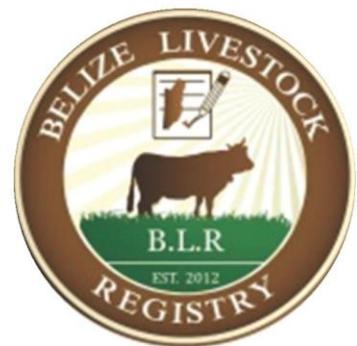


BELIZE LIVESTOCK  
PRODUCERS' ASSOCIATION



# ANNUAL REPORT 2024

46th Annual General Meeting



**" BUILDING AN ECONOMIC, SUSTAINABLE AND CLIMATE-RESILIENT FUTURE FOR BELIZE'S LIVESTOCK INDUSTRY "**



**BELIZE LIVESTOCK PRODUCERS' ASSOCIATION**

Table of Contents

**1.0 Belize Livestock Producers Association ..... 4**

**2.0 Minutes of the 45<sup>th</sup> Annual General Meeting of the Belize Livestock Producers' Association (BLPA) ..... 11**

**3.0 Management Report ..... 16**

**4.0 Belize Beef Fest & Rodeo: A Sizzling Celebration of Livestock, Culture, and Culinary Delights ..... 23**

**5.0 Trainings- Capacity Building ..... 26**

**5.0 BLPA Projects ..... 32**

    5.1 Building Resilience and Sustainability in Livestock Farmers ..... 32

    5.2 The Skills to Access the Green Economy (SAGE) apprenticeship: Pasture Management Apprenticeship Programme ..... 35

    5.3 Value chain assessment and exploratory national market analysis for sustainable beef cattle products IN BELIZE ..... 40

**6.0 Networking: Partners in Development ..... 44**

**7.0 Cattle Industry Report ..... 46**

    7.1 Brand Report ..... 46

    7.2 Membership Report ..... 50

    7.3 Veterinary Report ..... 52

        New World Screwworm ..... 52

        Veterinary Health Surveillance Service ..... 56

    7.4 The Belize Livestock Registry Report ..... 58

        Belize Livestock Registry (BLR) Highlights ..... 60

        National Herd ..... 61

        National Slaughter/Consumption ..... 62

        Cattle Export Report ..... 63

|             |                              |           |
|-------------|------------------------------|-----------|
| <b>8.0</b>  | <b>Financials .....</b>      | <b>65</b> |
| <b>9.0</b>  | <b>Sponsors .....</b>        | <b>66</b> |
| <b>10.0</b> | <b>Acknowledgements.....</b> | <b>67</b> |

## **1.1 Belize Livestock Producers Association**

The Belize Livestock Producers' Association (BLPA) is a private non-profit organization established under the Meat and Livestock Act Chapter 214, revised edition 2000. The livestock industry was formally organized in the late 1970's, when the Belize Government passed the Meat and Livestock Act (1), which established an association of Livestock Producers known as the Belize Livestock Producers' Association (BLPA). The Association is managed by eight Board of Directors elected from the general membership at its Annual General Meeting on the last Saturday of February. Currently, BLPA represents 7,503 farmed animal producers nationwide with most animals being beef cattle at 202,697 heads as of December 2024.

### **Vision:**

BLPA will be the leading advocate for developing a green livestock industry in Belize, the premier lobbyist for the best interest of livestock development and be the go-to organization for services to all livestock farmers in areas of technical services and market access.

### **Mission:**

BLPA will encourage a green livestock industry by promoting agroforestry and Agro-Silvo-pastoral systems, will offer transformational technical services aimed at improving access to high value markets.

BLPA will safeguard farmers' interest in the livestock industry through representation and lobbying at all levels.

### **General objectives of the BLPA:**

- 1.** To advocate at national, regional and international levels for the best interest of the livestock industry stakeholders.
- 2.** To provide farmers with improved access to new and high value markets.
- 3.** To provide and disseminate new technologies and relevant information through a system of technical-led training, education initiatives and projects.

In 2024, BLPA continued to activate its 5-year Strategic Plan as outlined below in its three (3) strategic objectives and in anticipation of the development of a green livestock industry in Belize.

- a. STRATEGIC OBJECTIVE #1: To Strengthen the governance structure of the organization.
- b. STRATEGIC OBJECTIVE #2: To Strengthen the Technical and Administrative capacity of BLPA, and offer technical assistance to other Livestock Associations
- c. STRATEGIC OBJECTIVE #3: To strengthen trade cooperation and coordination for improved market access and marketing of livestock and cattle products nationally and internationally.

# Board of Directors



Arden Edwards  
Chairman



Peter Friesen  
Vice- Chairman



Alexis Blanco  
Secretary



Darrell Tillett  
Treasurer



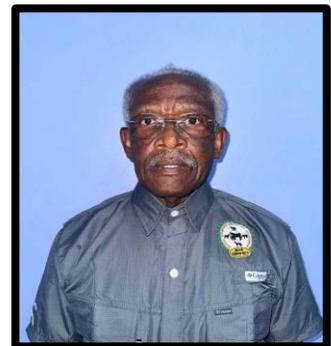
Peter Fehr  
Board Member



Franz Rempel  
Board Member



Gerhard Penner  
Board Member



Kent Diaz  
Board Member

# BLPA Office Staff



William Usher  
Chief Executive Officer



Mindy Garcia  
Operations/Human Resource/  
BLR Manager



Albert Moore  
Finance & Accounts  
Manager



Andre Depaz  
Veterinary Care & Sales  
Manager



Gary Ramirez  
Project Coordinator



Cesar Correa  
Assistant Accountant



Jenny Hernandez  
Admin Assistant. / Procurement  
Communication Officer



Sarai Pineda  
BLR Supervisor



Jessica Reyes  
Cashier/Accounts Clerk



Lexitah Cruz  
Membership/ Brand &  
Records Officer



Alexandra Tuz  
Data Entry Clerk



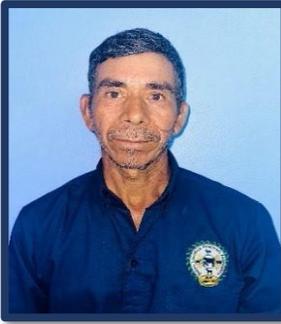
Desmond Gordon  
Data Entry Clerk



Aldeisha Flowers  
Office Maintenance



Doran Benguche  
Farm Supervisor



William Guerra  
Farm Assistant



Kenrick Thomas  
Security



Martin Suar  
Security

# Authorized Local Agents (ALA's)



Abel Baeza  
Corozal



Eric De La Rosa  
Orange Walk



Said Tzul  
Orange Walk



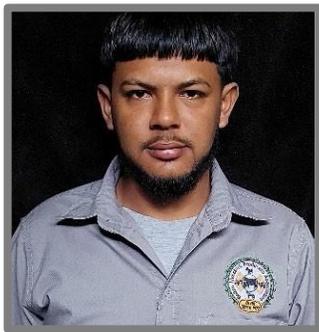
Clive Bernard  
Belize



Jose Rodriguez  
Cayo



Dany Hernandez  
Cayo



Scott Gutierrez  
Stann Creek



Lucas Can  
Toledo



Michael Shol  
Toledo

# Movement Control Officers (MCO's)



Edwin Cunil  
Bullet Tree Checkpoint



Esvin Constanca  
Bullet Tree Checkpoint



Andre Tzib  
Bullet Tree Checkpoint



Gilberto Pop  
Jalacte Checkpoint



Juan Mas  
Jalacte Checkpoint



Walfred Coh  
Jalacte Checkpoint

## **2.1 Minutes of the 45<sup>th</sup> Annual General Meeting of the Belize Livestock Producers' Association (BLPA)**

**Date:** 24<sup>th</sup> February 2024

**Location:** Mile 47.5 George Price Highway, Main Headquarters, Belmopan

**Theme:** "VOISIN, Belize's new livestock reality for increase stocking capacity, profitability, sustainability and marketability"

**Master of Ceremonies:** Mr. Neil Hall

**Present:** 414 voting members and the Board Members, except for Mr. Abe Froese.

### **1. Opening of the Meeting:**

Mr. Neil Hall (MC) and Chairman of the Board, Mr. Jeffery Reimer, called meeting to order at 9:45 am.

Mr. William Usher (CEO) commenced the 45th Annual General Meeting with a warm welcome to all attendees, including the Prime Minister (Hon. John Briceno), members of the BLPA, and representatives from the Ministry of Agriculture, Food and Security, BAHA, Orisa, the Ministry of Economic Development, the GEF Small Grants Program, and the IDB. He expressed gratitude for their presence, emphasizing the significance of their collaboration in fostering the growth of the livestock sector.

Mr. Usher mentioned the selection of three new board members and farewelled three outgoing members. He also announced exciting raffles and giveaways, including a grand prize featuring a 900 plus pound bull and a 600 plus pound heifer. Lastly, he encouraged attendees to take a tour at BLPA's model farm to see industry innovations.

The MC then requested one minute of silence to honor the memory of cattle farmers who passed away this year, including Mr. David Dyck, along with others who have also passed away.

Thereafter, a video of BLPA's 2023 accomplishments was presented to the members.

#### **Guest Speaker:**

The Prime Minister, Hon. John Briceño was invited as the Special guest speaker to address the membership. He started off by highlighting his background as a farmer and emphasized the importance of livestock production for national development. He discussed the potential for further growth in the industry and the government's commitment to its support.

Prime Minister Briceño also addressed various initiatives to support livestock farmers, including tax exemptions and assistance with irrigation. He emphasized the importance of sustainable practices and collaboration between government and stakeholders. Additionally, he discussed plans for enhancing the industry's competitiveness and expanding export opportunities.

#### Action Items:

- Explore tax exemption for exportation of cattle.
- Investigate duty-free importation of solar equipment for pasture management.
- Collaborate with the Ministry of Rural Development on well drilling initiatives.
- Continue facilitating importation of superior genetics.
- Enhance working relations with Mexico for cattle exports.
- Support initiatives for processing and value-adding of beef cattle.
- Explore opportunities for diversification of livestock products.
- Emphasize the role of livestock production in rural development and community building.
- Continue government support for Belizean farmers and ranchers.

Prime Minister Briceño concluded by commending the efforts of livestock farmers and expressing confidence in the industry's future success.

Following the Prime Minister's speech, Ms. Mindy Garcia presented him with a special recognition token.

## **2. BAHA Presentation on Screwworm**

Dr. Roxanna Alvarez, Chief Veterinary Officer at BAHA, initiated a discussion on Screwworm. Dr. Alvarez explained the importance of understanding Screwworm as the New World Screwworm disease, noting its impact on animal health due to tissue consumption by larvae and rapid reproduction cycles.

The current situation was reviewed, including the spread of Screwworm from Colombia to Costa Rica, leading to a zoo sanitary state of emergency in Costa Rica. Risk mitigation methods were discussed, emphasizing cooperative efforts among stakeholders such as the Belize Livestock Producers Association, Ministry of Agriculture, and BAHA. Strategies for surveillance, public awareness, high monitoring of imported animals, and training of technical officers were outlined as key preventive measures. Attendees were encouraged to monitor and report cases of larva infestations, comply with regulations, and share information with relevant authorities.

Concerns about the possible introduction of Screwworm via coyotes were addressed, with assurance that preparations are underway and larvicides are available in the market. Dr. Alvarez emphasized the collective responsibility of all stakeholders in preventing the introduction of Screwworm into Belize.

## **3. Presentation of VOISIN Pasture Management Video**

After BAHA's presentation on the New World Screwworm, a video on VOISIN Pasture Management was presented to the members.

#### **4. Approval of the Agenda**

Mr. Alexis Blanco, Secretary of the board, was appointed to carry out the business of the meeting. He outlined the agenda items, ensuring that all attendees had a copy and were aware of the meeting's purpose. The motion to accept the agenda was done by Mr. Elston Wade and seconded by Mr. Ramon Galvez. Motion was accepted.

#### **5. Approval of Previous AGM Minutes**

Mr. Alexis Blanco asked members to go over the Minutes of the previous AGM on page 9 of the Annual Report. No concerns, amendments or corrections were raised by members. Motion to accept the minutes was put forward by Ramon Galvez, seconded by Louis Juan. Motion was accepted.

#### **6. Matters Arising & New Business**

Mr. Blanco was asked to oversee matters arising and new business. There were no matters arising or new business, thus this section was closed.

#### **7. Presentation on Audited Financials**

Mr. Albert Moore, financial officer of BLPA, presented the audited financial statements, guiding attendees through the important points within the reports. Mr. Moore elaborated on the different sections of the financial statements, such as the balance sheet, income and expense statement, statement of changes in members' equity, and cash flows. Mr. Moore emphasized that the report provided by the auditors is entirely independent. The auditors maintain complete independence from BLPA and have no obligations to the organization beyond offering their professional opinion on BLPA's financial statements and operations. He mentioned that in instances where discrepancies are found in our financial records, the auditor issue what is termed a qualified report.

Conversely, if the audit reveals no issues, they issue an unqualified report. In the case of BLPA, we have received an unqualified audit report, signifying that both the board of directors and the management have upheld financial integrity without any blemishes. After Mr. Moore concluded his presentation, members raised questions regarding specific financial aspects, including the reduction in accounts receivable, budget support, staff costs, and tag sales.

Mr. Moore provided detailed explanations for each inquiry, clarifying the financial transactions and the merger of BLR and BLPA.

#### **8. Appointment of Auditors**

Mr. Moore was invited to provide details on the auditors' history and the decision to continue with MCMH Associates. It was noted that the present auditors have been efficient and familiar with

BLPA's systems. A motion was proposed by Elston Wade and seconded by Leonidas Sanchez to retain MCMH Associates as auditors for the upcoming term. The motion was approved.

## **9. Voting Procedures & Dissolved Board**

Members were given a voting slip at the entrance. Mr. Moore presented the voting procedures, emphasizing eligibility criteria and ballot distribution protocols. The rules were read out in both English and Spanish for clarity. Attendees were reminded of the importance of adhering to the voting guidelines to ensure a fair and transparent process.

There were 3 directors that stepped down this year. These directors were Jeffery Reimer, Arden Edwards and Abe Froese. Discussion arose regarding the composition of the new board and the process for selecting board members and positions. Concerns were raised regarding the number of board members and the method of selection for board positions. Clarifications were provided regarding existing laws and proposed changes to ensure transparency in the board's composition and decision-making process.

## **10. Nomination & Voting**

The floor was open to nominations. The election of the new board was overseen by the Chief Executive Officer of BLPA, Mr. Usher.

### **Nominations by order:**

1. Mr. Manuel G Vasquez- Nominated by Pablo Guerra, seconded by Ramon Galvez.
2. Mr. Peter Fehr- Nominated by Geovanny Foster, seconded by Silvano Torres.
3. Mr. Otto Penner- Nominated by Abram Reimer, seconded by Richard Penner.
4. Mr. Arden Edwards- Nominated by John Wade, seconded by Alberto Choco.
5. Mr. Gomer Enríquez- Nominated by Louis Juan, seconded by Fernando Polanco.
6. Mr. Kent Diaz- Nominated by Karl Gomez, seconded by Rupert Myles.

Nominations were closed by Ramon Galvez, seconded by Jeffery Reimer.

### **Vote counting was done by:**

- Albert Moore – BLPA staff
- Cesar Correa – BLPA staff
- Jessica Reyes and Michael Shol – (BLPA Staff) as Tally clerks
- Pablo Guerra, Matilda Alvarado, Abe Reimer, all candidates and 3 other representatives – Overseers

## Result of elections:

The following are the nominees and corresponding votes. There were 414 votes cast in total.

Table 1. Results of the 45<sup>th</sup> AGM elections

|   | <b>Name</b>    | <b>No. Votes</b> |
|---|----------------|------------------|
| 1 | Arden Edwards  | 333              |
| 2 | Peter Fehr     | 328              |
| 3 | Kent Diaz      | 305              |
| 4 | Manuel Vasquez | 90               |
| 5 | Gomer Enriquez | 68               |
| 6 | Otto Penner    | 39               |

The new board members, Mr. Arden Edwards, Mr. Peter Fehr and Mr. Kent Diaz were presented to the members.

