*Author: Olaf Rudolfsen - Oslo - Norway: 2025-12-06*

# *Fase 1 A - Operational Plan*

*First, we would like to emphasize the importance of building strong connections with local business partners and creating employment opportunities for the local community. We also hope to offer education and skills training through our Imboga Viticulture & Winemaking Academy program.*

**Rubavu Land Assessment for Project Development**
The selected land must be government-owned land, obtained through an official lease or concession agreement administered by the relevant public authorities.

**Develop Marketing and Expand the Investment Program**
Our project and activities include strengthening market visibility, building strategic partnerships with local businesses and the Rwandan government, and expanding investor outreach to support long-term growth.

**Construction of Essential Facilities**
Develop core infrastructure such as operational buildings, storage units, processing areas, utilities, and supporting technical facilities required for project operation.

**Viticulture and Agricultural Development**
Establish high-quality vineyard systems, introduce suitable grape varieties, and apply modern agricultural practices tailored to Rubavu's volcanic soils.

**Establishment of a Pilot Wine-Production Line**
Set up a small-scale, fully functional winemaking pilot facility to test grape varieties, processing techniques, and product development prior to full-scale production.

**Planning for Imboga Viticulture & Winemaking Academy**
This academy will offer professional training in viticulture and winemaking, providing local trainees with practical skills for a developing wine industry in Rubavu. It will serve as a regional hub for applied learning and agricultural innovation.

**Planning for Agricultural Skills Development and Training**
Implement training programs for local communities, including viticulture, crop management, soil conservation, and modern agricultural techniques.

**Planning for Tourism and Hospitality Services**
Integrate tourism-focused components such as visitor experiences, hospitality services, tasting areas, and guided tours to enhance economic diversification and regional attractiveness.


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# *Fase 1 B - Operational Plan*

**Strong Employment and Skills-Training Impact in Rubavu**
We will strengthen market visibility, develop investor networks, and position the project for long-term growth through targeted strategic outreach.

**Creating Significant Employment Opportunities in Rubavu**
This initiative will create meaningful jobs across agriculture, training, hospitality, and production, supporting sustainable economic growth and expanding high-quality employment opportunities for Rubavu's local community.

**Marketing and Expansion of the Investment Program**
We will strengthen market visibility, develop investor networks, and position the project for long-term growth through targeted strategic outreach.

**Tourism Attractions and Hospitality Services**
Plans include developing visitor experiences, hospitality facilities, and integrated tourism activities that enhance the region's economic potential.

**Collaboration Plan with the Norwegian Seafood Industry**
We aim to establish a structured partnership with Norway's seafood sector to support a high-quality import program and long-term commercial cooperation.

**Startup Plans for the Imboga Viticulture & Winemaking Academy**
The academy will provide practical training in viticulture and winemaking, serving as a regional hub for skills development, agricultural innovation, capacity building, and long-term support for Rubavu's new wine sector and its future economic impact.

**Preparation for Export of the Wine Production Line**
Strategic groundwork will be developed for future wine exports, including standards, quality control systems, and market-entry planning.

**Planning and Land Analysis for an 18-Hole Golf Course**
Location research and comprehensive assessments will guide land selection, design parameters, and long-term development strategies for an international-standard, professional 18-hole golf facility. An alternative startup option could be a medium-sized, lower-standard golf facility ranging from 9 to 18 holes.


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# *Rubavu Soil Report*

**Geological and Agro-Ecological Conditions**

- Rubavu is located in Rwanda's north-western volcanic highlands, within the Birunga (North-Western Volcanic) agro-ecological zone, situated along the shores of Lake Kivu and close to the Virunga volcanoes (Nyiragongo and Nyamuragira).

**Dominant soil group: Volcanic Andosols**

- Most scientific work classifies the Rubavu–Nyabihu / Lake Kivu uplands as being dominated by Andosols (World Reference Base) or Andisols (USDA).
- They occupy the hilly and mountainous farmland above Lake Kivu—landscapes that also support the intensive potato and vegetable production characteristic of Rubavu.

**Origin and Distribution**

- These soils are derived from young volcanic ash and pumice deposited by the Virunga volcanoes, which underpin their characteristic physical and chemical properties.
- They extend across the hilly and mountainous farmland above Lake Kivu, the same landscapes that support Rubavu's intensive potato and vegetable production.

