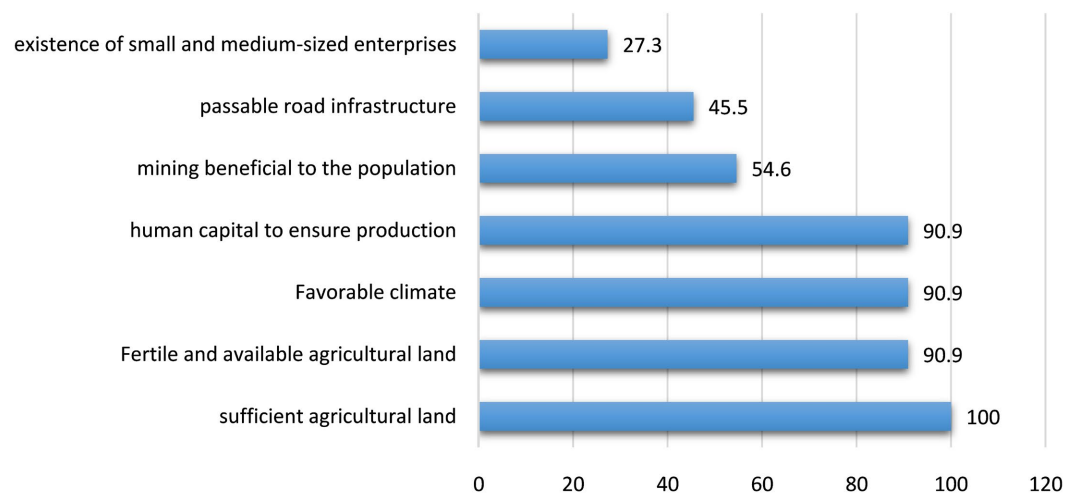
### *Access to health services, drinking-water, and domestic equipment, and light*

It is true that households seek treatment at health centers and hospitals (62%). However, it should be noted that 34% practice self-medication. Traditional practitioners account for only 4%. The community recognizes that there are local markets. However, there are no inter-territorial or inter-provincial markets. Local trade is closed and only takes place at the local level. All of this confirms the isolation of the Wamuzimu chiefdom. Flashlights remain the primary source of lighting.

Most roads are impassable, including strategic roads such as the national RN2, limiting access to markets and social services. School infrastructure is dilapidated and there are no universities, while health centers are poorly equipped and difficult to access. Access to drinking water is limited: 46% of households depend on river water, exposing the population to high health risks. Electrification is virtually non-existent, with widespread use of traditional sources such as flashlights (85%). Domestic appliances are rare: very few (29%) households have a radio, and less than 10% have a television or refrigerator.

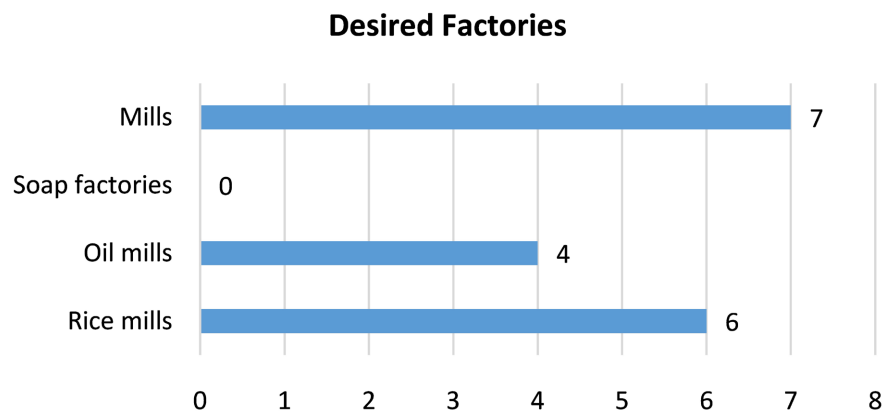
### *Agriculture in the Wamuzimu chiefdom*

Land tenure is considered favorable. The majority of respondents believe that access to land is facilitated by local customary rules. The available land is considered sufficient for the agricultural needs of households. The soil is considered fertile and suitable for cultivation. The climate is suitable (Figure 9). The local climate is perceived as favorable for agriculture, even in the dry season. Labor is available. There is consensus on the availability of human capital to ensure agricultural production. There is little structure in Agriculture. Agricultural cooperatives are virtually non-existent, which limits the pooling of efforts and access to markets. There are many obstacles to productivity. There is limited access to inputs. Agricultural inputs (seeds, fertilizers, tools) are scarce or inaccessible. Infrastructure is deficient. Agricultural access roads are dilapidated, hindering the transport of products to markets.



**Figure 9.** Summary of perception scores of opportunities.

There is land grabbing. Some land is monopolized by mining companies, reducing the amount of arable land. Rural exodus involves young people who leave their villages, to work in the mining sector, weakening the agricultural workforce. There is a lack of institutional support. Government policies in favor of agriculture are considered non-existent or ineffective. Several prospects and levers for development have been proposed. The community identifies mills, rice mills, and oil mills as priorities for processing local production (Figure 10). The development of agricultural sectors (cassava, bananas, coffee, and cocoa) is seen as a path to economic diversification. The creation of agricultural training centers and soil analysis laboratories is proposed to improve productivity. Sustainable forest management and land tenure security are considered essential for preserving agricultural resources. Through focus groups, the community is almost unanimous in its view that land tenure is favorable to households' access to land and that the amount of agricultural land is sufficient for households. The community also considers agricultural land to be fertile and available. There is almost unanimous agreement that the local climate is favorable to agriculture.