## 11. Grand Raffle & Auction

Mr. Neil Hall finalized the ceremony with the Grand Raffle. To ensure impartiality, it was decided that nobody from the Belize Livestock Producers' Association would choose the winner of the grand raffle; instead, Mr. Usher walked through the audience and choose at random members who selected the winners. Ms. Shanny Mendez was announced as the winner of the heifer and Mr. James Teigrob was the winner of the bull.

## Closing Remarks

Thanks were extended to all attendees for their participation, both in-person and online. Neil Hall, the MC, expressed gratitude for the opportunity to host the event and wished everyone a pleasant evening.

*Meeting was adjourned at 4:00 pm*

## 3.1 Management Report

The Belize Livestock Producers' Association (BLPA) has made significant strides in 2024, advancing the livestock industry through innovative events, collaborations and networking, capacity-building initiatives, and sustainable farming practices.

The year was marked by the successful **Belize Beef Fest & Rodeo**, held on August 18, 2024, at the National Agricultural Showgrounds. This event celebrated Belize's rich livestock heritage, showcasing culinary excellence, superior livestock genetics, and the thrilling tradition of rodeo. The festival not only promoted local meat products but also fostered networking opportunities for farmers and international stakeholders.

Key achievements by the BLPA in **capacity building** included the launch of three major projects:

1. **Silvopastoral Systems for Livestock Intensification and Climate Resiliency**, funded by UNDP, which trained 116 farmers in sustainable practices, established 114 forage banks, and improved 1,232 acres of pastureland.
2. **GEF 6 - Integrated Management of Production Landscapes**, which focused on sustainable land management and included training sessions on pasture management, animal nutrition, and health.
3. The **Skills to Access the Green Economy (SAGE) apprenticeship** in association with the Ministry of Education, Belize Livestock Producers Association (BLPA) and University of Belize (UB) worked collaboratively to implement and administer a pilot apprenticeship programme in Pasture Management in Belize.
  - The partnership involved technical support and guidance for the implementation, monitoring and evaluation of the pilot apprenticeship programme within the Belize Livestock Industry with financial support from all partners.
  - The apprenticeship spanned from June to December 2024 and aimed at preparing trainees to better understand and manage their pastures.
  - A total of 18 participants reported for the training. Of these, 38.9 % were women and 61.1% were men. All participants remained fully committed and engaged in the two (2) weeklong courses.

### Key Topics Covered

- Soil health and fertility management.
- Forage species selection and establishment.
- Rotational grazing systems and pasture utilization.
- Supplemental feed production (silage, urea molasses blocks).
- Farm planning, mapping, and financial record-keeping.
- Electric fence installation and safety.
- Water management and infrastructure.

Two other projects to which BLPA garnered funding and implemented and to which is believed will change the landscape of doing business in the Livestock Industry are

- A) UNDP’s Global Environmental Fund (GEF) Small Grants Project entitled, ***“Building Resilience and Sustainability in Livestock Farmers”***, whose main objective was to promote livestock intensification through the adoption of climate smart production practices and green technologies that will seek to enhance the resilience, productivity and promote GHG reduction of the livestock industry.

This project saw the importation of four Brangus bulls to improve herd genetics, resulting in 102 calves born in 2024, and the development of a Voisin rotational grazing system on the BLPA Model Farm that is being used to showcase the new changes in livestock production management in Belize.

- B) A key project commissioned by the BLPA in 2024 was granted by the Scaling Up Climate Ambition on Land Use and Agriculture (SCALA) program in collaboration with UNDP and FAO on the development of a project entitled, ***“Belize beef cattle value chain assessment and exploratory national market analysis”***.

This project reproduced the study on Belize's beef cattle value chain and market analysis, concluding with a valuation of USD 39.9M over 10 years for developing a sustainable grass-fed beef industry in Belize.

## **Infrastructural Improvement**

Your Secretariat in 2024 embarked on several areas of repairs and infrastructural improvements to better the services we provide to you our members and supporters of the Livestock Industry.

### **1) Movement Control Office (MCO)**

Two critical movement control offices required critical infrastructural improvements as follows:

- **Bullet Tree (Cayo District):** The MCO office underwent **repairs to the staircase and flooring** as both were being degraded due to heavy rains entering directly over years. Portions of the flooring were replaced, **complete staircase rebuilt** along with **an extension of the roof** to prevent water entering the building and a **water catchment system installed**.



**Figure 1.** Bullet Tree movement control location repaired

- Jalacte (Toledo District): The MCO office was originally within the BAHA office space at Jalacte.
  - In late 2023 a complete **Mennonite house** was **installed** within the Boarder check point area.
  - In early 2024, a **rainwater catchment system and sewage system** were **installed** that allowed for water use and proper sanitation facilities for our ALAs and Movement Control Officers who occupies that area to conduct their services to you.
  - Within the office established, electricity was enabled through the **installation of a solar system**, which also support the necessary lighting and internet needed to afford for the work of our Movement Control Officers.



**Figure 2.** Jalacte movement control location solar and water system installation

## 2) Toledo Livestock Coral

The livestock coral at the Dump intersection provides a very important service to our members. At the coral our members in the Toledo district use the coral to weigh their livestock before sale. Unfortunately, the design of the shoot was not allowing for safe handling of the animals. Your Secretariat made **repairs to the coral shoot** to allow for safe handling and adequate mounting of animals to cattle trucks for export delivery.



**Figure 3.** An improved Dump Coral with adjustable shoot in Toledo

## 3) BLPA Head Quarters

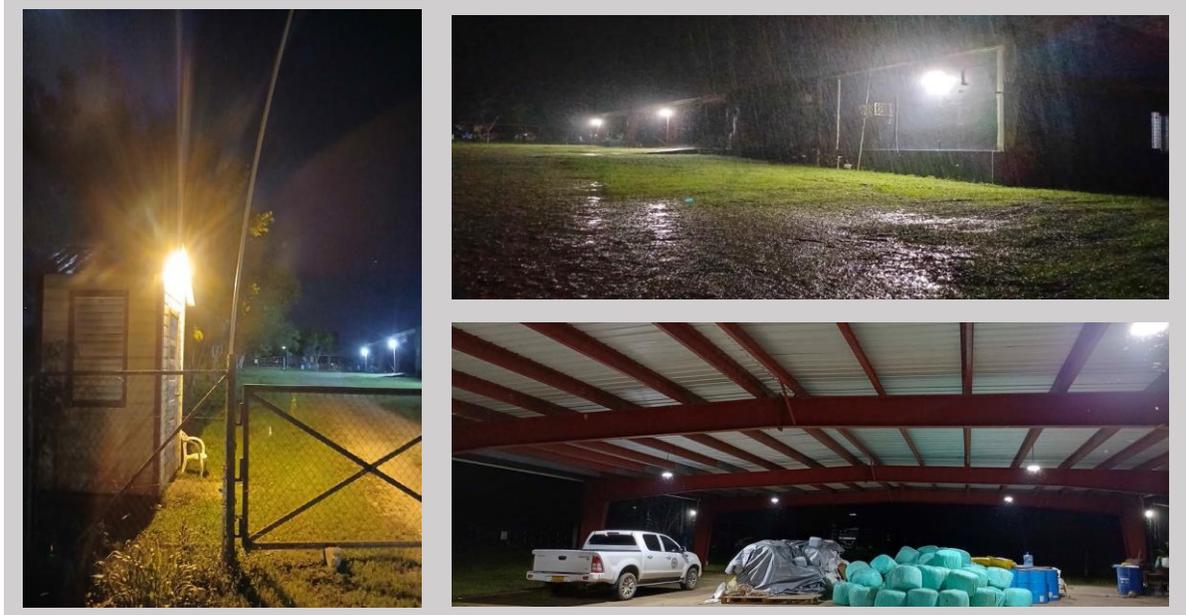
The compound at the Secretariat Headquarter (HQ) had been having electrical shortages and poor external lighting during the night for some time. These were of priority to fix during the 2024 financial year.

- Coral: The HQ coral had an important electrical upgrade for the proper functioning of the scale and lighting for coral to prevent vampire bats and potential theft.



**Figure 4.** Electrical scale system repaired and installed

- **Lighting:** The lighting on at the HQ was improved as can be seen below. Both at the coral and on the office building and security booth. The electrical system was tested and repaired where necessary.



**Figure 5.** Electrical system repaired and lighting installed at BLPA Headquarters

### **Belize Livestock Registry (BLR),**

The Belize Livestock Registry (BLR), established in 2012, has become a cornerstone of Belize’s cattle industry, providing a robust framework for tracking and managing livestock from birth to death. By leveraging advanced technology and a comprehensive database, the BLR ensures traceability, enhances disease control, and supports the sustainable growth of the livestock sector.

In 2024, the BLR continued to play a pivotal role in strengthening the industry, with significant achievements in farmer registration, animal tracking, and export facilitation.

### **Key Functions of the BLR**

#### **1. Farmer and Farm Registration:**

The BLR maintains a reliable database of farmers and farms, ensuring accountability and effective communication. In 2024, the registry recorded **7,503 active farmers**, a significant increase from 6,808 in 2023. This growth reflects the BLR’s efforts to expand its reach and support more stakeholders in the livestock industry.

#### **2. Animal Identification and Tracking:**

Each animal is assigned a **unique electronic ear tag**, applied by Authorized Local Agents (ALAs) stationed across Belize’s six districts. This tagging system enables precise tracking

of livestock, supporting record-keeping, disease control, and traceability to the farm of origin. In 2024, the BLR tracked **202,697 cattle**, with 76% being female and 24% male.

### 3. **Movement Control:**

The BLR monitors livestock movements from birth through local transport, export, slaughter, or death. This system helps prevent the spread of diseases and ensures swift responses to outbreaks. In 2024, the BLR facilitated the export of **41,515 cattle**, with 85.2% going to Guatemala and 14.8% to Mexico.

### 4. **Livestock Reduction Tracking:**

The BLR tracks the destination and purpose of each animal, whether for slaughter, export, or other uses. This ensures compliance with regulatory standards, enhances transparency, and supports quality assurance across the supply chain.

## **2024 Highlights and Achievements under the BLR**

- **Farmer Distribution:**

Orange Walk district led with **2,547 farmers (33.95% of total)**, followed by Cayo with **2,109 farmers (28.11%)**. These two districts collectively accounted for **62.06% of Belize's cattle farmers**, reflecting their dominance in the livestock sector.

- **Gender Inclusivity:**

The BLR recorded **712 female farmers (9.49% of total)**, demonstrating progress in gender inclusivity. Efforts to empower women in livestock farming remain a priority for the BLR.

- **National Herd Composition:**

The national herd in 2024 comprised **202,697 cattle**, with **38% under 3 years old**, indicating a young and growing population. Orange Walk district had the highest cattle population (**102,906 animals**), followed by Cayo (**58,232 animals**).

- **Export Growth:**

Cattle exports increased by **3% in 2024**, reaching **41,515 animals**. Guatemala remained the primary market, absorbing **35,351 animals (85.2%)**, while Mexico accounted for **6,164 animals (14.8%)**.

- **Slaughter and Consumption:**

Local beef consumption saw an **11.8% increase**, with **10,500 animals slaughtered** in 2024. The first quarter of the year (January-March) recorded the highest slaughter rates, reflecting seasonal trends in beef demand.

## Challenges and Solutions

- **Disease Management:**

The BLR plays a critical role in disease surveillance and control. In 2024, challenges such as **Screwworm infestations**, **Rabies**, and **Blackleg** were addressed through farmer education, vaccination programs, and collaboration with the Belize Agriculture Health Authority (BAHA).

- **Farmer Engagement:**

The BLR through BLPA continues to engage farmers through training and outreach programs, emphasizing the importance of proper record-keeping, animal health, and sustainable practices.

## Future Directions

The BLR aims to expand its services by:

1. **Enhancing Technology:** Implementing advanced tools for real-time tracking and data analysis.
2. **Increasing Farmer Participation:** Encouraging more farmers to register and participate in the BLR system.
3. **Promoting Sustainability:** Supporting initiatives like silvopastoral systems and rotational grazing to improve land use and climate resilience.
4. **Strengthening Export Markets:** Facilitating smoother export processes and exploring new markets for Belizean cattle.

The Belize Livestock Registry is a vital institution that ensures the traceability, sustainability, and growth of Belize's cattle industry. By providing a reliable system for tracking livestock, supporting farmers, and facilitating exports, the BLR has become an indispensable tool for the livestock sector.

In 2024, the BLR's achievements in farmer registration, animal tracking, and export growth underscore its commitment to advancing the livestock industry and contributing to Belize's economic development. Through continued innovation and collaboration, the BLR is poised to drive further progress in the years to come.

## 4.1 Belize Beef Fest & Rodeo: A Sizzling Celebration of Livestock, Culture, and Culinary Delights

The Belize Livestock Producers' Association held its second signature event on August 18, 2024, at the National Agricultural Showgrounds in collaboration with the Ministry of Agriculture and the Wild West Club. The Belize Beef Fest and Rodeo is a national event that promises to become an integral part of the Belize Tourism Circuit. Belizeans and visitors came together to celebrate the rich heritage of our livestock industry, the culinary masters showcased the finest home-grown cuts. Key objectives accomplished at this event were:

1. **Objective 1: Culinary Grill Challenge:** The Belize Beef Fest aimed to be the ultimate culinary grill challenge, uniting meat lovers from across the country. This event featured prime quality home-grown livestock meats, including beef, pork, and mutton, meticulously prepared by talented chefs. Attendees had the opportunity to savour a wide variety of mouth-watering dishes, exploring the diverse flavours and cooking techniques that make Belizean cuisine so unique.



Figure 6. Judges appraising

2. **Objective 2: Showcasing Belizean Livestock Genetics:** The Belize Beef Fest is not only about delicious food; it is also a platform that highlights the quality livestock genetics available in Belize. Livestock producers showcased their prized animals, demonstrating the remarkable breeding programs and advancements made in our country. Visitors gained insight into the care, dedication, and expertise that go into raising superior livestock. This aspect of the festival fostered appreciation for the Belizean livestock industry and created network opportunities for local breeders, potentially attracting international partnerships and collaborations.



Figure 7. Livestock producers

3. **Objective 3: The Thrill of Belizean Rodeo:** The Belizean Rodeo has been an emblem of our cultural heritage, capturing the spirit of the Wild West within our tropical paradise. Belize Beef Fest and Rodeo embraced this tradition, offering a thrilling rodeo experience for all ages. Attendees witnessed fearless cowboys and cowgirls showcase their equestrian skills, roping and riding with electrifying energy. The rodeo events served as a source of entertainment and education, allowing both



Figure 8. Rodeo competitors.

Belizeans and international guests to immerse themselves in the vibrant cowboy culture that makes our country so captivating.

4. **Objective 4: All Things Meat from Belize:** At Belize Beef Fest and Rodeo, we aimed to provide an all-encompassing experience for our visitors. Livestock producers from across the country had the opportunity to showcase their meat products, including fresh cuts, sausages, cured meats, and unique local specialties. Through interactive demonstrations and informative exhibits, attendees learnt about the entire meat production process, from farm to table. This aspect of the festival will continue to promote the importance of supporting local farmers and contribute to the overall growth of the Belizean livestock industry.



**Figure 9.** Grilling styles and judge viewing plating and grilling presentations.

Businesses that attended or sponsored the event included: The Belize Tourism Board, Running W Meats, Country Meats, Sandra’s Meat Shop, Butcher Boys, Western Dairies, Miss Debz, Wall & Sons Fresh Cheese Ltd.

The Wild West Club carried out the Rodeo full of activities to embrace the livestock culture in our young riders. It was a day full of activities and an excellent way to bring together families from all over the country in promotion of the livestock farmers and products.