**Key Physical Properties**

- Low bulk density, high porosity, and strong aggregation.
  These properties produce soils that are friable, easy to till, and characterized by good root penetration and high water-holding capacity.
- High water-holding capacity linked to amorphous minerals (allophane, imogolite) and elevated organic-matter content.
  This supports resilience during short dry periods and favors crops commonly grown in Rubavu, including Irish potato, vegetables, and bananas.
- Elevated susceptibility to erosion and landslides.
  The combination of loose soil structure and steep slopes makes Andosols highly erosion-prone if not protected by vegetation cover or terracing—an important management concern in the Lake Kivu basin, including Rubavu.

**Chemical Characteristics and Soil Fertility**

- Typically acidic soils (commonly pH 5–6 or lower) with high organic-carbon content and relatively high cation-exchange capacity (CEC). However, they exhibit strong phosphorus fixation, as P becomes bound to Al/Fe–humus complexes; consequently, crops often show a pronounced response to phosphorus fertilization.
- In their natural state, these soils are regarded as inherently fertile relative to many other tropical soil types. This underpins recent descriptions of Rubavu as


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having “fertile volcanic soils” and as being Rwanda’s leading district for vegetable production.
- Under intensive cultivation and limited organic inputs, soil quality declines. Surface organic matter and nutrient reserves diminish, and acidity can increase, necessitating lime, organic amendments, and balanced fertilization to sustain productivity.

**Ferralsols and Acrisols**
- Occur on older, more stable geomorphic surfaces within the broader Lake Kivu and volcanic highlands region, where volcanic deposits have undergone prolonged and intensive weathering.
- These soils are typically deep, strongly leached, and acidic, characterized by low-activity clays and limited natural nutrient reserves. As a result, they are more dependent on fertilizer inputs than the younger Andosols.

**Nitisols and Phaeozems**
- Several studies of the Lake Kivu basin report Humic Nitisols and Phaeozems interspersed with Andosols in specific landscape positions. These soils may form on well-drained, moderately weathered slopes with stable structure and relatively high clay content. They are suitable for perennial crops and intensive arable farming, provided erosion is effectively controlled.

**Colluvial and Valley-Floor Soils of the Lake Kivu Area**
- In foot-slopes, lower slopes, and valley bottoms, colluvial and alluvial soils develop from eroded volcanic material. These include Gleysols, Fluvisols, or deep, humic colluvial Andosols with high moisture and organic-matter content. Such soils are important for irrigated vegetable production, rice cultivation, and fodder systems.

**Soil Management Issues in Rubavu**
- The Lake Kivu basin experiences mean annual soil loss rates of approximately 30 $t \cdot ha^{-1} \cdot yr^{-1}$, with steep volcanic hillsides being particularly vulnerable.
- Andosols in the region are widely described as highly susceptible to erosion due to their low bulk density and weak structural stability under intense rainfall.
- Government interventions include terracing programs, buffer-zone protection around Lake Kivu, and watershed management initiatives within Rubavu District.

**Soil Fertility Decline in Intensive Cropping Systems**
- Continuous cultivation of potatoes and vegetables without adequate organic inputs leads to reductions in soil organic matter and nutrient stocks, particularly Nitrogen (N), Phosphorus (P), and Potassium (K).
- Reports indicate that over-use or misapplication of mineral fertilizers and pesticides is beginning to degrade soil quality in Rubavu, especially when combined with residue burning.


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**High Agricultural Potential with Proper Management**

- The combination of cool temperatures, reliable rainfall, and fertile volcanic Andosols makes Rubavu one of Rwanda's most productive districts for vegetables, potatoes, bananas, and other cash crops. Current research on regenerative and agro-ecological practices in Nyakiliba Sector (Rubavu) highlights terracing, contour hedgerows, mulching, organic manures, and diversified rotations as key strategies for slope stabilization and long-term soil fertility management.

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# *Best Red Grapes for Rubavu*

**No. 01: Pin Noir**

- Excellent match for cool nights + volcanic soils.
- Produces high-value wines.
- Already successful in other volcanic highlands (Etna, Chile, Oregon)
- Top recommendation for premium red wine.

**No. 02: Syrah (Cool-Climate Syrah / Shiraz)**

- Thrives on volcanic soils.
- Performs well in mild climates at elevation.
- Produces elegant, peppery wines.
- Strong commercial and viticultural choice.

**No. 03: Tempranillo (High-altitude clone)**

- Adapted to cool nights (grown in Rioja Alavesa at 700–900 m).
- Handles volcanic and Andosol mixtures.
- Reliable productivity.
- Good for stable yields and structured wines.

**No. 04: Gamay**

- Highly suited to granite & volcanic soils.
- Naturally high acidity → good in warm days/cool nights.
- Resistant and productive.
- Ideal for Rubavu's moderate heat and fertile soils.