**Figure 10.** Preferences or wishes of factory types.

There is a perception of a severe lack of businesses, a lack of passable roads, and uncertainty about the profitability of mineral resources for local communities, although opinion is divided 50-50 on this last point. Among the perspectives for promoting agriculture, the Wamuzimu community sees the establishment of agro-industrial plants as a potential and much-desired salvation. This would mainly involve the development of mills and rice mills. Oil mills would follow as a priority.

### 3.3. Analysis of Indicators of Underdevelopment and Precarious Living Conditions

Indicators of underdevelopment and precarious living conditions in the Wamuzimu chiefdom, as expressed by respondents in interviews include:

#### *Socio-economic indicators of underdevelopment*

*Poor infrastructure:* impassable or non-existent roads, including National Road

No. 2; lack of modern school infrastructure and universities; lack of equipped health centers and access to drinking water; lack of electricity in several areas.

*Poverty and precariousness:* Very low household incomes, dependence on subsistence agriculture; Massive unemployment and underemployment, especially among young people; Lack of processing plants or structured economic activities; Lack of access to credit and financial services.

*Degradation of the agricultural fabric:* Destruction of agricultural land and fish ponds by mining operators; Flight of agricultural labor to the mining sector; Lack of arable land and support for family farming.

*Environment and natural resources:* Pollution of rivers, disappearance of fish; Deforestation and loss of biodiversity; Unregulated and illegal mining, often by foreign companies;

#### ***Institutional and policy indicators***

*Governance and justice:* Lack of accountability and transparency in resource management; Failure of operators to comply with specifications; Poor enforcement of the mining code and excessive centralization of authorizations; Corruption and clientelism in decision-making processes.

*Social inclusion:* Low involvement of women and young people in development initiatives; Lack of awareness and civic education; Absence of a known or implemented local development plan.

These indicators point to a clear conclusion: despite its natural resources, the Wamuzimu chiefdom remains marginalized due to the absence of an effective governance framework, poor resource management, and a lack of investment in infrastructure and social services.

#### ***Actions already taken to promote the exploitation of all these resources for the development of the chiefdom***

Some actions have already been undertaken to promote the exploitation of all these resources for the development of the chiefdom (**Table 2**).

**Table 2.** Development actions already carried out in the chiefdom.

Actors	Role played in the actions undertaken
Wamuzimu chiefdom	Advocacy, reporting abuses, participation in negotiations
Ucomiki-Union	Local mining cooperative, partner of mining companies
Mining companies	Lugushwa Mining, Kamituga Mining, Strategos (often criticized)
Local NGOs	Awareness raising, training, advocacy on community rights
Civil society	Mobilization, reporting abuses, participation in community dialogues
Provincial deputies	Field investigations, reporting on illegal exploitation
Judicial authorities	Sanctioning of illegal operators, seizure of minerals, and convictions

**Formal mining projects:** Granting of mining permits by the Congolese gov-

ernment to certain mining companies such as Strategos, Lugushwa Mining, and Kamituga Mining (a subsidiary of Shomka Resources); Partnerships with local cooperatives, notably the Union of Mining Cooperatives of South Kivu (Ucomiki-Union), to regulate artisanal mining.

**Development of specifications:** Attempts to develop specifications between mining companies and local communities, although these are often not respected or incomplete; Advocacy by traditional leaders for mining companies to comply with the Mining Code and social obligations towards communities; **Support for responsible mining:** NGOs such as PACT, IPIS, SAESSCAM: training artisanal miners in less polluting techniques and mineral traceability; “Green mine” projects to reduce environmental impact. **Local development programs:** Road rehabilitation and school construction, initiated by the provincial or national government, but often unfinished or poorly maintained; Mining Social Fund (FSM) intended to finance community projects, although criticized for its lack of transparency. 5. **Awareness-raising and advocacy:** Campaigns on the rights of local communities vis-à-vis mining companies (e.g., Natural Resource Governance Institute); Fight against child labor in mines (UNICEF, Save the Children); Community mobilization and reporting of abuses, including legal action against illegal operators.

**Limitations and obstacles:** Failure by certain companies, such as Strategos, to comply with specifications; lack of environmental and social impact assessments; corruption, illegal exploitation, and resource grabbing by external actors; lack of coordination between local actors, NGOs, and state authorities.