A grilling competition took place where chefs of diverse culture participated. The Judges were Chef Rob, Chef Mike Acal and Chef Aaron Zuniga. The grading structure was shared before the competition started and BLPA sponsored the winning prizes in the following categories:



**Figure 10.** Awarding of certificates

**Beef Category:**

- 1<sup>st</sup> prize: \$1000 - Champion - John Dyck
- 2<sup>nd</sup> prize: \$300 - Winner - Sandra's Meat Shop
- 3<sup>rd</sup> prize: \$200 - Winner - Greg Moiser

**Pork Category:**

- 1<sup>st</sup> prize: \$1000 - Champion - Miss Debs
- 2<sup>nd</sup> prize: \$300 - Winner - Sandra's Meat Shop
- 3<sup>rd</sup> prize: \$200 - Winner - Emory Thiessen

**Lamb Category:**

- 1<sup>st</sup> prize: \$1000 - Champion - Emory Thiessen
- 2<sup>nd</sup> prize: \$300 - Winner - Tender Buff
- 3<sup>rd</sup> prize: \$200 - Winner - Miss Debs



**Figure 11.** Belize Beef Fest Winning Chefs & Judges 2024

## 5.1 Trainings- Capacity Building

### *Project 1: Promotion of Silvo-pastoral Systems for Livestock Intensification and Climate Resiliency.*



**Figure 12.** Toledo group present for training

In October 2023, the Belize Livestock Producers’ Association (BLPA), with support from the UNDP Innovative Small Grants Aggregator Platform, launched the project “Promotion of Silvopastoral Systems for Livestock Intensification and Climate Resiliency.” This initiative aimed to address key challenges faced by cattle farmers in Belize, such as declining pasture productivity, increased vulnerability to climate change, and limited access to innovative farming techniques. The project sought to empower farmers with tools, knowledge, and resources to transition to more resilient and productive livestock systems, focusing on the integration of silvopastoral systems, which combine trees, forage, and livestock to optimize land use and promote sustainability.

The main objective was to help cattle producers in four targeted communities adopt silvopastoral practices, boosting both productivity and climate resilience.

To support this, the project established four Farmer Field Schools (FFS)—one in Stann Creek and three in Toledo. These schools encouraged active farmer participation through hands-on activities such as pasture assessments and tree planting. The training curriculum was developed with farmers, addressing their needs and priorities identified in initial farmer field assessments.



**Figure 13:** Stann Creek group present for training

**Eight (8) farmer field modules were developed.**

**Module 1: Pasture Management** – An in-depth explanation of Andre Voisin’s principles of rational grazing, which highlighted the importance of rotating livestock within paddocks to allow pastures to recover, avoid overgrazing and improve overall soil health. Participants also learnt about pasture evaluation, concepts of stocking rate and carrying capacity which is important to take into consideration when making pasture grazing management decisions.



**Figure14.** Pasture Evaluation

**Module 2: Silvopastoral Systems** – This module emphasized the importance of the water cycle in sustainable farming, highlighting how trees regulate water availability and maintain farm resilience.

Farmers learned how trees enhance the water cycle by improving soil infiltration, reducing surface runoff, and maintaining moisture levels, which are crucial for healthy pastures.

The principles and advantages of integrating trees with pastures were discussed during the introduction of Silvopastoral Systems (SPS). Classroom discussions covered how Silvopastoral Systems improves soil health, reduces heat stress on livestock through shade, and supports biodiversity by providing habitats for various species.

**Module 3 & 4: Farm Planning** - Module 3 focused on helping farmers develop practical five-year plans tailored to their specific farm resources and challenges. Farmers assessed their current farm setups, identifying key areas such as infrastructure, water sources, paddocks, and herd size, while also considering challenges and opportunities. In Module 4, farmers refined their plans and presented them to the group for feedback. The refined plans are those to which the farmer uses to continue the development of his farm



**Figure15.** Farm Planning



**Figure 16.** Preparation of multi-nutritional blocks

**Module 5: Animal Nutrition** - Farmers learned the basics of livestock nutrition, how different nutrients support cattle growth, reproduction, and health. The sessions highlighted the importance of supplemental feeding in filling nutritional gaps and keeping cattle healthy when natural forage is scarce. Participants were also taught how to prepare multi-nutritional blocks (MNB) by selecting the right ingredients, calculating appropriate ratios, and ensuring the right balance of energy, protein, and minerals.

**Module 6: Animal Health** - This module focused on the vital role of disease prevention and herd health management in maintaining the sustainability and productivity of livestock operations. Farmers learned about common cattle diseases in Belize, their causes, symptoms, and effective prevention and control strategies. Topics covered included vaccination schedules, biosecurity practices, and early disease detection. The BLPA veterinarian led an engaging session on key diseases such as rabies, mad cow disease, and blackleg, providing practical insights and addressing farmers' questions. Other topics also discussed were gastrointestinal worms and warts in livestock.



**Figure 17.** Rabies & Blackleg Vaccine

**Module 7: Forest Species** - This module aimed to deepen participants' understanding of native timber trees in Belize, focusing on their ecological environments and how to identify and cultivate them. The session began with a PowerPoint presentation highlighting the diversity of native timber species, including mahogany, cedar, and sapodilla. It covered their characteristics, uses, and growth requirements.

The practical component took participants into the field, where they explored a nearby forest to observe and identify native timber trees in their natural habitats. This hands-on experience allowed farmers to examine tree features, understand their ecological roles, and learn how to assess tree health and growth stages.

**Module 8: Forage and Legumes** - This module emphasized the importance of incorporating high-quality forage species as sources of protein and energy for livestock in Belize to enhance animal health, weight gain, and productivity. It began with an overview of energy-rich forages like Elephant grass, Cuba-22, and Taiwan grass, highlighting their high biomass output and adaptability to local conditions. Pasture grasses were also discussed as essential energy sources for grazing systems. The session also covered protein-rich forages such as Leucaena, Mulberry, Nacadero and wild peanuts (*Arachis pintoi*) and their ability to improve soil fertility through nitrogen fixation.



**Figure: 18** Forage - Cuba-22



**Figure 19.** Farmer securing his 1-acre plot

Participants received materials to establish their one-acre (0.47-hectare) forage banks, including barbed wire for fencing, Leucaena seeds, and high-yield grass varieties like Taiwan grass, Cuba-22, and Elephant grass.

Additionally, Mombasa grass seeds were provided for its drought resistance and versatility.

A total of 114 forage banks were established across 45 hectares, incorporating resilient forage species such as Mombasa, Cameroon, Cuba-22, Elephant grass, and Leucaena. These species not only ensured high-quality feed during the dry season but also served as sustainable seed sources, reducing dependence on external inputs. Mahogany trees were distributed to support sustainable forestry and livestock integration.

During the training program, 116 farmers participated, including 31 women (27% of attendees), demonstrating the project's commitment to gender inclusivity and empowering female farmers.

Farmers collectively improved 1,232 acres of pastureland, averaging 18.4 acres per farmer. These efforts enhanced feed quality, biomass availability, and sustainability in livestock production.

To address pasture degradation, the initiative promoted expanded rotational grazing, increasing the average number of paddocks per farmer from 7.3 to 15.2.



**Figure 20.** Farmer receiving Mombasa and Leucaena seeds

**Project 2: GEF 6 – Integrated Management of Production Landscapes to Deliver Multiple Global Environmental Benefits - Belize Water Shed**



**Figure 21.** Pasture Evaluation

In January 2024, the Belize Livestock Producers' Association (BLPA) received funding from the sixth phase of the Global Environment Facility (GEF 6), which supports projects addressing global environmental challenges. One focal area of the project was "Integrated Management of Production Landscapes to Deliver Multiple Global Environmental Benefits." This initiative promoted sustainable land management practices to improve ecosystem services, conserve biodiversity, and support livelihoods within the Belize River Watershed.

As part of the project, the BLPA conducted sustainable livestock production training sessions across four locations in Belize between January and June 2024.

These locations were:

- 1) Belmopan, Cayo – BLPA Headquarters.
- 2) Yo Creek, Orange Walk – Agriculture Field Station.
- 3) Double Head Cabbage, Belize – Community Center
- 4) Crooked Tree Village, Belize - Community Center



**Figure 22.** Weighing of Forage

**Four different trainings** were carried out for each group with topics being:

- 1) **Pasture Management:** Using the 4 principles of Voisin to understand the importance of rotation, occupation time, rest period, and regular performance.
- 2) **Silvopastoral Systems:** Introduction to silvopastoral systems and the different types used in the region.
- 3) **Animal Nutrition:** Focused on the importance of nutrition of animals and their requirements such as water, minerals, vitamins, energy and protein. A practical part of this programme included the introduction of Drone technology used in



**Figure 23.** Assessment of Nutrients with Drone technology

assessing nutrient availability within pastures without the need for basic mineral diagnosis within a laboratory.

- 4) **Animal Health:** Diseases that mostly affects cattle were discussed, the importance of vaccination, types of vaccines in livestock and lastly parasites affecting livestock.

During this program, 93 farmers participated and were trained, of which 16% (i.e. 15) were females.

### **Development of forest tree nursery at BLPA**

Funds obtained from this GEF 6 project also provided for the development of an irrigated forest tree nursery. This plant tree nursery was established on the grounds of the Model Farm at the Belize Livestock Producers' Association' compound (see photo below).

The nursery structure will host various tree plants recommended to be used within the silvopastoral systems being promoted by the BLPA. Plants will be available for sale to farmers and the public as a source of revenue generation for the BLPA.



**Figure 24.** Irrigated Forest tree nursery at BLPA Model Farm

## 5.0 BLPA Projects

### 5.1 Building Resilience and Sustainability in Livestock Farmers

BLPA continued with the execution of the UNDP's Global Environmental Fund (GEF) Small Grants Project entitled, "*Building Resilience and Sustainability in Livestock Farmers*". This project is commonly referred to as the "GEF Project".

The project's **main objective** was to promote livestock intensification through the adoption of climate smart production practices and green technologies that will seek to enhance the resilience, productivity and promote GHG reduction of the livestock industry.

#### Project outcomes included:

- 1) *The purchase of four (4) breeding bulls. Two (2) black Brangus bulls were imported from Mexico and two (2) red Brangus bulls were purchase from a breeder within Belize.*



**Figure 25.** Black and Red Brangus within the Bull Service programme

Farmers from the Farmer Field School (FFS) have taken advantage of improving their herd genetics from the breeding program that is currently in place. BLPA's four acquired Brangus breed bulls have been servicing cows in Orange Walk, Belize, Cayo and Toledo Districts.

One hundred and two (102) calves have been born in 2024 from the four bulls obtained through this project.

This initiative aims not only to enhance productivity and improve herd genetics for the farmers but in time can also aid in the generation of income the BLPA.



| <b>BLPA Bull Service Programme – Calves birthed in 2024</b> |                                   |                    |
|---|-----------------------------------|--------------------|
| <b>No.</b>  | <b>Address</b>                    | <b># of Calves</b> |
| 1   | BLPA Office Grounds, Belmopan     | 11                 |
| 2   | Blue Creek Village, Toledo        | 36                 |
| 3   | San Pedro Colombia, Toledo        | 6                  |
| 5   | San Pedro Colombia, Toledo        | 8                  |
| 6   | San Miguel Village, Toledo        | 9                  |
| 7   | Yo Creek Village, Orange Walk     | 7                  |
| 8   | Big Falls Village, Toledo         | 2                  |
| 9   | Mafredi Village, Toledo           | 4                  |
| 10  | Scotland Halfmoon Village, Belize | 11                 |
| 11  | Big Falls Village, Toledo         | 8                  |
|   | <b>TOTAL:</b>                     | <b>102</b>         |

**Figure 26.** Some calves birthed under the BLPA bull service programme

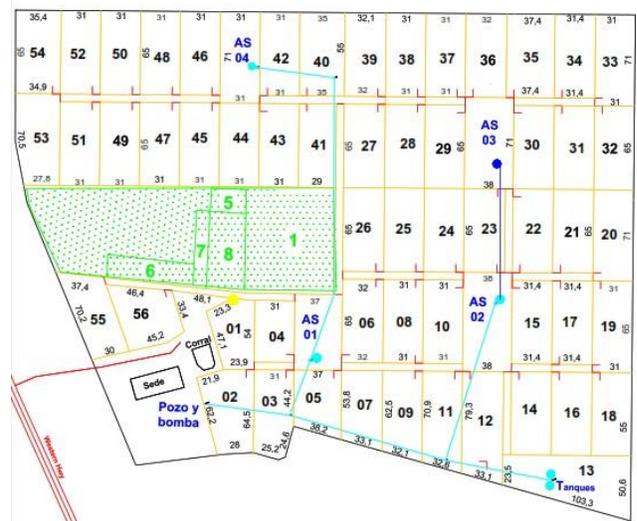
2) *Development of a Voisin System of pasture rotation management on the model farm of BLPA in which 56 paddocks were constructed using solar powered electric fencing system.*

The BLPA Model Farm was designed taking into consideration the Voisin rotational grazing system. By employing this system, farmers can enhance their stocking capacity and improve livestock productivity.

The paddocks were designed using double stand electric fencing. It contains acres of forage bank and four (4) social areas spaced within the 35-acre farm. Water is attained through a well that pumps water to two holding tanks of a total of 10,000L capacity that is then gravity fed to the water troughs within the social areas.

The model farm started with 25 heifers and 1 Bull. Currently there are 14 calves, and more are on the way. Animals follow a daily, planned sequence of movement that is dependent on pasture maturity and availability within the paddocks.

This rotational approach allows pastures to recover and regrow before being grazed again, promoting a healthier and more bountiful pasture.



**Figure 27.** BLPA Model Farm design



**Figure 28.** Cattle grazing at BLPA Model Farm

**Table 2:** Number of Cattle at BLPA Model Farm

| <b>Animal Type</b> | <b>Quantity</b> |
|--------------------|-----------------|
| Heifers            | 11              |
| Cows               | 14              |
| Bull               | 1               |
| Male Calves        | 9               |
| Female Calves      | 5               |
| <b>Total</b>       | <b>40</b>       |

## ***5.2 The Skills to Access the Green Economy (SAGE) apprenticeship: Pasture Management Apprenticeship Programme***

The **Skills to Access the Green Economy (SAGE) apprenticeship** in association with the Ministry of Education, Belize Livestock Producers Association (BLPA) and University of Belize (UB) worked collaboratively to implement and administer a pilot apprenticeship programme in Pasture Management in Belize.

Sponsored by SAGE, BLPA and UB, the project aimed to enhance cattle farmers' knowledge and skills in pasture management to improve productivity, sustainability, and environmental conservation.

The program ran from June to December 2024 and involved **18 participants (38.9% women, 61.1% men)**, who demonstrated strong engagement and commitment throughout the training.

### **Project Objectives and Outcomes:**

1. **Improved Pasture Management:** The program focused on teaching optimal pasture species selection, establishment techniques, and grazing systems to increase cattle productivity without further land clearing. Participants learned about soil sampling, forage identification, biomass determination, and rotational grazing systems.
2. **Hands-On Training:** Participants engaged in practical activities such as soil sampling, Leucaena sowing, electric fence installation, silage production, and urea molasses block manufacturing. They excelled in hands-on assessments and performed well in written quizzes.
3. **Environmental Benefits:** By promoting sustainable pasture management, the program aimed to reduce deforestation for pasture expansion, improve soil health, and enhance biodiversity. Farmers were encouraged to incorporate deep-rooted plants like Leucaena, which provide multiple benefits such as forage, soil improvement, and firewood.
4. **Farmer Collaboration:** Participants created a WhatsApp group to share knowledge, experiences, and educational content, fostering a supportive network among farmers.
5. **Technical Visits and Farm Improvements:** Follow-up visits revealed that trainees implemented improvements such as pasture rotation, new pasture establishment, protein banks, and electric fencing. Some farmers also diversified their income sources by selling firewood or fence posts.
6. **Farmer Exchange Visit:** A visit to La Clarissa farm in Cayo exposed trainees to advanced livestock management practices, including coral design, water systems, and cattle handling techniques.
7. **Second Week Workshops:** The final week covered farm planning, silage and urea molasses block production, ration formulation, and grazing system calculations. Trainees developed five-year farm plans and strategies for financial sustainability.

## Pasture Management Apprenticeship Programme:

The programme was structured into a comprehensive course outline that combined theoretical knowledge with hands-on practical training. The program spanned two weeks of intensive workshops, followed by a six-month implementation period with technical follow-up visits.