**No. 05: Cabernet Franc**

- Better than Cabernet Sauvignon in cool or variable climates.
- Performs well on volcanic soils.
- Good disease tolerance.
- A smart, climate-resilient red choice.

# *Best White Grapes for Rubavu*

**No. 06: Sauvignon Blanc**

- Excellent match with high altitude + volcanic soils.
- Keeps acidity even in warm days.
- Already successful in Kenya & Ethiopia highlands.
- Top white recommendation.



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**No. 07: Chardonnay**

- Performs extremely well on both volcanic soils and cool climates.
- Allows premium wine styles.
- Highly adaptable.
- Reliable cornerstone variety.

**No. 08: Riesling**

- Thrives in cool climates.
- Loves volcanic soils (Alsace, Germany's slate & volcanic regions).
- Built for high acidity environments.
- Premium high-altitude white.

**No. 09: Chenin Blanc**

- Superb drought tolerance.
- Thrives on volcanic and mixed soils.
- Extremely versatile for winemaking.
- Very well suited to Andosols with good water retention.

**No. 10: Viognier**

- Excellent aromatic expression on volcanic soils.
- Handles mild humidity with proper canopy management.
- High-value niche wine.
- A strong option for unique premium products.

## *Based on Scientific Knowledge*

Rubavu's volcanic Andosol soils, cool nights, reliable rainfall, and high-altitude climate make the region well suited for a select group of red and white grape varieties known to perform strongly in volcanic and mountain environments. Drawing on global viticulture research, tropical high-altitude studies, and early trials already conducted in Rwanda, the most promising grapes for Rubavu include Pinot Noir, Syrah, Tempranillo, Gamay, Cabernet Franc, Chardonnay, Sauvignon Blanc, Riesling, Chenin Blanc, and Viognier.

These recommendations are based on scientific evidence of grape performance in volcanic soils, their tolerance to humidity and disease pressure, and their proven success in similar regions such as Ethiopia's highlands, the Canary Islands, and Mt. Etna.

The next step is to establish small trial plots in Rubavu to evaluate growth, disease resistance, and wine quality, followed by scaling up the best varieties. This approach provides a solid, research-based foundation for developing a modern and sustainable wine industry in Rubavu.



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# *Partnerships and Strategic Plans*

**Executive Summary of the Investment Plan**
We are a group of experienced innovators, investors, and entrepreneurs with a strong track record in research, development, media, and marketing. We are proposing a high-value investment project in Gisenyi, Rubavu District, Rwanda, focused on viticulture, grape-wine production, tourism, and international import & export trade.

**Olaf Rudolfsen - Innovator & Founder - Background**
More than 40 years of experience as a photographer and film director. Productions including work for BBC, CNN, and Norwegian national TV. More than 1,500 films produced, mainly travel and documentary productions, as well as a large number of commercial films. Extensive experience in web design, website development, social media content creation, and creative business marketing. Reference Website: https://rudolfsen.com

**Our Vision**
To establish one of Rwanda's first grape-wine production facility, develop a high-end tourism infrastructure, and promote the region as an international destination for premium products and experiences. We aim to work closely with locals and the Rwandan government, leveraging local resources, sustainable practices, and international expertise to generate economic growth and global recognition for the region.

**Our investors Philosophy**
We support projects with strong business concepts and innovative potential and are willing to provide substantial funding for ideas that demonstrate viability, sustainability, and growth potential.

**Imboga International Investment ltd**
This is a private limited company (LTD) already registered in Rwanda to ensure full legal compliance. The company will serve as the foundation for all business operations, partnerships, and investments in Rwanda from Norway. It is a family owned company, with a broad partnership between myself and my three sons, aged 18 to 40.

**Ownership**
Our company is 100% Norwegian-owned, and all shareholders are currently Norwegian citizens. The Managing Director is also Norwegian. This ownership structure is a temporary startup solution; local business partners will be invited to participate in our projects and, over time, to join the company structure


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# *Marketing Plans*

**Marketing and Branding**
We are building two professional websites showcasing our wine, tourism, and other offerings. These are already under production. We are producing a large number of commercial films—15–20 are already completed. Travel documentaries and social-media content targeting international audiences are the next planned steps. Ultimately, we aim to develop a strong brand positioning Rwanda as a hub for high-quality wine, wine tasting, luxury golf tourism, and wildlife safaris connected to the best hotels and travel services.