Several initiatives have been implemented in the Wamuzimu chiefdom to regulate the exploitation of natural resources for local development. Formal mining partnerships have been established between local cooperatives, such as the Union of Mining Cooperatives of South Kivu (Ucomiki-Union), and companies such as Lugushwa Mining and Kamituga Mining, a subsidiary of Shomka Resources. These collaborations aim to structure artisanal mining in alluvial areas. In addition, attempts have been made to develop specifications, notably with the company Strategos, although their implementation remains incomplete or is not being respected. The Wamuzimu chiefdom has engaged in advocacy for mining that complies with the Mining Code and respects community rights. NGOs such as PACT, IPIS, and SAESSCAM have also contributed to the training of artisanal miners, the promotion of less polluting techniques, and the traceability of minerals. However, these efforts are hampered by major obstacles, including corruption, non-compliance with commitments by some companies, and the lack of environmental and social impact studies.

**Changes observed in the Wamuzimu community following actions taken to promote responsible resource exploitation**

Positive changes observed: Emergence of small businesses and settlements around mining areas; Partial improvement in housing: transition from adobe houses to permanent structures; Increased awareness of local community rights

and the Mining Code; Capacity building for local leaders and mining cooperatives by NGOs such as PACT, IPIS, and SAESSCAM; Attempts at dialogue between mining operators and local communities, although often under duress; Legal proceedings against illegal operators (e.g., conviction of three Chinese nationals in Bukavu for illegal mining).

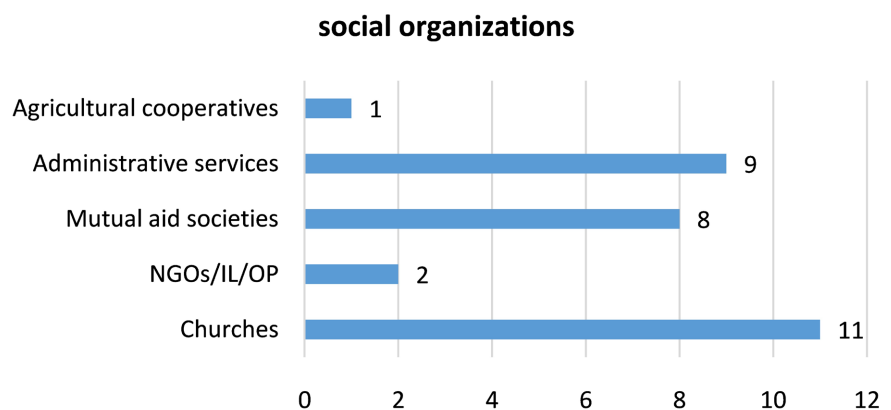
Limitations and frustrations expressed: Lack of tangible change for the majority of the population: persistent poverty, dilapidated infrastructure, limited access to social services; Failure by some companies, such as Strategos, to comply with specifications; Pollution of rivers and destruction of forests without rehabilitation measures; Lack of transparency in the management of mining revenues; Unregulated artisanal mining, often encouraged by unstructured cooperatives.

Although some action has been taken, the changes observed remain marginal and unevenly distributed. The population has high expectations for concrete, sustainable, and inclusive measures to ensure that resource exploitation truly becomes a lever for development.

The actions taken have led to some noticeable changes in the community, although their scope remains limited. Specific improvements have been reported, such as the emergence of small businesses, the transformation of housing with permanent structures, and increased awareness of the rights of local communities. Community leaders and mining cooperatives have benefited from training and technical support. Legal proceedings have also been brought against illegal operators, with notable convictions, such as that of three Chinese nationals in Bukavu. Nevertheless, the majority of respondents express frustration at the lack of tangible changes for the population as a whole. Infrastructure remains dilapidated, poverty persists, and environmental pollution continues without rehabilitation measures. Failure to comply with specifications and a lack of transparency in the management of mining revenues fuel a sense of injustice and marginalization.

#### ***Human capital and social organizations***

The most visible social organizations are primarily churches, followed by administrative services and mutual aid societies. However, there are very few non-governmental organizations, local initiatives, and farmers' organizations. Agricultural cooperatives are very rare.



### 3.4. Obstacles to Development and Prospects

In terms of obstacles to development, the main ones are the dilapidated state of the roads, the low value placed on resources, the lack of vocational schools, the lack of jobs, and the inadequacy of basic infrastructure. Secondly, the community perceives deforestation, the brain drain to the city, and rural exodus, as well as poor access to services. To a lesser extent, the community perceives insecurity, excessive dependence on minerals, seasonal disruptions, land grabbing by concessionaires, and witchcraft as obstacles to development. Land tenure is perceived to a very small extent as an obstacle to development.

The major obstacles to development have been detailed (Figure 11). These include a lack of funding to exploit natural resources, rehabilitate infrastructure, and develop natural resources. Isolation and poor road conditions make it difficult to access entities, and dilapidated roads prevent the transport of agricultural products. There is a general lack of agricultural access roads. There is also land grabbing. Some land is grabbed by companies (BANRO, Chinese companies) and does not benefit the population. Mining by Chinese companies can destroy natural resources and does not benefit the population. Lack of access to basic services, including difficulties in accessing agricultural inputs, microcredit, and agricultural cooperatives. There is also rural exodus, as the lack of employment pushes the intellectual elite to leave rural areas. There are other difficulties: provincial government policy is considered poor; increased deforestation may alter the climate; failure to respect good governance in certain chiefdoms, leading to land conflicts; and a lack of machinery and technology for development. Witchcraft is cited as an obstacle. In the Basimbi administrative Division, out of 16 villages, 8 have disappeared because of witchcraft.