Below is a detailed description of the course outline:

### Week 1: Foundations of Pasture Management

**Objective:** Introduce participants to the fundamentals of pasture management, including soil health, forage selection, and basic farm planning.

#### 1. Introduction to Pasture Management:

- Importance of pasture management for cattle productivity and environmental sustainability.
- Challenges faced by cattle farmers (e.g., weight loss, reduced reproductive ability, and inadequate feed availability).

#### 2. Soil Sampling and Analysis:

- Techniques for proper soil sampling.
- Importance of soil pH, organic matter, and nutrient availability.
- Demonstration and practice of soil sampling in the field.

#### 3. Forage Species Identification:

- Identification of common grass and legume species.
- Discussion of invasive species (e.g., Johnson grass) and beneficial plants (e.g., Leucaena, Pixoy).

#### 4. Leucaena Sowing and Establishment:

- Benefits of Leucaena as a drought-tolerant, high-protein forage.
- Techniques for seed scarification, germination, and transplanting.
- Field demonstration of Leucaena sowing.
- 



Figure 29. Week 1 training course (SAGE)

**5. Biomass Determination:**

- Use of quadrats to quantify available forage.
- Calculating carrying capacity and grazing periods.

**6. Electric Fence Safety and Installation:**

- Safety guidelines for electric fencing.
- Demonstration of fence installation and maintenance.

**7. Pasture Establishment (Cut & Carry Systems):**

- Techniques for establishing cut-and-carry forage species (e.g., Taiwan grass).
- Importance of selecting mature planting material for better establishment.

**8. Farm Planning Basics:**

- Introduction to farm mapping and resource allocation.
- Initial discussions on creating a farm plan.

## Week 2: Advanced Pasture Management and Practical Applications

**Objective:** Build on foundational knowledge with advanced techniques and practical applications for sustainable pasture management.

### 1. Farm Planning and Mapping:

- Detailed farm planning using templates (e.g., CATIE farm planning).
- Participants created and presented their farm plans.

### 2. Rotational Grazing Systems:

- Types of rotational grazing systems (e.g., strip grazing, mob grazing, Voisin grazing).
- Advantages and disadvantages of each system.
- Calculations for grazing days, paddock size, and stocking rates.

### 3. Urea Molasses Block (UMB) Manufacture:

- Importance of UMB as a supplemental feed.
- Step-by-step production of UMB.
- Cost analysis and economic feasibility.

### 4. Silage Production:

- Techniques for silage production and storage.
- Demonstration of silage compaction and fermentation.

### 5. Ration Formulation:

- Use of the Pearson Square method to formulate feed rations.
- Balancing energy and protein sources for cattle.

### 6. New World Screwworm Discussion:

- Identification, prevention, and treatment of screwworm infestations.
- Importance of regular cattle monitoring.



**Figure 30.** Week 2 training course (SAGE)

## 7. **Water Management and Infrastructure:**

- Discussion on efficient water systems (e.g., solar-powered pumps, gravity-fed troughs).
- Importance of providing clean water to cattle.

## 8. **Record Keeping and Financial Planning:**

- Importance of maintaining farm records for profitability analysis.
- Strategies for diversifying farm income (e.g., selling firewood, fence posts).

## **Follow-Up and Implementation**

After the initial two-week training, participants returned to their farms to implement the concepts learned. Technical follow-up visits were conducted to:

- Assess the implementation of pasture rotation, new pasture establishment, and electric fencing.
- Provide guidance on weed control, forage management, and farm planning.
- Address challenges and offer solutions for sustainable practices.

## **Farmer Exchange Visit**

A visit to La Clarissa farm in Cayo provided trainees with real-world insights into:

- Advanced coral design and cattle handling techniques.
- Efficient water systems and solar-powered infrastructure.
- Large-scale pasture management and rotational grazing practices.

## **Hands-On Assessments and Evaluations**

Throughout the course, participants were evaluated through:

- **Written Quizzes:** Multiple-choice, true/false, and open-ended questions.
- **Practical Skills Assessments:** Checklists for soil sampling, Leucaena sowing, biomass determination, electric fence installation, and silage production.
- **Farm Plan Development:** Participants created and presented detailed farm plans.
- **Participation and Engagement:** Active involvement in discussions and group activities.

## **Challenges:**

- **Weed Control:** Some trainees struggled with identifying beneficial "weeds" that could serve as forage.
- **Time Constraints:** Daily herd movement for rotational grazing was challenging for farmers with off-farm jobs.

- **Financial Limitations:** Many trainees lacked the capital to implement their farm plans fully.

### **Key Takeaways:**

- **Technical Guidance:** Regular support and reassurance are crucial for farmers to adopt new practices.
- **Record Keeping:** Proper documentation is essential for assessing farm profitability and making informed decisions.
- **Networking:** The program fostered a strong sense of community among participants, encouraging knowledge sharing and collaboration.

### **Conclusion:**

The apprenticeship successfully equipped farmers with the skills and knowledge to improve pasture management, enhance cattle productivity, and promote environmental sustainability. The program highlighted the importance of continuous learning, record-keeping, and community support in achieving long-term agricultural success.

### ***5.3 Value chain assessment and exploratory national market analysis for sustainable beef cattle products IN BELIZE***

The second project, sponsored by the Scaling Up Climate Ambition on Land Use and Agriculture (SCALA) program in collaboration with UNDP and FAO, via its private sector engagement facility, collaborated with BLPA and the Government of Belize to

- 1) To conduct a value chain assessment of the beef cattle value chain,
- 2) To conduct an exploratory national market analysis,
- 3) To conduct a financial analysis of the cost to transition from current practices to climate-resilience livestock production, and
- 4) To develop a roadmap to enhance the climate resilience of livestock farmers.

The assignment produced a strategic analysis summarizing the main findings of the research, including the aspects highlighted above for the beef cattle value chain and recommendations for the sustainable transformation of the livestock sector to leverage new market opportunities and identify the low hanging fruits that can be strategically implemented by the Belize Livestock Producers Association (BLPA) and private sector potential investment areas.

The document entitled "*Value chain assessment and exploratory national market analysis for sustainable beef cattle products IN BELIZE*" concluded with a **Roadmap and Strategic Recommendations for Belize's Beef Value Chain** as summarized below:

### **1. Governance Structure Proposal**

- A **public-private governance framework** is proposed to strengthen Belize's sustainable beef value chain. This framework will involve the Belize Livestock Producers Association (BLPA), government institutions, private trade entities, academia, and financial organizations.
- **Steering Committee (SC):** Led by BLPA and MAFSE, this committee will oversee the implementation of strategies, monitor progress, and ensure compliance with national and international commitments.
- **Technical Committee (TC):** Composed of public and private organizations, this committee will provide technical guidance, develop work plans, and secure funding for value chain development.
- **Formalization:** The governance structure should be formalized through an **Executive Decree** to ensure mandatory participation and compliance.

### **2. Policy Proposals for Value Chain Development**

- **Governance:** Establish a governance structure led by MAFSE and BLPA to align with national climate and environmental goals.
- **Financing:** Provide financial support for farmers to adopt climate-resilient practices, retain breeding females, and improve herd genetics.
- **Incentives:** Offer tax reductions for importing genetic materials and implement mechanisms to limit agricultural expansion while promoting sustainable practices.
- **MRV and Traceability:** Strengthen the animal traceability system to support herd growth, market supply control, and genetic improvement programs.
- **Trade Agreements:** Review trade agreements with Guatemala and Mexico to define quotas and control mechanisms that benefit Belizean producers.

### **3. Actionable Roadmap and Strategic Recommendations**

- **Production:** Promote herd growth and sustainable intensification of production through climate-resilient practices.
- **Governance:** Establish a governance structure to create a unified climate-resilient production policy.
- **Unified Vision:** Position the beef sector as a "one big farm" to improve efficiency and market competitiveness.

- **Policy and Enabling Environment:** Increase cattle production to meet domestic and international demand.
- **Financing:** Secure climate financing options to support sustainable practices and herd growth.
- **Markets and Trade:** Develop a marketing strategy to promote high-quality, climate-resilient beef products.

#### 4. Implementation Phases

- The roadmap is divided into **short-term (1-4 years)**, **medium-term (5-7 years)**, and **long-term (8-10 years)** phases. Key actions include:
  - Implementing climate-resilient practices.
  - Establishing governance and traceability systems.
  - Securing climate financing and developing market strategies.

#### 5. Implementation Budget

- The total budget for the 10-year implementation plan is **USD 39.9 million**, covering strategic, technical, and operational activities. Funding is proposed to come from a mix of reimbursable and non-reimbursable resources. Below is a summary of the budget by strategy:

**Table 3:** Ten-year road map implementation plan and budget

| Strategy                                  | Short-Term (1-4 years)   | Medium-Term (5-7 years)  | Long-Term (8-10 years)   | Total                   |
|---|--------------------------|--------------------------|--------------------------|-------------------------|
| <b>1. Production</b>                      | USD 6.32 million         | USD 8.17 million         | USD 11.72 million        | USD 26.21 million       |
| <b>2. Governance</b>                      | USD 144,000              | USD 108,000              | USD 108,000              | USD 360,000             |
| <b>3. Unified Vision</b>                  | USD 1.89 million         | USD 1.12 million         | USD 969,000              | USD 3.9 million         |
| <b>4. Policy and Enabling Environment</b> | USD 166,000              | USD 102,000              | USD 102,000              | USD 370,000             |
| <b>5. Financing</b>                       | USD 1.54 million         | USD 1.46 million         | USD 871,000              | USD 3.88 million        |
| <b>6. Markets and Trade</b>               | USD 2.18 million         | USD 1.5 million          | USD 1.5 million          | USD 5.18 million        |
| <b>Total</b>                              | <b>USD 12.25 million</b> | <b>USD 12.46 million</b> | <b>USD 15.27 million</b> | <b>USD 39.9 million</b> |

- **Key Budget Highlights:**
  - **Production:** The largest budget allocation (USD 26.21 million) focuses on implementing climate-resilient practices, training, and technical assistance to increase herd size and productivity.

- **Governance:** USD 360,000 is allocated to establish and operationalize the governance structure.
- **Unified Vision:** USD 3.9 million is dedicated to creating policies that benefit the entire industry, including price control mechanisms and centralized auctions.
- **Financing:** USD 3.88 million is allocated to secure climate financing and develop credit programs for farmers.
- **Markets and Trade:** USD 5.18 million is allocated to develop a marketing strategy, including certification programs and a national brand for sustainable beef.

## 6. Conclusions and Recommendations

- **Production and Technical Assistance:** Standardize practices, promote sustainable intensification, and improve herd genetics. Provide technical assistance and veterinary support to farmers.
- **Meat Processing:** Develop good production practices, improve labelling standards, and regulate beef imports to ensure quality and sustainability.
- **Markets:** Focus on formal markets like Mexico, promote Belize as a sustainable beef producer, and develop value-added products for niche markets.
- **Governance and Policies:** Formalize governance through an Executive Decree, strengthen BLPA's role, and review tax structures to support sustainable practices.
- **Financing and Incentives:** Provide low-interest loans, grants, and subsidies to farmers for adopting sustainable practices and improving herd quality.
- **Climate Change:** Implement climate-resilient practices, limit agricultural expansion, and monitor weather patterns to reduce vulnerability.

## 7. Recommendations for Future Studies and Monitoring

- **GHG Emissions Inventory:** Conduct a study to estimate greenhouse gas emissions from the beef industry and align with national climate goals.
- **Public Registry Verification:** Verify the implementation of climate-smart practices on cattle farms.
- **Market Demand Analysis:** Analyze demand for high-quality beef in the hotel, restaurant, and catering sectors.
- **Low Carbon Beef Certification:** Investigate the feasibility of a low-carbon beef certification to enhance market sustainability.
- **Rebranding Campaign:** Develop a communication campaign to promote Belize's sustainable beef production.

It is believed that by addressing these areas, Belize can enhance its beef value chain, improve market competitiveness, and ensure long-term sustainability in the face of climate change.

## 6.1 Networking: Partners in Development

The Belize Livestock Producers Association embarked on the important networking obligations for and behalf of its membership. The following relationships were developed during the 2024 operational year.

### 1) MOU with the Development Finance Corporation

On 17<sup>th</sup> September 2024, a Memorandum of Understanding (MOU) was signed between the Development Finance Corporation (DFC) and the Belize Livestock Producers Association (BLPA) with the **aim to establish a collaborative framework to promote the development and enhancement of the livestock industry** in Belize.

The partnership seeks to leverage the DFC's strengths as a development bank and the BLPA's expertise to provide financial support, resources, and technical assistance to ranchers, farmers, and cattle producers nationwide.

The **objectives include:**

- promoting climate-smart livestock practices among small, medium, and large cattle ranchers,
- improving resiliency, and
- supporting the sustainable growth of the Belizean economy



**Figure 31.** Signing of MOU (DFC & BLPA)

This collaboration is to strengthen the livestock industry by ensuring that farmers have access to financial resources and technical support to increase productivity, improve herd genetics, and implement sustainable practices.

This partnership also emphasizes capacity building and technical assistance, where BLPA and DFC will work together to educate farmers on climate-smart practices and modern herd management techniques. In an era of changing climate conditions, adopting sustainable farming practices is essential for protecting our environment, ensuring food security, and enhancing the resilience of our sector.

DFC's commitment to providing agricultural and cattle loans, as well as funding for infrastructure and herd improvement projects, will empower producers to enhance their operations and farming practices.

## 2) Collaboration with the Ministry of Economic Development (MED)

The BLPA collaborated with the Ministry of Economic Development in several fronts in 2024 and with the development of project concept for the enhancement of the Livestock sector.

The **project concept developed** by the MED in collaboration and on behalf of BLPA was entitled, “**Cattle-Livestock for Environmental Advancement, Resiliency and Sustainability (CLEARS)**”.

The concept proposed a **primary objective** to transition Belize’s cattle livestock sector towards climate-resilient practices that enhance productivity, sustainability, and environmental health.

- The Concept Note has been endorsed by the BLPA
- The Concept Note is intended to be submitted to the Green Climate Fund in hope to gain approval for the development of a full-blown proposal.



Figure 32. MED Workshop on CLEARS

## 3) Collaboration with the MAFSE

The BLPA collaborative work with the Ministry of Agriculture, Food Security and Enterprise (MAFSE) continues in perpetuity as the MAFSE is the lead government ministry responsible for the policy development and stewardship within the Agriculture Sector to which the Belize Livestock Producers’ Association plays a leading role in the Livestock Sector. Areas of collaboration in the 2024 calendar year included:

- The **continued negotiations with Mexico** for the continued expansion of cattle export
- The **management of the New World Screw Worm** that is currently the primary cattle health pest problem in Belize
- The **financial support for cattle farmers** affected by flood in the Belize River Valley and Crooked Tree because of Tropical Storm Sara.

## 4) Collaboration with the BAHA

The BLPA collaborative effort remains strong with the Belize Agricultural Health Authority (BAHA). In the year 2024 the following areas of collaboration were a part of the continued efforts between both institutions.

- **Training** in the identification, control and monitoring of the **New World Screw Worm** to BLPA’s technical personnel (i.e. Authorized Local Agent and Veterinary officer)/

- **Training in Vampire Bat trapping** to BLPA’s technical personnel
- **Collaboration in cattle export** to Mexico

## 5) **Collaboration with the OIRSA**

The BLPA collaborative work with the Inter-American Institute on Agriculture in Central America (IICA) was initiated in the year 2023 and continued in 2024. Our effort of networking and collaborations include,

- **Discussions on project development** for the livestock sector
- The **management of the New World Screw Worm** that is currently the primary cattle health pest problem in Belize
- The **financial support for cattle farmers** affected by flood in the Belize River Valley and Crooked Tree because of Tropical Storm Sara.

## 7.0 **Cattle Industry Report**

### 7.1 **Brand Report**

#### **Brand Registrations for the year 2024**

Branding is the principal means of determining and verifying livestock ownership in the country of Belize to protect livestock from theft or loss. Under the cattle Branding Act, chapter 207 of the Laws of Belize, Brands must be recorded or registered to prove ownership and is considered legal evidence in a court of law.