**Website Already Produced**
IMBOGA.COM

**B2B and Export Strategy**
As part of our marketing strategy, we will participate in international trade activities, such as global exhibitions, to attract international partners, potential Norwegian investors, and buyers to Rwanda.

**Export opportunities to Europe**
Exporting our own wine brand, along with high-quality Rwandan products such as coffee and tea, to Europe, Norway, and other international markets will be a top priority for our business operations.

**Collaboration with the Norwegian fish export industry**
We intend to establish a strategic collaboration with the Norwegian fish-farming industry, specifically the salmon-export sector, which is renowned for producing some of the highest-quality seafood in the world. Norwegian salmon is globally recognized and highly valued, particularly within the Japanese sushi market, where it is consistently top ranked.

**Tourism Development**
Creating a high-end, exclusive tourism experience centered around wine, nature, wildlife, and golf will attract international visitors and investors to the Rubavu District and help position it as a unique luxury destination.

**Sustainability and Innovation**
Focusing on environmentally sustainable practices in agriculture and tourism, integrating research and development for innovative wine production and luxury tourism solutions, will strengthen Rwanda's position as a competitive and sustainable travel destination.


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# *Project Impact and Vision*

**Economic Growth**
Job creation in viticulture, tourism, hospitality, and logistics will contribute to increased export revenues and greater international trade exposure.

**Cultural and Social Development**
Promoting Rwanda as a luxury travel destination will encourage local entrepreneurship and collaboration with international partners.

**Innovation and Global Recognition**
Introducing large-scale grape-wine production to Rwanda will fill an untapped market niche and position the country as a leader in innovative agricultural and tourism initiatives in Africa. To the best of my knowledge, there is currently no full-scale grape-wine production in Rwanda, although there is a farmer in the Huye District who is cultivating grapes. Based on climate assessments, the Rubavu District appears to offer significantly better conditions for grape production.

**Grapes for the Rubavu District**
Gisenyi's warm, tropical high-altitude climate is well suited for several resilient wine grape varieties found in similar regions around the world. Among red grapes, Syrah, Grenache, Malbec, and Cabernet Sauvignon perform well in warm conditions while keeping good acidity at altitude.

Mediterranean varieties such as Mourvèdre and Tempranillo also thrive in heat and produce rich, structured wines. For white wines, grapes like Chenin Blanc, Viognier, Sauvignon Blanc, and Chardonnay adapt successfully to warmer climates and volcanic soils.

Dessert-style production is possible with heat-tolerant grapes such as Muscat, Malvasia, and Gewürztraminer, which naturally develop aromatic sweetness. These varieties together offer Rwanda strong potential for producing distinctive wines shaped by the country's unique elevation and equatorial location.

**Conclusion**
Our group brings the experience, expertise, and capital required to make this project successful. By collaborating with the Rwandan government, we aim to create a sustainable, high-quality, and internationally recognized business ecosystem that will benefit both the local economy and Rwanda's global profile.


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# *1 - 3 Phase Budget*

**Phase 1**
Phase 1 focuses on research and establishing a working relationship with the Rwandan government. We will explore the possibility of obtaining a 99-year lease agreement for government-designated land suitable for wine-production facilities and vineyard development. Our intention is to collaborate closely with the authorities to identify land that aligns with both national priorities and the long-term needs of the project. A small office and an initial production hall will be constructed as part of the startup phase. For Phase 1, we require 1 - 5 hectares of land. During this period, we will import grapes and begin small-scale wine production while simultaneously preparing the land for future local grape cultivation.

**Phase 1 Budget: USD 100,000 – 200,000**

**Phase 2**
In Phase 2, we will begin developing the land for agricultural use and preparing it for full grape production. Our first production line based on imported grapes will be operational. We will scale up wine production and begin B2B marketing and sales of our new Rwandan wine brand. We will also import Norwegian salmon for the Rwandan market. Additional efforts include building partnerships and collaborations in Gisenyi and throughout Rwanda, particularly within the hotel and tourism sectors.

**Phase 2 Budget: USD 500,000 – 2,000,000**

**Phase 3**
Phase 3 involves expanding both vineyard and wine production capacity. We will broaden our import and export activities across multiple categories. Additionally, we aim to secure a 99-year lease agreement for the development of a 9–18-hole golf course with full facilities. We already have Norwegian investors prepared to participate once this stage is approved.

**Phase 3 Budget: USD 2 – 20 million**

## *Possibility for Budget Adjustments*

There is room for budget adjustments depending on the level of collaboration and support provided by the Rwandan government, as well as the response and commitment from our investors to the conditions offered to this project.


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