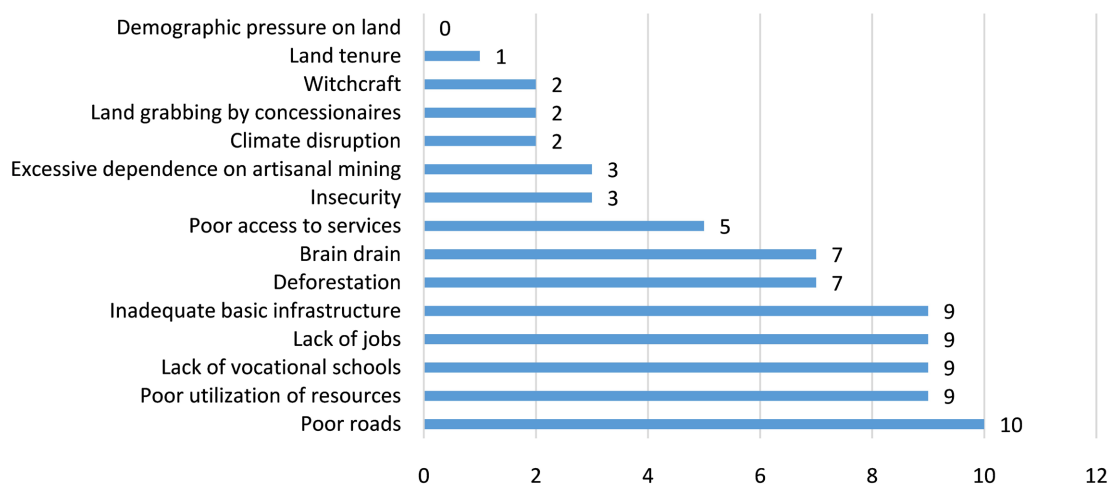


Figure 11. Perceived barriers to development.

The main obstacles to development were listed: Limited access to agricultural inputs, microcredit, and cooperatives, which hinders agricultural productivity; Land appropriation by BANRO, which limits the land available to local popula-

tions and hinders development; Insufficient farming resources, despite the available space, which affects agricultural production; Infrastructure: inadequate infrastructure in need of rehabilitation, including roads in poor condition, complicating the transport of products; Lack of jobs leading to rural exodus, particularly of skilled labor; Lack of access to agricultural inputs and the need for reforestation; Lack of access to agricultural inputs and the need to reopen agricultural access roads, which are essential for community development; A significant lack of vocational training centers and capacity-building initiatives.

***Imbalance between potential and living conditions***

Our analysis reveals links between resource exploitation and living conditions. Some of these links are perceived as unbalanced or negative, namely: The glaring mismatch between the wealth of resources (gold, cassiterite, timber, rivers, agricultural land) and the persistent poverty of the population. Unregulated or illegal mining, often carried out by foreign companies (particularly Chinese), which destroys agricultural land, fish ponds, and forests without compensation. The absence of local benefits: revenues from exploitation are not reinvested in social infrastructure (roads, schools, hospitals). Environmental degradation: disappearance of fish from rivers, soil pollution, deforestation. The flight of agricultural labor to the mining sector, leading to a decline in food production and an increase in famine.

There are also links that are perceived as potentially positive but poorly exploited, namely: Some respondents acknowledge that mining has changed the socio-economic landscape (emergence of small businesses, improved housing), but without a proportional impact on overall well-being. Mining could improve living conditions if it were regulated, transparent, and accompanied by investment in social services.

Responses from interviews to the question: “Does the exploitation of these resources contribute to improving the living conditions of the population and/or the development of the Wamuzimu chiefdom?” The majority of respondents clearly said “NO.” The main reasons given were: A glaring mismatch between the wealth of resources (gold, cassiterite, timber, rivers, agricultural land) and persistent poverty. Unregulated and illegal mining, often carried out by foreign companies, particularly Chinese ones. Destruction of agricultural land, fish ponds, and forests, without compensation. Lack of social infrastructure: impassable roads, dilapidated schools, lack of health centers. Failure to create local jobs: young people are marginalized, women are not involved. Concentration of income in the hands of a few external or corrupt actors. Flight of agricultural labor to the mining sector, exacerbating famine. Environmental pollution and disappearance of fish from rivers.

There have been some isolated improvements: the emergence of small businesses and improved housing in some mining areas. The creation of a few mining cooperatives and local initiatives. Community awareness and advocacy by NGOs and local leaders.

But there are limits to these improvements: Impact not proportional to the wealth extracted. Lack of transparency in the management of mining revenues. Development projects are often unfinished or poorly managed.

In short, resource exploitation in the Wamuzimu chiefdom does not contribute significantly to improving living conditions or sustainable development. It is perceived as a source of imbalance, conflict, and marginalization, despite some visible socio-economic effects.

Among the major obstacles identified are corruption, poor governance, lack of accountability. Failure by operators to comply with specifications. Exclusion of local communities from decision-making processes. Poor enforcement of the mining code and excessive centralization of authorizations.