A Brand can be any letter or combination of letters or any letter or combinations of letters in conjunction with a number intended to be distinctly or permanently impressed or made upon any cattle. The word “cattle” includes any bull, cow, heifer, ox, steer, calf or any horse, marge, gelding, colt or filly or any mule or ass.

Under the Current law, a Brand is considered delinquent if not registered, recorded and approved within the Belize Livestock Producers’ Association (BLPA) registration system.

A time span of 30 days is allotted for the delinquent Brand to be registered if found not to be registered. In case no action is taken, the Brand is open for the public to apply for. Failure to register Brands within a 10-year period is considered abandonment of the Brand upon which the Brand becomes available for the public to apply for; thereby, depriving the original owner from any legal claim.

## **Application for Brand Registration**

It is a felony to brand someone else's animals with a brand that is not owned by the registered owner or remove any livestock brand from any cattle. It is also illegal to use any brands for branding bull, cow, heifer, ox, steer, calf, or any horses, mare, gelding, colt or filly, or mules or asses unless the Brand has been registered, recorded and approved at the Belize Livestock Producers' Association. Once brands are recorded with BLPA, they become the personal property of the owner.

### The rules and regulations for registering a brand are as follows:

1. Applicant must provide a copy of a valid passport or any valid ID card.
2. Applicant must provide the Brand design which he or she wishes to use before branding the animal.
3. Applicant must specify the livestock and branding position to which the brand will be applied.
4. Applicant must specify the period for which the Brand is being applied for.
5. Brand registration fee must accompany the application form.

### **The following are the fees Applied for Brand Registration**

- 1) Registration fee: \$10 per year (a maximum of 10 years is allowed)
- 2) Replacement for lost or damage card: \$10

### **Brand Ownership by Multiple Owners**

Brands can be registered by multiple parties with clear separations of ownership or by shared ownership if there is a clear agreement that all owners are also responsible for authorizing the movement, sale or slaughtering of animals. All are liable to maintaining status of updating brand.

### **Corporate Brand ownership**

Brands can be applied and registered by a business entity, provided that the company is registered in Belize and provides proof of the registry along with a Belizean representative that is liable to the ownership of the brand by foreigners.

Brand ownership requires full documentation of a legal person that resides or is a Belizean national and forms part of said corporation.

### **Transfer of an existing Brand to new owner**

Brands are not transferred automatically. The registered owner(s) of the Brand must provide, and agreement made between the person(s) to whom the transfer of brand will be made. In case of the owner's death a death certificate must be presented for transfer to be possible. If a part owner is

added or removed, an agreement should be signed by all parties involved and certified by a Justice of Peace and must be presented.

### Release and Publishing of Brands

BLPA reserves the right to publish the name and owner of the Brand along with accepted brand if required but no other personal data will be released.

### Brand Registrations (2023 versus 2024)

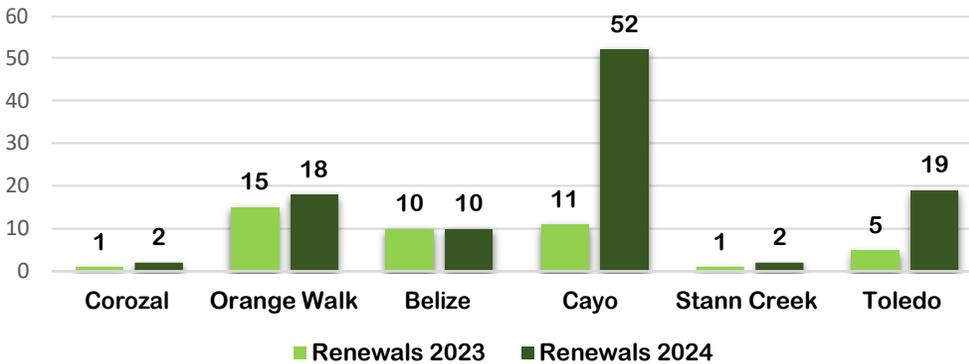
Graph 1 illustrates the comparative number of new brand registrations across districts in Belize. In 2023 Orange Walk followed by Cayo districts led in new registrations, while in 2024 Toledo followed by Orange Walk recorded the most registrations. Corozal district consistently recorded the fewest. In 2024, a total of 58 new registrations were observed.



**Graph 1.** Brand Registrations by District (2023-2024)

Graph 2 illustrates the comparative number of brand renewal registrations across districts in Belize. In 2023 Orange Walk followed by Cayo districts led in new registrations, while in 2024 Cayo followed by Toledo recorded the most Brand registrations. Corozal and Stann Creek districts recorded the fewest. In 2024, a total of 103 new brand renewal were observed.

## Brand Renewals 2023-2024



**Graph 2.** Brand Renewals by District (2023-2024)

### Official Brand ID Card

BLPA issues an official certificate of registration by means of an Identification Card to members who are owners of registered brands. The images in figure below display the card and location of brand tags on cattle.

Image A depicts the design of an official brand registration card by the Belize Livestock Producers' Association.

Image B provides a visual guide illustrating the designated locations on an animal where official brand marks must be applied based on the farmer's chosen location.

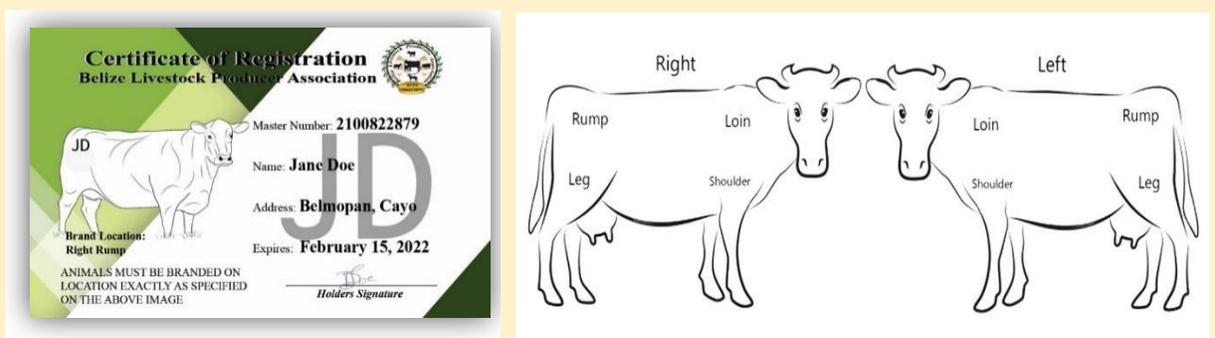


Image A

Image B

**Figure 33.** Official Brand ID Card (Image A) and location choices (Image B) by BLPA.

## 7.2 Membership Report

The Belize Livestock Producers' Association, committed to closely supporting farmers, has introduced a range of Membership Benefits. These include:

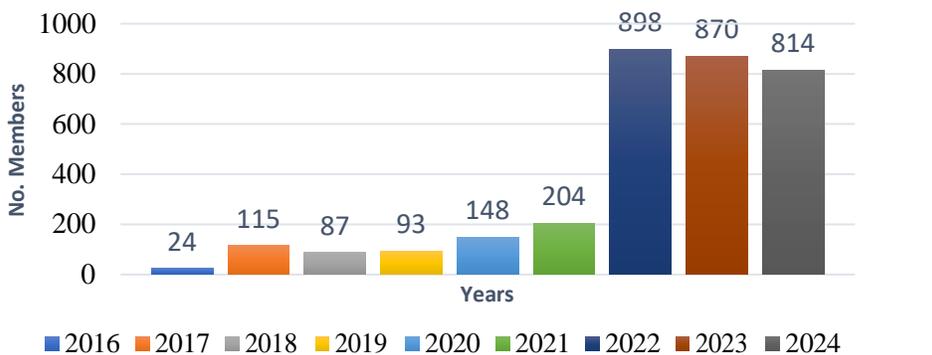
1. **Executive Body Involvement:**
  - Members can be part of the executive body.
2. **Access to BLPA Services:**
  - Enjoy access to BLPA services such as Brand Registry, Belize Livestock Registry, and ownership of cattle.
3. **Membership Card:**
  - Receive a Membership Card for exclusive discounts upon presentation.
4. **Duty-Free Exemption Letters:**
  - Obtain letters for duty-free exemptions on imported products or cattle, contributing to farm development.
5. **Bank Recommendations:**
  - Benefit from Bank Recommendation letters for loans and deposits of sales.
6. **Visa Recommendation:**
  - Receive Visa Recommendation letters.
7. **Molasses Purchase Support:**
  - Get a Recommendation letter from BLPA to buy molasses in large bulk.
8. **Land Department Referral:**
  - Obtain Referral Letters for the Land Department.
9. **Discount on Citrus Pellets:**
  - Available discounts on Citrus Pellets.
10. **Educational Seminars:**
  - Priority access to Educational Seminars, offering members the first choice to uplift their farms.
11. **BLPA Veterinary Services**
  - Access veterinary services provided by BLPA.
12. **Discount at Reimer Feed Mill**
  - 5% discount at Reimers Feed Mill on Selected Items.

The Belize Livestock Producers' Association (BLPA) currently boasts a total of 1,230 active members. The BLPA welcomes all stakeholders in the local livestock industry to join as active members, regardless of farm size. Unity and solidarity form the core strength that positions BLPA to effectively assist its members. The annual membership fee for becoming a member is \$25.

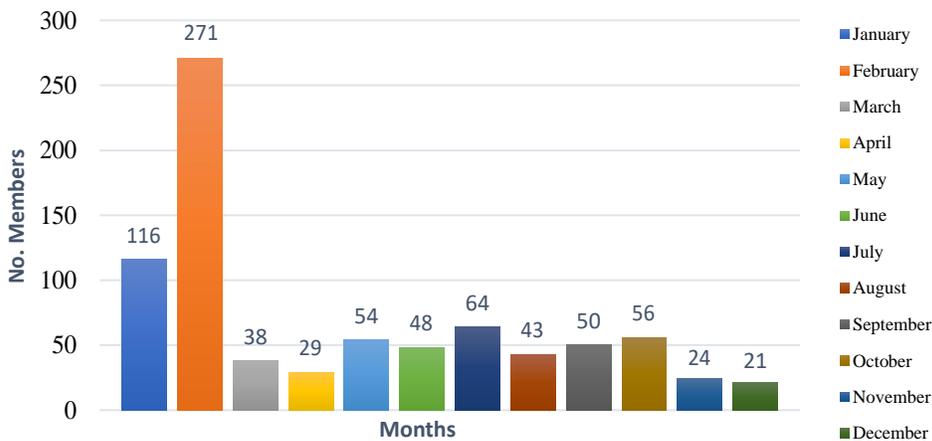
### BLPA membership trend

In the year 2024, the Belize Livestock Producers' Association recorded a total of eight hundred and fourteen (814) registered members (See Graph 3). This total was comprised of four hundred and forty-three (443) renewals and three hundred and seventy-one (371) new members. Graph 4 shows the monthly registration by members in 2024.

A detailed analysis indicates that the overall membership did not experience an increase in 2024. This observation was attributed to the fact that five hundred and seventy-one (571) members had applied for a membership period exceeding one year and, therefore, did not renew in 2024.



**Graph 3.** Annual Membership registration at BLPA from 2016 to 2024.



**Graph 4.** Membership registration at BLPA by month in 2024.

The current active members by district are shown in table 4. The distribution of members across districts reflects a robust and encouraging trend for the Belize Livestock Producers' Association.

The district with the highest membership is Orange Walk District, demonstrating a strong and active participation from this region. The Cayo and Toledo districts also boast significant representation within the association.

The Association is committed to implementing targeted initiatives, outreach programs, and engagement activities to continue fostering growth and participation across all districts.

**Table 4.** Current active members by residency.

| Total Active Members | Corozal | Orange Walk | Belize | Cayo | Stann Creek | Toledo |
|----------------------|---------|-------------|--------|------|-------------|--------|
| 1,224                | 88      | 504         | 160    | 210  | 31          | 206    |

### 7.3 Veterinary Report

#### New World Screwworm

Myiasis caused by screwworm in livestock, also known as "gusanera," is an infestation caused by fly larvae that feed on the living tissue of mammals (including humans) and occasionally birds.

Two species of flies are responsible for this type of myiasis: the New World fly *Cochliomyia hominivorax*, found only in the Americas, and the Old-World fly *Chrysomya bezziana*, found exclusively in Africa and Asia.

The wounds emit a characteristic odour that attracts gravid female flies to lay their eggs. These flies can travel distances of up to 20 kilometers in tropical climates or up to 300 kilometers in arid environments to locate a suitable host.

The fly *Cochliomyia hominivorax* undergoes complete transformation, progressing through the stages of egg, larva, pupa, and adult. Its life cycle can take around 24 days in temperate climates, and approximately 18 days in tropical climates.



**Figure 34.** *Cochliomyia hominivorax*

<sup>1</sup> Guatemala is included in the membership as all transporters/exporters must be a registered member to obtain license to transport livestock from Belize to Guatemala. Majority of the transporters are of Guatemalan nationality.



**Figure 35.** Small wound

The larvae can infest a variety of wounds, including those as small as a tick bite. However, the most common infestations occur in the navels of newborns, wounds from castration or dehorning, and the vulvar or perineal regions of females.

The larva is cylindrical and whitish in shape, with two hooks at one end and twelve segments separated by rings with protruding spines, giving it a screw-like appearance. This structure allows it to burrow into a wound by "drilling" through the tissues it feeds on.

At the start of an infestation, slight movement can be observed within the wound, which becomes deeper and more extensive as the larvae feed on the tissue, producing serosanguineous discharge. Affected animals typically isolate themselves from the group and display signs of lethargy, loss of appetite, and discomfort at the wound site. Without treatment, animals may die within 7 to 14 days due to toxicity or secondary infections.



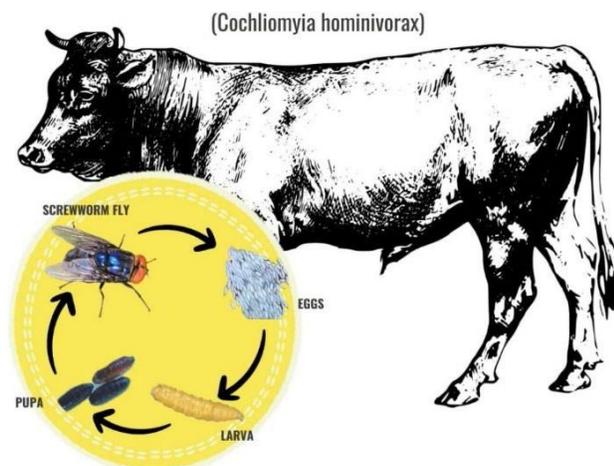
**Figure 36.** Larva

The screwworm has caused severe damage to livestock across the Americas, particularly in cattle. Wounds from dehorning, castration, branding, tick bites, and especially calf birth and the navels of newborn animals are highly attractive to female flies for egg-laying.

In much of the Americas, *Cochliomyia hominivorax* is considered the primary insect pest affecting livestock and the second most significant arthropod pest, surpassed only by ticks.

#### Life Cycle:

- I. Egg – Day 0: Females deposits 200-400 eggs each time near wounds or natural orifices. It takes 12-14 hours to hatch.
- II. Larva: Takes 5-7 days to develop completely, feeding from live tissue. It then leaves the wound, falling to the ground to continue its cycle.
- III. Pupa: Once on the ground, the larva buries itself and takes 7-10 days during the Pupa stage to continue its transformation.
- IV. Adult – Screwworm Fly: Fly emerges. Males become sexually



**Figure 37.** Life cycle of *Cochliomyia hominivorax*

mature and able to mate within 24 hours. Females become sexually mature within 6-7 days. About 4 days after mating, female flies are ready to lay their eggs.

Between 2023 and 2024, over 53,000 cases of cattle screwworm have been reported in Central America, primarily affecting cattle, dogs, and pigs with cattle being the most affected. Over 43,000 reported cases. Belize has eight (8) confirmed screwworm cases so far, all within the Toledo District. This outbreak has significant economic and social impacts, prompting regional cooperation to mitigate cases through surveillance, movement controls, animal inspections, education, a combination of management practices, wound care and biological control measures.