In summary, the majority of respondents establish a weak or even negative link between resource exploitation and the living conditions of the population, due to poor management, a lack of equitable redistribution, and often illegal or unsustainable exploitation.

***Economic, social, cultural, political, and legal causes hindering the development of the Wamuzimu chiefdom***

**Economic causes:** Mining activity: heavy dependence on unregulated artisanal mining, to the detriment of agriculture and agribusiness. Monopolization of resources by foreign companies, with little local benefit. Lack of productive investment and absence of banks or credit mechanisms for local producers. Geographical isolation: impassable roads that limit access to markets and services.

**Social causes:** Widespread poverty and low household income; unemployment and underemployment, especially among young people. Poor access to basic social services: health, education, drinking water. Rural exodus and flight of agricultural labor to the mining sector. Jealousy, laziness, and lack of community collaboration.

**Cultural causes:** Resistance to change and backward customary practices. Tribalism and social exclusion, hindering cohesion and openness to others. Excessive community interdependence, which discourages individual initiative and investment.

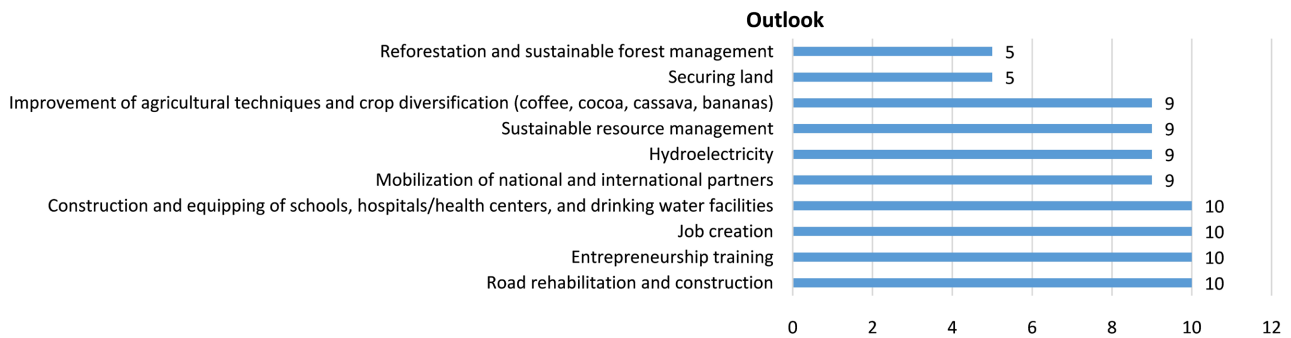
**Political causes:** Lack of strong local leadership: some traditional chiefs are absent or not very involved. Corruption and clientelism, particularly in the management of resources and mining permits. Political isolation of the chiefdom in the face of provincial governance that is considered tribal and non-inclusive. Lack of strategic planning and a shared vision of development.

**Legal causes:** Failure to enforce the mining code and land laws. Excessive concentration of mining powers at the central level, marginalizing local authorities. Lack of accountability and sanction mechanisms for non-compliance with specifications. Corruption in the judicial system, which does not protect the rights of local communities. The development of the Wamuzimu chiefdom is hampered by a tangle of economic, social, cultural, political, and legal factors that reinforce each other. An integrated approach based on local governance, social justice, and com-

munity participation is essential to overcome these obstacles.

Among the prospects for ensuring local development in Wamuzimu, the first priority is the urgent need to rehabilitate and build roads; promote training in entrepreneurship; create jobs; build and equip schools and health centers; mobilizing national and international partners, perhaps through twinning; developing hydroelectric power plants; sustainably managing local resources; and improving/diversifying agricultural techniques. Securing land, especially in the face of land grabbing and reforestation, as well as sustainable forest management, also score highly among the prospects for ensuring local development.

Proposals to overcome obstacles to development (Figure 12) include Expertise in cultivated soil through the creation of an agricultural laboratory to study the soil and identify appropriate crops, in order to avoid wasting time and resources. Reopening agricultural access roads to improve access to agricultural inputs and facilitate the flow of products to other entities. The population has also called on intellectuals to help develop their environment.



**Figure 12.** Outlook to overcome the barriers to development.

Members of the local community in Wamuzimu have provided several proposals on the main resources for development: **Natural resources:** The Divisions have a large area for agriculture, livestock grazing, and aquaculture, which are crucial for development. **Agricultural inputs:** Access to agricultural inputs is essential for improving productivity and development. **Infrastructure:** The rehabilitation and reopening of agricultural access roads are essential for improving connectivity and resource distribution, facilitating the transport of products, and improving market access. **Financial support:** The availability of microcredit and financing is necessary to effectively exploit natural resources. **Training and capacity building:** The creation of vocational training centers is important for skills development and reducing rural exodus. **Improve access to microcredit** and cooperative structures to increase the availability of services to the population. **Address land issues by resolving land ownership conflicts**, particularly in areas controlled by companies such as BANRO, which hinder local development. **Increase funding for the development of natural resources**, including agriculture, livestock, and aquaculture, to maximize local economic potential. - Implement **better provincial government policies** to support local development and improve the

condition of roads for transportation. **Involve local intellectuals** and community members in development initiatives to ensure that solutions are tailored to the specific needs of the population.

*The approaches proposed by respondents to improve living conditions and promote the development of the Wamuzimu chiefdom through the responsible exploitation of its resources.*

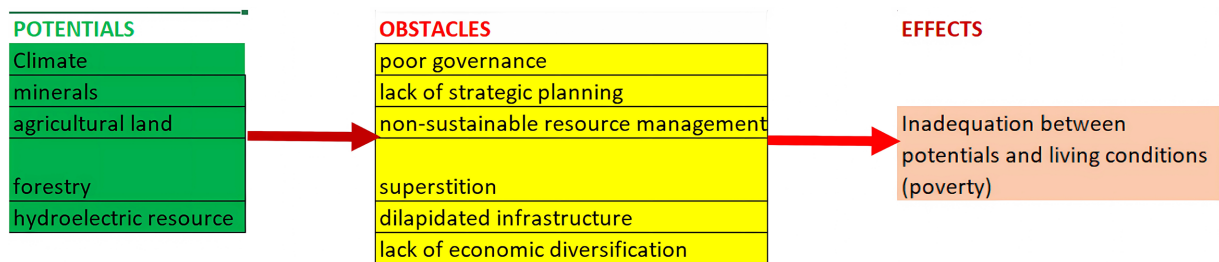
This is a comprehensive approach: integrated, participatory, and sustainable, including **inclusive and accountable governance**: involving local communities in decision-making and resource management. Strict compliance with specifications by mining operators. Transparency in the management of mining revenues. Decentralization of mining powers to strengthen the role of local authorities. **Responsible resource exploitation**: Formalization of the artisanal mining sector and supervision of cooperatives. Registration of operators in legal and controlled structures. Rigorous application of the Congolese mining code and due diligence standards. Reduction of environmental impact (pollution, deforestation, destruction of fish ponds). **Support for agriculture and economic diversification**: Distribution of agricultural inputs, solar irrigation, and training in sustainable techniques. Development of pilot farms and local value chains (coffee, cocoa, cinchona). Creation of microcredit and agricultural cooperatives. Encouragement of agribusiness and rural entrepreneurship. **Targeted social investments**: Construction of modern schools, health centers, and drinking water stations. “One Mine = One School” program to link mining and education. Mobile clinics for mining areas exposed to heavy metals. **Community security and resilience**: Rehabilitation of agricultural access roads and the RN2 highway. Fight against armed groups and fake Wazalendo. Strengthening peace and social cohesion. **Involvement of women and young people**: Vocational training and integration into development projects. Enhancing their roles in awareness-raising, governance, and local innovation. Prevention of social exclusion and community conflicts.

## 4. Discussion

### 4.1. Structural Causes of Development Bottlenecks

The development bottleneck in the Wamuzimu chiefdom is the result of a complex mix of economic, social, cultural, political, and legal causes. Economically, dependence on unregulated artisanal mining, resource grabbing by foreign companies, and a lack of productive investment are hindering growth. Socially, widespread poverty, youth unemployment, and rural exodus weaken the community fabric. Culturally, resistance to change, tribalism, and excessive interdependence hinder innovation and individual initiative. Politically, the absence of strong local leadership, corruption, and the isolation of traditional chiefs in the face of non-inclusive provincial governance limit the capacity for action. Legally, the non-enforcement of the Mining Code, the centralization of power, and corruption in the judicial system prevent the protection of community rights and the effective regulation of resource exploitation. The conceptual model (**Figure 13**) illustrates how

the local potential is hindered by various obstacles, which lead to a profound disconnect between the area's potential and the precarious living conditions of its population.



**Figure 13.** Conceptual model of potentials, obstacles and consequences in Wamuzimu chiefdom.

There are multiple and converging indicators of non-development in the Wamuzimu chiefdom. At the institutional level, local governance is weakened by a lack of accountability, failure to comply with specifications, excessive centralization of mining permits, and corruption. Finally, social inclusion is limited, with low participation by women and young people in development initiatives and the absence of a known or implemented local development plan.

## 4.2. Determinants of Rural Development

### 4.2.1. Economic Determinants

Our results show that, economically speaking, households in Wamuzimu live in chronic poverty, with low incomes, massive unemployment, and a lack of structured economic activities. The agricultural fabric is severely degraded, particularly due to the destruction of fields and fish ponds and the lack of support for family farming.

The main economic determinants of poverty include unemployment, low wages, income inequality, and limited access to essential resources and services. These economic factors interact and reinforce each other, creating a vicious cycle of poverty.

#### *Income and employment*

Increasing income levels and diversifying employment opportunities are essential for improving living standards and reducing poverty. Studies consistently highlight the importance of economic growth and diversification beyond agriculture (Hoang, 2020, pp. 81-90; Yesigat & Awoke, 2024, pp. 929-939; Demchenko et al., 2023, pp. 93-108; Sen, 2024). Access to credit and financial services also plays an important role (Adejobi & Kassali, 2013, pp. 143-152).