Below are key strategies farmers and pet owners must take into consideration:

### 1. Proper Wound Management

- **Immediate Treatment:** Clean and treat all wounds promptly, including those from castration, dehorning, branding, and tick bites.
- **Wound Protection:** Use antiseptic sprays, fly repellents, or wound dressings to prevent female flies from laying eggs.
- **Monitoring:** Regularly inspect animals for any signs of wounds or infestations.



Figure 38: Larvicide spray

### 2. Good Hygiene Practices

- **Clean Facilities:** Maintain clean living conditions for livestock to reduce the presence of flies.
- **Manure Management:** Properly dispose of manure and organic waste to minimize breeding grounds for flies.
- **Tick Control:** Use acaricides and other measures to reduce tick populations, as their bites can become entry points for infestation.



Figure 39. Tick and fly control

### 3. Chemical Control

- **Insecticides:** Use approved insecticides or fly repellents to reduce fly populations and protect livestock.
- **Larvicides:** Apply larvicidal treatments to wounds to kill any existing larvae.

### 4. Livestock Management Practices

- **Quarantine:** Isolate new or injured animals to monitor and treat any wounds before introducing them to the herd.
- **Newborn Calves:** Navel should be treated daily with Iodine or insecticide/larvicide for 5 days, which will help it dry out faster and avoid it from becoming a breeding ground for bacterial pathogens and from the new world screwworm fly from laying its eggs.



**Figure 40.** Insecticide and Acaricide

### 5. Reporting

- Report any suspected infestations to the Belize Agriculture Health Authority (BAHA), Belize Livestock Producers' Association (BLPA) or Ministry of Agriculture (MAFSE) to prevent outbreaks.

Combining these measures can effectively reduce the risk of screwworm infestations in Belize and enhance livestock health and productivity. Maintaining livestock health is a multifaceted priority, involving farmers, veterinarians, livestock associations, competent authority and the government.

## Veterinary Health Surveillance Service

BLPA Veterinary department has assisted in passive surveillance and herd health management to farmers, including members and non-members of BLPA, throughout the country. BLPA responded to 19 different notifications from farmers across the country which have had problems of morbidity or mortality during the year 2024.

**Table 5.** Notifications recorded by BLPA Veterinary Department

| CASE # | DATE       | LOCATION                  | SPECIE | BREED        | SEX | AGE (MONTHS) | Presumptive Diagnosis/Diagnosis |
|--------|------------|---------------------------|--------|--------------|-----|--------------|---------------------------------|
| 1      | 9-Jan-24   | Shipyards, Orange Walk    | Bovine | Brahman      | F   | 22           | Blackleg                        |
| 2      | 10-Jan-24  | Blue Creek, Orange Walk   | Bovine | Nelore       | F   | 25           | Blackleg                        |
| 3      | 25-Feb-24  | Crooked Tree, Belize      | Bovine | Brahman      | F   | 84           | Anaplasmosis                    |
| 4      | 2-April-24 | Guinea Grass, Orange Walk | Bovine | Brahman      | M   | 11           | Rabies                          |
| 5      | 15-Apr-24  | Silver Creek, Toledo      | Bovine | Brahman      | F   | 85           | Septicemia                      |
| 6      | 15-Apr-24  | Blue Creek, Toledo        | Bovine | Brahman      | F   | 60           | Abdominal Hernia                |
| 7      | 16-Apr-24  | Billy White, Cayo         | Bovine | Holstein     | M   | 29           | Snake Bite                      |
| 8      | 16-Apr-24  | Blue Creek, Orange Walk   | Bovine | Nelore       | F   | 11           | Rabies                          |
| 9      | 18-Apr-24  | Blue Creek, Orange Walk   | Bovine | Nelore       | F   | 42           | Rabies                          |
| 10     | 3-May-24   | Honey Camp, Orange Walk   | Bovine | Brahman      | M   | 24           | Rabies                          |
| 11     | 23-May-24  | San Victor, Corozal       | Bovine | Brahman      | M   | 22           | Rabies                          |
| 12     | 28-May-24  | Guinea Grass, Orange Walk | Bovine | Brahman      | F   | 36           | Rabies                          |
| 13     | 3-Jun-24   | Spanish Lookout, Cayo     | Bovine | Nelore       | F   | 154          | Anaplasmosis                    |
| 14     | 5-Jun-24   | San Carlos, Orange Walk   | Bovine | Brahman      | F   | 111          | Pyodermatitis                   |
| 15     | 8-Jun-24   | Dump, Toledo              | Bovine | Brahman      | F   | 3            | Bovine omphalitis               |
| 16     | 11-Jun-24  | San Lazaro, Orange Walk   | Bovine | Brahman      | M   | 11           | Blackleg                        |
| 17     | 26-Jun-24  | Blue Creek, Orange Walk   | Bovine | Black Angus  | F   | 36           | Rabies                          |
| 18     | 10-Jul-24  | Chunox, Corozal           | Bovine | Holstein     | F   | 37           | Mineral deficiency              |
| 19     | 23-Jul-24  | Benque Road, Cayo         | Bovine | Brahman      | M   | 5            | Rabies                          |
| 20     | 6-Aug-24   | San Carlos, Orange Walk   | Bovine | Brown Swiss  | F   | 132          | Rabies                          |
| 21     | 6-Aug-24   | Blue Creek, Orange Walk   | Bovine | Nelore       | F   | 36           | Rabies                          |
| 22     | 14-Aug-24  | 7 miles Village, Cayo     | Bovine | Nelore       | M   | 6            | Rabies                          |
| 23     | 19-Aug-24  | Esperanza Village, Cayo   | Bovine | Nelore       | F   | 10           | Rabies                          |
| 24     | 18-Sep-24  | Bladen, Toledo            | Bovine | Brahman      | F   | 49           | Septicemia                      |
| 25     | 22-Sep-24  | Blue Creek, Orange Walk   | Bovine | Brangus      | F   | 28           | Septicemia                      |
| 26     | 29-Sep-24  | Spanish Lookout, Cayo     | Bovine | Brahman      | F   | 9            | Rabies                          |
| 27     | 2-Oct-24   | Central Farm, Cayo        | Equine | Thoroughbred | M   | 48           | Equine Encephalitis             |
| 28     | 5-Oct-24   | Yo Creek, Cayo            | Bovine | Brahman      | F   | 120          | Dead Calf                       |
| 29     | 7-Oct-24   | Blue Creek, Orange Walk   | Bovine | Black Angus  | F   | 48           | Rabies                          |
| 30     | 16-Oct-24  | Spanish Lookout, Cayo     | Bovine | Holstein     | F   | 90           | Rabies                          |
| 31     | 16-Oct-24  | Spanish Lookout, Cayo     | Bovine | Nelore       | M   | 3            | Rabies                          |
| 32     | 6-Nov-24   | Indian Creek, Orange Walk | Bovine | Nelore       | M   | 4            | Rabies                          |
| 33     | 9-Dec-24   | Billy White, Cayo         | Bovine | Brahman      | F   | 12           | Rabies                          |
| 34     | 10-Dec-24  | Spanish Lookout, Cayo     | Bovine | Holstein     | F   | 73           | Mineral deficiency              |
| 35     | 30-Dec-24  | Buena Vista Village, Cayo | Bovine | Jersey       | F   | 32           | Sole laceration                 |

Between BLPA and BAHA, there were a total of 18 confirmed cases of Rabies in Belize for 2024. It is noted that Rabies had the most negative impact on our cattle producers, causing the highest mortality rate for 2024. Blackleg also continues to affect farmers around Belize and a total of 12 cases were based on presumptive diagnosis.

These diseases are 100% preventative through proper vaccination. There is a dire need for farmers to implement a more stringent vaccination program for disease that are prevalent in Belize. Due to the amount of rain received in 2024, various skin conditions were also seen on livestock.



**Figure 41.** Some veterinary cases attended to during 2024

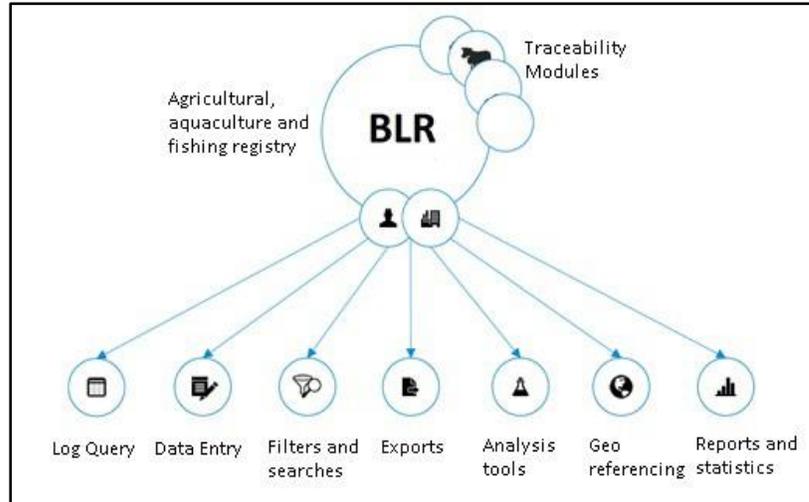
BLPA received many calls from farmers to assist with information regarding animal health issues and the use of vaccines, dewormer, vitamins or any other concerns or questions they may have. This is indicating a real need for veterinary and zoonosis services in Belize and particularly for large livestock animals.

Animal health is critically important, especially in livestock. Healthy livestock increases productivity and reduces cost. It also plays an important role in the export market since healthy animals meet regulatory standards, enabling farmers to access the Mexican cattle market.

## 7.4 The Belize Livestock Registry Report

### The Role of the Belize Livestock Registry (BLR)

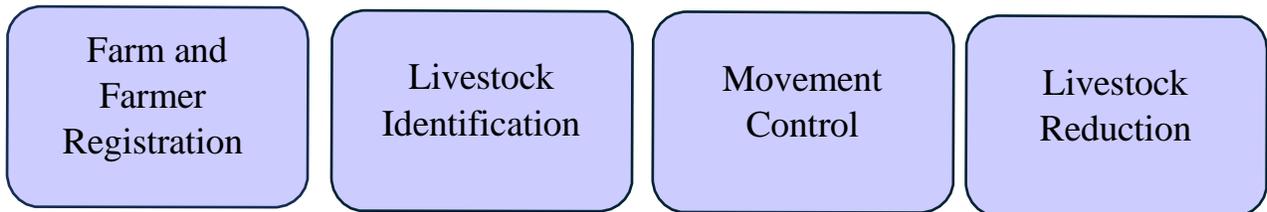
Since its establishment in 2012, the Belize Livestock Registry (BLR) has been instrumental in monitoring and managing the country's cattle industry. By utilizing advanced tools to accurately record and retrieve data, the BLR enables the generation of comprehensive reports that detail an animal's journey—from birth to death—and document its past and present locations.



**Figure 42.** BLR functions

Each animal is assigned a unique ear tag, which is applied by our Authorized Local Agents (ALAs) stationed in every district. This tagging system ensures efficient identification and tracking, contributing to the effective management of the livestock sector.

### Components of the BLR system:



### The Livestock Traceability Process

The process begins with the **registration of farmers and farms**, creating a reliable database for accountability and communication. Each animal is assigned a **unique electronic ear tag** for accurate tracking, supporting record-keeping, disease control, and traceability to its farm of origin.

**Movement control** monitors livestock from birth through local transport, export, slaughter or death, preventing disease spread and enabling swift outbreak responses. Finally, **livestock reduction** tracks each animal's destination and purpose, ensuring compliance, quality, and transparency across the supply chain.

This robust system ensures safety, accountability, and sustainability.

## BLR Personnel & Locations



**Figure 43.** Location of Authorized Local Agents, Check points and Permit offices in Belize.

The map above illustrates the presence of agents playing a role in data capturing or inspection to maintain a functional traceability in Belize. The BLR agents include the following:

- 29 permit officers throughout the country located within the Mennonite Communities of Belize.
- 7 Movement Control Officers: 1 officer at Blue Creek in Orange Walk, 3 officers at Bullet Tree in Cayo and 3 officers at Jalacte in Toledo.
- 3 Data Entry Clerks.
- 9 Authorized local agents (ALAs) countrywide.
- 1 BLR Supervisor
- 1 BLR Manager.

## Belize Livestock Registry (BLR) Highlights

### Farmers & Establishments:

**Table 6. Distribution of Farmers by District**

| DISTRICT         | PERSONS      | %          |
|------------------|--------------|------------|
| 01 - Corozal     | 1,373        | 18.30      |
| 02 - Orange Walk | 2,547        | 33.95      |
| 03 - Belize      | 503          | 6.70       |
| 04 - Cayo        | 2,109        | 28.11      |
| 05 - Stann Creek | 192          | 2.56       |
| 06 - Toledo      | 779          | 10.38      |
| <b>TOTAL:</b>    | <b>7,503</b> | <b>100</b> |

entire country which adds up to 33.95% of cattle ranchers.

At the end of the year 2024 (Table 6), the total active farmers recorded in the BLR was 7,503. Compared to 2023, the BLR had 6,808 farmers, a 695 farmer increase in 2024.

Furthermore, out of the total active farmers, 6,203 (82.67%) are males and 712 (9.49%) are females, with the highest concentration of farmers in Orange Walk (2,547) followed by Cayo (2,109) respectively. Orange Walk comprised of the largest number of farmers in the

**Table 7. Male and Female Farmers by district**

| DISTRICT            | MALE  | %     | FEMALE | %     | TOTAL        |
|---------------------|-------|-------|--------|-------|--------------|
| 01 - Corozal        | 952   | 15.34 | 101    | 14.19 | 1053         |
| 02 - O. Walk        | 2,091 | 33.71 | 264    | 37.08 | 2,355        |
| 03 - Belize         | 443   | 7.14  | 50     | 7.02  | 493          |
| 04 - Cayo           | 1,855 | 29.92 | 199    | 27.95 | 2054         |
| 05 - S. Creek       | 169   | 2.72  | 18     | 2.53  | 187          |
| 06 - Toledo         | 693   | 11.17 | 80     | 11.24 | 773          |
| Total               | 6,203 | 100   | 712    | 100   | 6,915        |
| Unregistered Sex    |       |       |        |       | 588          |
| <b>GRAND TOTAL:</b> |       |       |        |       | <b>7,503</b> |

did not include their sexual identification.

Table 7 illustrates the distribution of farmers by district including gender. In 2024 we ended with 6,203 male farmers and 712 female farmers. We have 82.6 of the livestock farmers being males and 9.4% females. At the time of registration, 588 farmers

**Table 8. Distribution of Farmers by Animals Owned**

| RANGES            | ANIMALS           | PERSON          | %            |
|-------------------|-------------------|-----------------|--------------|
| 0 - 50 Animals    | 48,428.00         | 5,057           | 65.88        |
| 51 - 100 Animals  | 24,395.00         | 336             | 4.38         |
| 101 - 150 Animals | 13,296.00         | 108             | 1.41         |
| + 151 Animals     | 116,578.00        | 279             | 3.63         |
| <b>TOTAL</b>      | <b>202,697.00</b> | <b>5,780.00</b> | <b>75.30</b> |

animals. Of note is the total 5,780 farmers identified with animals within the BLR System. Within the BLR, there are farmers that do not have animals, some buy and sell only, while others are institutions or slaughterhouses.