#### *Agricultural productivity*

Our findings show that, despite several favorable conditions, there is little structuring in the agricultural sector. Agricultural cooperatives are virtually non-existent, which limits the pooling of efforts and access to markets. There are numerous obstacles to productivity. There is limited access to inputs. Agricultural inputs (seeds, fertilizers, tools) are scarce or inaccessible. Infrastructure is deficient. Ag-

ricultural access roads are dilapidated, hindering the transport of products to markets. There is land grabbing. Some land is monopolized by mining companies, reducing the amount of arable land. Rural exodus means that young people are leaving to work in the mining sector, weakening the agricultural workforce. There is a lack of institutional support. Government policies in favor of agriculture are considered non-existent or ineffective.

While diversification is important, agricultural productivity remains the cornerstone of rural economies. Improved agricultural techniques, access to improved seeds and inputs, and effective access to markets are essential (Adejobi & Kassali, 2013, pp. 143-152; Alamerie, 2020).

#### ***Infrastructure development***

In the Wamuzimu chiefdom, in terms of infrastructure, the roads are impassable, schools are dilapidated, health centers are inadequate, access to drinking water remains limited, and electricity is virtually non-existent.

Many authors have explained in their works that adequate infrastructure, particularly in terms of transport, communication, and energy, is essential for connecting rural areas to markets and facilitating economic activities (Ogunleye & Amen, 2010; Demchenko et al., 2023, pp. 93-108; Martín & Tulla, 2019, pp. 517-540; Knieć & Goszczyński, 2022, pp. 27-50). Access to information and communication technologies (ICT) is increasingly recognized as an essential driver of economic development (Aslam et al., 2024; Tham et al., 2021, pp. 222-237).

#### **4.2.2. Social Determinants**

##### ***Education and human capital***

In Wamuzimu, the school enrollment rate is 82%, but 18% of children remain outside the education system. The level of education among heads of households is low: more than half have not progressed beyond primary school. There are several villages where children travel 4 - 12 km to reach school. School-age children represent 1 - 6 members of households, or 70.1% of household members. Households are dominated numerically by children, who are dependents, consumers, and non-producers. This poses a labor problem.

Improving education levels and skills development are essential to boosting productivity and creating opportunities (Yesigat & Awoke, 2024, pp. 929-939; Drago et al., 2020; Demchenko et al., 2023, pp. 93-108; Westgard & Alnasser, 2017; Aslam et al., 2024). This includes both formal education and access to relevant training and skills development programs.

##### ***Health and well-being***

In Wamuzimu, most roads are impassable, including strategic routes such as the RN2, limiting access to markets and social services. School infrastructure is dilapidated and there are no universities, while health centers are poorly equipped and difficult to access. Access to drinking water is limited: 46% of households depend on river water, exposing the population to high health risks.

Good health and access to quality healthcare are essential for a productive workforce and a better quality of life (Azuh et al., 2021, pp. 159-170; Singh, 2025;

Uprety, 2025; Moskvicheva et al., 2025). It is essential to address the social determinants of health, such as poverty, inequality, and access to resources (Backonja et al., 2022, p. 104051; Shrestha et al., 2023, p. 7678; Brutto et al., 2022; Uprety, 2025).

#### ***Social capital and community participation***

In the Wamuzimu chiefdom, community engagement is low: only 11% of heads of households participate in collective actions. Women and young people are marginalized in development initiatives, despite their demographic weight. The most visible social organizations are primarily churches, followed by administrative services and mutual aid societies. On the other hand, there are very few non-governmental organizations, local initiatives, and farmers' organizations involved in development. Agricultural cooperatives are very rare.

Strong social networks, trust, and community participation are essential for collective action and effective governance (Wang & Wang, 2023; Kniec & Goszczyński, 2022, pp. 27-50; Bajrami et al., 2020; Vorodam et al., 2025). The proposed "integrated and participatory approach" is a key recommendation. In this study. It is essential to empower local communities and promote participatory development approaches (Macken-Walsh & Curtin, 2013, pp. 246-264; Ibani, 2019).

Social networks, trust, cooperation, and a sense of community can promote rural development by facilitating access to resources, opportunities, and services.

Social capital is one of the main dimensions of socially organized communities; it also makes it easier for citizens to solve problems collectively. People involved in local associations and community life also feel closer to their neighborhood and physical environment (Wiesinger, 2007).

#### ***Gender equality***

Our findings showed that young people are marginalized and women are underrepresented. Empowering women and promoting gender equality are essential to unlocking the full potential of rural communities (Yesigat & Awoke, 2024, pp. 929-939; Ijatuji et al., 2022; Khazami et al., 2023; Ge et al., 2022; Zhou & Lai, 2023). It is essential to address gender inequalities in access to resources, education, and opportunities.

### **4.2.3. Environmental Determinants**

#### ***Natural resource management***

In the Wamuzimu chiefdom, despite several favorable conditions (climate, vegetation, soils), the environment suffers from pollution, deforestation, and biodiversity loss, exacerbated by unregulated mining.

Sustainable management of natural resources, including land, water, and forests, is crucial for long-term rural development (Milner, 2016; Harbiankova & Gertsberg, 2022; Vorodam et al., 2025). This includes addressing issues such as deforestation, soil erosion, and water scarcity.

In our findings, we highlighted the mismatch between abundant mineral resources and their unregulated or illegal exploitation, often by foreign companies (particularly Chinese), which destroys agricultural land, fish ponds, and forests

without compensation. This results in a lack of local benefits. The income generated by mining is not reinvested in social infrastructure (roads, schools, hospitals). Environmental degradation is considerable. We are seeing the disappearance of fish from rivers, soil pollution, and deforestation. The flight of agricultural labor to the mining sector is leading to a decline in food production and an increase in famine.

#### 4.2.4. Institutional and Governance Determinants

Our findings show that governance is failing, social exclusion is rife, and there is a lack of strategic planning. Despite a few initiatives (mining partnerships, craft training, community advocacy), local benefits remain marginal. Mining, which is often unregulated and dominated by foreign companies, leads to the destruction of agricultural land, environmental pollution, and the exclusion of communities from decision-making processes. The specific national or provincial governance failures and regulatory gaps that permit these detrimental activities are illustrated by the desperate state of the national road, and the corruption, and excessive centralization, and the lack of enforcement of the Mining Code.

Effective governance, transparency, and accountability are essential for creating an environment conducive to investment and development (Kniec & Goszczyński, 2022, pp. 27–50; Sharma, 2021; Bhattarai, 2020, pp. 38-48; Lehmann & Jenss, 2022, pp. 848-866).

##### *Policy and regulatory framework*

Appropriate policies and regulations are needed to support rural development initiatives, including agricultural policies, infrastructure development policies, and social protection programs (Hoang, 2020, pp. 81-90; Menyah et al., 2020; Leimbigger et al., 2022, pp. 749-754).

##### *Institutional barriers*

Many authors point to ineffective governance structures, centralized planning processes, and the lack of coherent development strategies as major obstacles to rural progress. These problems often lead to a lack of local ownership and participation in development initiatives. (Yar & Zazia, 2024). Bureaucracy and administrative barriers can significantly hinder the implementation of rural development projects. This is particularly evident in cross-border collaborations, where differences in administrative rules and regulations pose significant problems. (Furmankiewicz & Trnková, 2024, pp. 137-150; Pollermann et al., 2013, pp. 111-117).

The authors offer several examples of successful strategies for overcoming obstacles to rural development, although success is often context-specific and requires adaptation to local conditions. Rural development must therefore take multifunctionality into account, and the corresponding planning processes should be based on “integrated development strategies” as a comprehensive approach to territorial development based on the strengths, weaknesses, opportunities, and threats of a region.

#### 4.2.5. Cultural Determinants

In Wamuzimu, cultural causes of non-development are highlighted, namely resistance to change and backward customary practices. Tribalism and social exclusion hinder cohesion and openness to others. Excessive community interdependence discourages individual initiative and investment.

The preservation and promotion of local culture and heritage can contribute to rural development through tourism (Vorodam et al., 2025; Ray, 2013, pp. 924-933; Chinniah & Anuar, 2025). This requires careful planning and management to ensure that tourism benefits local communities in a sustainable manner. Witchcraft is one of the cultural determinants. Actually, in specific regions like neighboring Uganda (Vincent & Patience, 2025), and among the Atchan (Ébrié) people in Côte d'Ivoire (Dagbé, 2022), witchcraft is explicitly identified as a **socio-cultural reality** with tangible impacts on communities. Witchcraft in Rega communities of the Democratic Republic of Congo, which include Wamuzimu chiefdom, is a *social reality*, not merely a myth—deeply embedded in cultural, religious, and socio-political structures. In Rega communities, as in many parts of eastern DR Congo, *beliefs in witchcraft and sorcery are widespread and socially consequential*. These beliefs are not simply folkloric or symbolic; they actively shape interpersonal relationships, community dynamics, and responses to misfortune. On the 28 September 2021, The Guardian reported the death of eight women in South Kivu, reportedly been burned or lynched as a consequence of witchcraft accusations.

### 5. Conclusion

Analysis of the socio-economic dynamics in the Wamuzimu chiefdom reveals a structural tension between the natural potential of the territory and the persistence of multidimensional poverty. Despite the presence of strategic resources and local development initiatives, the beneficial effects remain marginal, hampered by deficient governance mechanisms, predatory mining, and low community inclusion in decision-making processes.

The survey results highlight the need for a reconfiguration of local policies based on a participatory, integrated, and sustainable approach. This involves the establishment of transparent governance mechanisms, local capacity building, rigorous oversight of extractive activities, and the promotion of the agricultural and artisanal sectors. The mobilization of women, youth, and community leaders appears to be an essential lever for catalyzing change. Ultimately, the development of Wamuzimu cannot be envisaged without a profound transformation of the relationship between resources, power, and citizenship. This territory, rich in potential but weakened by exclusionary practices, calls for a strategic response based on social justice, accountability, and collective resilience.

The recommendations focus on strengthening local governance, regulating mining, diversifying the economy and promoting agriculture; investing in basic infrastructure, capacity building and civic education, securing the territory and

social cohesion, monitoring and evaluation, and accountability for interventions.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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