With regards to number of cattle heads per farmer, it can be observed in Table 8 that 65.88% (5,057) of the industry can be classified as small farmers who owns between 1 to 50 animals, whilst only 3.63% of the farmers are within the large farmer category and have 150 plus

## National Herd

**Table 9. Breakdown of National Herd by Age**

| AGE (Months)          | QUANTITY       | %           |
|-----------------------|----------------|-------------|
| 01-12                 | 35,441         | 17%         |
| 13-24                 | 23,751         | 12%         |
| 25-36                 | 17,796         | 9%          |
| 37-48                 | 15,363         | 8%          |
| 49-60                 | 16,077         | 8%          |
| 61-72                 | 13,236         | 7%          |
| 73-84                 | 12,622         | 6%          |
| 85-96                 | 13,236         | 7%          |
| 96-108                | 13,293         | 7%          |
| 109-120               | 11,197         | 6%          |
| 120+                  | 33,797         | 17%         |
| Undefined             | 403            | 0.2         |
| <b>TOTAL: 190,483</b> | <b>202,697</b> | <b>100%</b> |

Table 9 shows the distribution of the National Herd by Age. This illustrates a young cattle population of approximately 38% being less than 3 years old (i.e. 36 months) while 17% are 10 years old or more. Total herd population within the BLR is at 202,697 with 154,908 or 76% being female and 47,347 or 24% being male with 442 or 0.2% registered as castrated male animals.

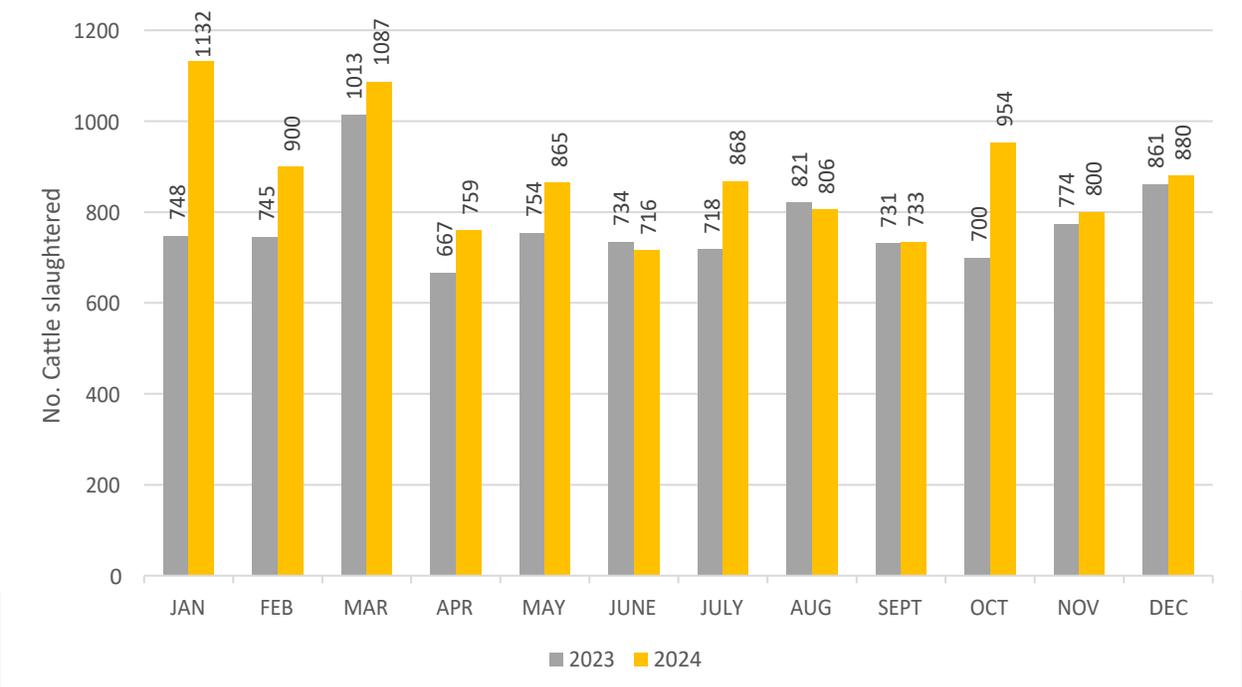
**Table 10. Distribution of Animals by District**

| DISTRICT (6)     | QUANTITY       |
|------------------|----------------|
| 01 - Corozal     | 11,909         |
| 02 - Orange Walk | 102,906        |
| 03 - Belize      | 9,306          |
| 04 - Cayo        | 58,232         |
| 05 - Stann Creek | 7,167          |
| 06 - Toledo      | 13,177         |
| <b>TOTAL</b>     | <b>202,697</b> |

Table 10 shows the distribution of animals by district. Orange Walk continues to have the highest concentration of cattle in 2024 followed by Cayo. The northern two districts combined for a total of 114,815 animals or 56.6% of all the animals within the country. This is followed by the Cayo district with 28.7% of the total cattle population. Toledo is the district with the third highest cattle population with 6.5%.

## National Slaughter/Consumption

According to the BLR records, 10,500 animals were slaughtered or otherwise consumed locally in 2024 with March being the highest month of consumption with 1,087 animals and April the lowest at 716 animals. A comparative trend in the graph below shows beef slaughter record from 2023 through 2024. There has been an uptake in cattle slaughtered from 2023 at 9,266 unit of animal to 10,500 unit of animal in 2024, which represents an 11.8 % increase. Interestingly, the first quarter of the year (i.e. January through March) seems to be when the highest slaughtering of beef occurs and hence the highest period of expected beef consumption in Belize.



**Graph 5.** Comparative beef cattle slaughter (2023 vs 2024)

## Cattle Export Report

Table 11 shows the monthly exports to Guatemala and Mexico respectively for the 2024 calendar year along with the consolidated total for both Mexico and Guatemala. In 2024 the livestock farmers exported a total of 41,515 animals. A total of 35,351 animals were exported to Guatemala and 6,164 to Mexico. As shown in the table, approximately 85.2% of those animals went to the Guatemalan market while 14.8% was exported to the Mexican market.

**Table 11.** Monthly export to Guatemala and Mexico in the 2024 calendar year.

| Month (2024) | GUATEMALA | MEXICO | CONSOLIDATED |
|--------------|-----------|--------|--------------|
| January      | 4,175     | 216    | 4,391        |
| February     | 3,067     | 445    | 3,512        |
| March        | 2,409     | 432    | 2,841        |
| April        | 2,627     | 1,139  | 3,766        |
| May          | 2,766     | 656    | 3,422        |
| June         | 1,964     | 615    | 2,579        |
| July         | 1,672     | 291    | 1,963        |
| August       | 3,398     | 222    | 3,620        |
| September    | 3,377     | 509    | 3,886        |
| October      | 2,753     | 425    | 3,178        |
| November     | 3,959     | 582    | 4,541        |
| December     | 3,184     | 632    | 3,816        |
| Total        | 35,351    | 6,164  | 41,515       |

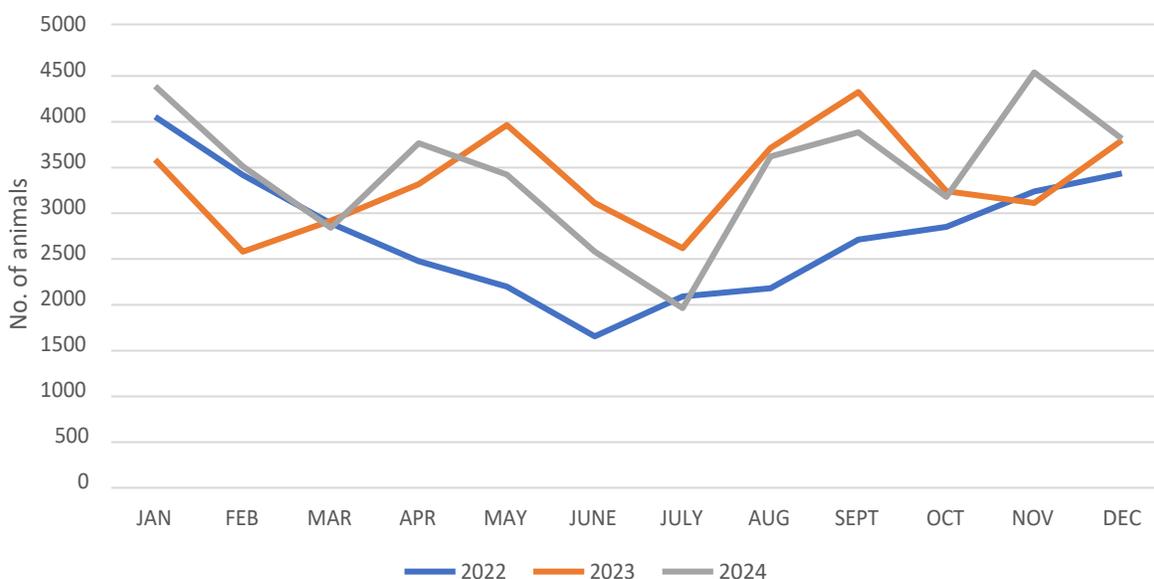
Total yearly export comparison between 2023 and 2024 revealed an increase from 40,290 animals exported in 2023 versus 41,515 in 2024. This is an increase in export in 2024 of 1,225 animals or 3% versus 2023.

**Table 12.** Yearly export trend comparison between 2023 and 2024

| YEAR | JAN   | FEB   | MAR   | APR   | MAY   | JUNE  | JULY  | AUG   | SEPT  | OCT   | NOV   | DEC   | TOTAL         |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| 2023 | 3,585 | 2,580 | 2,917 | 3,319 | 3,964 | 3,114 | 2,618 | 3,714 | 4,325 | 3,242 | 3,114 | 3,798 | <b>40,290</b> |
| 2024 | 4,391 | 3,512 | 2,841 | 3,766 | 3,422 | 2,579 | 1,963 | 3,620 | 3,886 | 3,178 | 4,541 | 3,816 | <b>41,515</b> |
| DIFF | 806   | 932   | 76    | 447   | 542   | 535   | 655   | 94    | 439   | 64    | 1427  | 18    | <b>1,225</b>  |

The line graph below shows a yearly cattle export comparison for the past three years: 2022, 2023 and 2024. The exports have increased annually: Yr 2022 = 33,197 animals; Yr 2023 = 40,290 animals and Yr 2024 = 41,515 animals.

The trend indicated a similar pattern of cattle movement throughout the year for both 2023 and 2024 compared to 2022. January through March is expected to see a reduction in export as farmers generally holding their animals to increase weight gains before selling in March as pasture is abundant during this period. As of March, the dry period sets in and hence pasture availability starts declining and so does the price per pound of cattle for the export market. In both 2023 and 2024 we saw a recurring uptake in export during the months of August and September and again in November for 2024 only.



**Graph 6.** Annual export trend comparison from 2022 to 2024

BELIZE LIVESTOCK PRODUCERS ASSOCIATION

FINANCIAL STATEMENTS

31 DECEMBER 2024

BELIZE LIVESTOCK PRODUCERS ASSOCIATION

FINANCIAL STATEMENTS

'31 DECEMBER 2024

INDEX

|  | Page     |
|--|----------|
| Report of the independent auditors to the Board of Directors | 1 - 3    |
| Statement of financial position                              | 4        |
| Statement of comprehensive income                            | 5        |
| Statement of changes in members' equity                      | 6        |
| Statement of cash flows                                      | 7        |
| Notes to the financial statements                            | 8 - 15 . |



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Page 1

REPORT OF THE INDEPENDENT AUDITORS  
TO THE BOARD OF DIRECTORS OF  
BELIZE LIVESTOCK PRODUCERS ASSOCIATION

*Opinion*

We have audited the accompanying financial statements of Belize Livestock Producers Association which comprise the statement of financial position as at 31 December 2024 and the statement of comprehensive income, statements of changes in equity and cash flow for the year then ended, and summary of significant accounting policies and other explanatory notes.

In our opinion, the accompanying financial statements present fairly, in all material respect, the financial position of Belize Livestock Producers Association as at 31 December 2024 and of its financial performance and its cash flow for the year then ended in accordance with International Financial Reporting Standards for Small and Medium-sized Entities (IFRS for SMEs).

*Basis for Unqualified Opinion*

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors Responsibilities for the Audit of the Financial Statements section of our report. We are independent of Belize Livestock Producers Association in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants (IESBA Code)* together with the ethical requirements that are relevant to our audit of the financial statements in Belize, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our unqualified opinion.

*Responsibilities of Management and Directors for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Association's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the shareholders either intend to liquidate the Association or to cease operations or has no realistic alternative but to do so.

Those Directors are responsible for overseeing the Association's financial reporting process.

*Auditor's Responsibilities for the Audit of the Financial Statements*

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with International Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statement, whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Association's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Association's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statement or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. The Association is foreseen to continue as a going concern for an indefinite period.
- Evaluate the overall presentation, structure and content of the financial statement, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Association to express an opinion on the financial statement. We are responsible for the direction, supervision and performance of the Association's audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement principal on the audit resulting in this independent auditor's report is Mark C. Hulse.



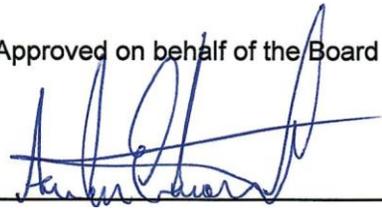
MCMH Associates  
11 February 2025

Belize City,  
Belize, C.A.

STATEMENT OF FINANCIAL POSITION  
31 DECEMBER 2024

All amounts expressed in Belize dollars

|                                     | Notes | 2024             | 2023              |
|-------------------------------------|-------|------------------|-------------------|
| Current assets:                     |       |                  |                   |
| Cash and cash equivalents           | 2, 3  | 900,505          | 911,057           |
| Accounts receivable and prepayments | 2, 4  | 310,916          | 104,539           |
| Inventories                         | 2, 5  | <u>55,107</u>    | <u>50,517</u>     |
|                                     |       | <u>1,266,528</u> | 1,066,112         |
| Non-current assets:                 |       |                  |                   |
| Biological assets                   | 2, 7  | 36,330           | 41,229            |
| Property and equipment              | 2, 6  | 2,073,869        | <u>2,102,641</u>  |
|                                     |       | 2,110,199        | 2,143,870         |
| Total assets                        |       | <u>3,376,727</u> | <u>3,209,982</u>  |
| Current liabilities:                |       |                  |                   |
| Accounts payable and accruals       | 2, 8  | 94,018           | 60,084            |
| Project funds liability             | 2, 9  | <u>110,576</u>   | <u>          </u> |
| Total liabilities                   |       | <u>204,594</u>   | <u>60,084</u>     |
| NET ASSETS                          |       | 3,172,133        | 3,149,899         |
| EQUITY                              |       |                  |                   |
| Retained earnings                   |       | 3,172,133        | 3,149,899         |
| TOTAL EQUITY                        |       | 3,172,133        | 3,149,899         |

Approved on behalf of the Board  
  
 \_\_\_\_\_ Director

  
 \_\_\_\_\_ Director

Auditor's report pages 1 - 3.

The notes on pages 8 to 15 form an integral part of these financial statements.

STATEMENT OF COMPREHENSIVE INCOME  
YEAR ENDED 31 DECEMBER 2024

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All amounts expressed in Belize dollars

|  | Notes | 2024             | 2023             |
|--|-------|------------------|------------------|
| INCOME:                                      | 2     |                  |                  |
| Service revenue                              | 10    | 519,424          | 497,116          |
| Product sales (net)                          | 11    | 411,882          | 364,395          |
| Other income                                 | 12    | <u>833,452</u>   | <u>888,039</u>   |
|  |       | <u>1,764,758</u> | <u>1,749,550</u> |
| EXPENSES:                                    | 2     |                  |                  |
| Advertising and awareness                    |       | 10,178           | 316              |
| AGM expense                                  |       | 23,671           | 13,431           |
| Allowance and subsistence                    |       | 29,585           | 27,862           |
| Bank service charges                         |       | 2,893            | 2,614            |
| BSE surveillance Program expense             |       | 12,379           | 49,853           |
| Budget support                               |       | 100,204          | 100,204          |
| Commission expense                           |       | 104,770          | 96,496           |
| Direct support (farmers)                     |       | 258,353          | 118,375          |
| Fuel   |       | 31,837           | 32,292           |
| Insurance, license and taxes                 |       | 1,098            | 11,145           |
| Interest and penalties                       |       | 243              | 282              |
| Loss on disposal of property and equipment   |       | 7,992            | (19,015)         |
| Meetings and seminars                        |       | 9,249            |                  |
| Membership subscriptions                     |       | 3,375            |                  |
| Miscellaneous expense                        |       | 18,155           | 10,425           |
| Model farm expense                           |       | 20,979           | 8,684            |
| Office expenses                              |       | 31,871           | 28,360           |
| Professional fees                            |       | 13,669           | 15,190           |
| Project expense                              |       | 28,349           | 43,079           |
| Rent   |       |                  | 3,470            |
| Repairs and maintenance                      |       | 73,238           | 36,270           |
| Security and surveillance                    |       | 5,468            | 2,720            |
| Social security expense                      |       | 34,073           | 35,937           |
| Staff costs                                  |       | 794,505          | 795,572          |
| Travel expense                               |       | 21,215           | 5,010            |
| Utilities expenses                           |       | <u>40,529</u>    | <u>27,963</u>    |
|  |       | <u>1,677,878</u> | <u>1,446,538</u> |
| Net income before depreciation               |       | 86,880           | 303,012          |
| Less: Depreciation of property and equipment | 6     | (59,683)         | (59,926)         |
| Amortization of biological assets            | 7     | (4,899)          | (4,771)          |
| Net income for the year                      |       | <u>22,298</u>    | <u>238,316</u>   |

The notes on pages 8 to 15 form an integral part of these financial statements.

STATEMENT OF CHANGES IN MEMBERS' EQUITY  
YEAR ENDED 31 DECEMBER 2024All amounts expressed in Belize dollars

|                                      | 2024             | 2023             |
|--------------------------------------|------------------|------------------|
| RETAINED EARNINGS:                   |                  |                  |
| Balance at the beginning of the year | 3,149,899        | 3,655,322        |
| BLR accounts transferred to BLPA     |                  | (739,016)        |
| Variance in opening balance          | (64)             | 147              |
| Prior year adjustment                |                  | (4,869)          |
| Net income for the year              | 22,298           | 238,316          |
| Balance at the end of the year       | <u>3,172,133</u> | <u>3,149,899</u> |

The notes on pages 8 to 15 form an integral part of these financial statements.

STATEMENT OF CASH FLOWS  
YEAR ENDED 31 DECEMBER 2024

All amounts expressed in Belize dollars

|   | 2024            | 2023             |
|---|-----------------|------------------|
| Cash flow from operating activities                     |                 |                  |
| Net income for the year                                 | 22,298          | 238,316          |
| Adjustments for items not affecting operating cash:     |                 |                  |
| Prior year adjustment                                   |                 | (4,869)          |
| Depreciation on property and equipment                  | 59,683          | 59,926           |
| Amortization of biological assets                       | 4,899           | 4,771            |
| (Gain) / loss on disposal of fixed assets               | 7,992           | (19,015)         |
| BLR accounts transferred to BLPA                        |                 | (739,016)        |
| Variance in opening balances                            | {63}            | {25}             |
| Operating income /(loss) before working capital changes | 94,809          | (459,913)        |
| Changes in working capital - add / (deduct)             |                 |                  |
| {Increase} / decrease in accounts receivable            | (206,377)       | 941,774          |
| (Increase) in inventories                               | (4,590)         | (47,835)         |
| Increase in accounts payable and accruals               | 33,933          | 8,854            |
| Increase in accounts project funds liability            | 110,576         |                  |
| Net cash provided by operating activities               | <u>28,351</u>   | <u>442,879</u>   |
| Cash flow from investing activities                     |                 |                  |
| Proceeds from sale of fixed assets                      | 9,134           | 28,150           |
| Purchase of property and equipment                      | (48,037)        | (191,356)        |
| Purchase of biological assets                           |                 | (46,000)         |
| Net cash (used by) investing activities                 | <u>(38,903)</u> | <u>(209,206)</u> |
| Net (decrease) / increase in cash and cash equivalents  | (10,552)        | 233,674          |
| Cash and cash equivalents at beginning of year          | <u>911,057</u>  | <u>677,383</u>   |
| Cash and cash equivalents at end of year                | <u>900,505</u>  | <u>911,057</u>   |

The notes on pages 8 to 15 form an integral part of these financial statements .

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2024

All amounts expressed in Belize dollars

1. GENERAL INFORMATION

Belize Livestock Producers Association (the "Association") is a corporate body incorporated under and by virtue of the Meat and Livestock Act Chapter 214, Revised Edition 2000 of Belize. The Association's membership consists of livestock producers whom do not hold share capital.

The Association is a non-profit organization. The primary function of the Association is to promote understanding and goodwill among its members and to stimulate the development of the livestock industry by safeguarding the interest of its members in all matters concerning the production and marketing of livestock. It also seeks to provide technical and other information of assistance to its members.

The Association operates from its registered office at 47 1/2 Miles George Price Highway in Belmopan, Belize. The Association had 30 employees as at 31 December 2024.

These financial statements are prepared in compliance with International Financial Reporting Standards for Small and Medium-sized Entities (IFRS for SMEs) as issued by the International Accounting Standards Board (IASB). Unless otherwise stated, monetary amounts are stated in Belize dollars. The accounting policies outlined in Note 2 have been consistently applied to all periods presented.

2. SIGNIFICANT ACCOUNTING POLICIES, ESTIMATES, AND JUDGEMENTS

The significant accounting policies used in the preparation of these financial statements are summarized below. These accounting policies conform, in all material respects, to IFRS for SMEs.

2.1 General

Use of estimates, assumptions, and management judgement

In preparing the financial statements, management is required to make subjective estimates and assumptions that affect the reported amount of assets, liabilities, net income, and related disclosures. Estimates made by management are based on historical experience and other assumptions that are believed to be reasonable. Key sources of estimation uncertainty include: impairment and useful lives of property and equipment, impairment of financial instruments, and accrued liabilities. Accordingly, actual results may differ from these and other estimates thereby impacting future financial statements. Refer to the relevant accounting policies in this note 2 for details on management's use of estimates and assumptions.

2.2 Financial instruments - recognition and measurement

The Association applies the provisions of both Section 11 and Section 12 of the IFRS for SMEs to account for all of its financial instruments.

- continues

NOTES TO THE FINANCIAL STATEMENTS  
31 DECEMBER 2024

All amounts expressed in Belize dollars

**2. SIGNIFICANT ACCOUNTING POLICIES, ESTIMATES, AND JUDGEMENTS** (continued)

**2.2 Financial instruments - recognition and measurement** (continued)

Initial recognition of a financial asset or liability:

The Association recognizes a financial asset or financial liability when the Association becomes a party to the contractual provisions of the instrument.

Cash and cash equivalents :

Cash and cash equivalents represent cash in hand and deposits held on call with banks with a term less than 90 days.

Accounts receivable and prepayments:

Accounts receivable and prepayments are initially measured at the transaction price (including transaction costs) and are subsequently measured at the undiscounted amount of cash or other consideration expected to be received.

At the end of each reporting period, the Association assesses whether there is objective evidence of impairment on accounts receivable and prepayments. Objective evidence includes significant financial difficulty of the debtor, breach in contract, probability of bankruptcy, and repayment trends. Impairment is measured as the difference between the carrying value and the discounted estimated future cash flows. When objective evidence exists, the impairment is recorded immediately.

Trade and other payables:

Trade and other payables are recognized on an accrual basis, when goods or services are received. Payables are recognized initially at the transaction price (including transaction costs) and are subsequently measured at the undiscounted amount of cash or other consideration expected to be paid.

Derecognition of a financial asset or liability:

Financial assets are derecognized on the statement of financial position when the Association's contractual rights to the cash flows from the assets have expired, when the Association retains the right to receive the cash flows of the assets but assume an obligation to pay those cash flows to a third party, or when the Association has transferred the contractual rights to receive the cash flows to a third party.

Financial liabilities are derecognized on the statement of financial position when the Association's obligation specified in the contract expires, is discharged, or is cancelled. The difference between the carrying amount of the financial liability and the consideration paid is recognized in the statement of comprehensive income.

- continues

NOTES TO THE FINANCIAL STATEMENTS  
31 DECEMBER 2024

All amounts expressed in Belize dollars

2. SIGNIFICANT ACCOUNTING POLICIES, ESTIMATES, AND JUDGEMENTS (continued)

2.3 Inventories

Inventories are stated at the lower of cost and estimated selling price less selling costs. The cost of inventories is the acquisition cost plus all landing and handling costs. The cost of inventories is determined using the first-in first-out (FIFO) method. At each reporting date, inventories are assessed for impairment. If inventory is impaired, the carrying amount is reduced to its selling price less selling costs; and the impairment loss is recognized immediately in the statement of comprehensive income.

Inventory risk is the risk that inventory may be misappropriated. Management closely monitors inventory levels in relation to sales and also conducts stock count of the stock on hand.

2.4 Biological assets

Long-term biological assets consist of livestock (cattle).

Biological assets are carried at cost less accumulated depreciation and any accumulated impairment losses, as the fair value of these biological assets cannot be readily ascertained due to the inexistence of an active market. Cost represents the historic cost of acquisition.

Depreciation of livestock is calculated using the straight-line method to allocate the cost less its residual value over its estimated life of 10 years.

The residual values, useful lives and depreciation method of the Association's biological assets are reviewed for impairment on an annual basis.

2.5 Property and equipment

Property and equipment includes land, building, motor vehicle, computer equipment, furniture, and fixtures. Property and equipment are carried at historical cost less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying value or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits will flow to the Association and the cost can be measured reliably. All other repairs and maintenance are charged to income during the financial period in which they are incurred.

Land is not depreciated as its useful life cannot be estimated. Depreciation on other assets is recorded using the reducing balance method at the following rates:

|                                    |     |
|------------------------------------|-----|
| Building and building improvements | 3%  |
| Equipment                          | 10% |
| Furniture & fixtures               | 10% |
| Motor vehicles                     | 25% |

- continues

NOTES TO THE FINANCIAL STATEMENTS  
31 DECEMBER 2024

All amounts expressed in Belize dollars

**2. SIGNIFICANT ACCOUNTING POLICIES, ESTIMATES, AND JUDGEMENTS** (continued)

**2.5 Property and equipment** (continued)

When property and equipment are disposed of by sale or scrapping, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in the statement of comprehensive income.

Property and equipment is assessed for indicators of impairment at each reporting date. If there is an indication that the asset may be impaired, an impairment test is performed by comparing the asset's carrying amount to its recoverable amount. The recoverable amount is the higher of the asset's value in use or fair value less costs of disposal.

**2.6 Provisions**

Provisions are liabilities of uncertain timing or amount and are recognized when the Association has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are measured as the best estimate of the consideration required to settle the present obligation at the reporting date. Significant judgement is required to determine whether a present obligation exists and in estimating the probability, timing and amount of any cash outflows. Provisions are recorded related to litigation, future employee benefits and other items. Provisions are recorded on the basis of all available information at the end of the reporting period. In the event that results differ from management expectations, the Association may incur expenses in excess of the provisions recognized.

**2.7 Revenue recognition**

The Association has a few sources of revenue: cess collections, animal feed, ear tag sales, administration fees from the BLR, export subsidy fees, brand registration and other income.

The Association receives cess income which is recognized at the time members' livestock is delivered to be processed or leaves the country of Belize. Cess income is earned per head of livestock.

Brand registration income is recognized at the time of registration.

All other income is recorded when services are rendered or goods delivered and it is probable that future economic benefit will flow to the entity.

Income which has been received and not yet recognized is recorded as deferred income on the statement of financial position.

**2.8 Expense recognition**

Expenses are recognized on the accrual basis in the period the goods are received or services are rendered.

- continues

NOTES TO THE FINANCIAL STATEMENTS  
31 DECEMBER 2024

All amounts expressed in Belize dollars

**2. SIGNIFICANT ACCOUNTING POLICIES, ESTIMATES, AND JUDGEMENTS (continued)**

**2.9 Leasing**

A lease is an agreement in which the lessor grants the lessee the right to use an asset for an agreed upon period of time in return to a payment or series of payments. A finance lease is a lease that transfers substantially all the risk and rewards incidental to ownership of the leased asset to the lessee, where title may or may not eventually be transferred. An operating lease is a lease other than a financing lease.

Operating leases:

In the event that the Association is a lessee in an operating lease, the rental payments are recorded on a straight-line basis over the lease term in the statement of comprehensive income.

Finance leases:

In the event that the Association is a lessee in a financing lease, the leased asset is recorded to property and equipment and the related lease obligation is recorded as a liability on the statement of financial position. The amount recorded is the lower of the fair value of the leased asset and the minimum lease payments.

**2.10 Taxes**

In accordance with the Meat and Livestock Act Chapter 214, Revised Edition 2000 of Belize, the Association is not subject to business tax, and it is not a registered agent for GST. As such, they do not collect GST. However, the Association pays GST.

**2.11 Translation of foreign currencies**

Monetary assets and liabilities denominated in foreign currencies are translated in Belize dollars at rates prevailing at the date of the statement of financial position. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in the statement of comprehensive income. Non-monetary assets and liabilities in foreign denominations are translated

2024                      2023

**3. CASH AND CASH EQUIVALENTS**

Cash and cash equivalents consist of the following:

Restricted

Project funds held in financial institutions (Refer to Note 9) 110,576

Unrestricted

|                                     |         |         |
|-------------------------------------|---------|---------|
| Cash held at financial institutions | 785,381 | 910,260 |
| Cash on hand                        | 4,548   | 797     |
|                                     | 900,505 | 911,057 |

NOTES TO THE FINANCIAL STATEMENTS  
31 DECEMBER 2024

All amounts expressed in Belize dollars

4. ACCOUNTS RECEIVABLE 2024                      2023

Accounts receivable consists of the following:

|   |         |         |
|---|---------|---------|
| Trade receivables for sales of livestock products | 195,080 | 100,998 |
| Employee loans and advances                       |         | 320     |
| Other receivables and prepayments                 | 115,837 | 3,221   |
|   | 310,916 | 104,539 |

5. INVENTORIES

Inventories consists of tags held for resale:

|               |        |        |
|---------------|--------|--------|
| Lucaena Seeds | 2,244  | 5,343  |
| Tag Readers   |        | 900    |
| Taggers       | 690    | 960    |
| Tags          | 52,173 | 43,314 |
|               | 55,107 | 50,517 |

6. PROPERTY AND EQUIPMENT

Property and equipment consist of the following:

|                                       | Land & Buildings | Motor vehicles | Furniture,<br>fixtures and<br>equipment | Total     |
|---------------------------------------|------------------|----------------|---|-----------|
| <u>Cost</u>                           |                  |                |   |           |
| At 31 December 2023                   | 2,172,364        | 260,354        | 188,550                                 | 2,621,268 |
| Restatement                           | 12,791           |                | (12,791)                                |           |
| Additions                             | 7,127            | 30,548         | 10,361                                  | 48,037    |
| Disposals                             |                  | {14,284}       | {18,443}                                | {32,727}  |
| At 31 December 2024                   | 2,192,282        | 276,618        | 167,677                                 | 2,636,578 |
| <u>Accumulated amortization</u>       |                  |                |   |           |
| At 31 December 2023                   | 307,244          | 154,188        | 57,195                                  | 518,627   |
| Restatement                           | (2,446)          |                | 2,446                                   |           |
| Additions                             | 18,645           | 30,469         | 10,569                                  | 59,683    |
| Disposals                             |                  | {3,626}        | {11,975}                                | {15,601}  |
| At 31 December 2024                   | 323,443          | 181,031        | 58,235                                  | 562,709   |
| Net book value at<br>31 December 2024 | 1,868,839        | 95,588         | 109,442                                 | 2,073,869 |
| Net book value at<br>31 December 2023 | 1,865,120        | 106,166        | 131,356                                 | 2,102,641 |

NOTES TO THE FINANCIAL STATEMENTS  
31 DECEMBER 2024

All amounts expressed in Belize dollars

7. BIOLOGICAL ASSETS

Biological assests consist of the following:

|                                       | Cattle | Total  |
|---------------------------------------|--------|--------|
| Cost                                  |        |        |
| At 31 December 2023                   | 46,000 | 46,000 |
| Additions                             |        |        |
| Disposals                             |        |        |
| At 31 December 2024                   | 46,000 | 46,000 |
| <u>Accumulated amortization</u>       |        |        |
| At 31 December 2023                   | 4,771  | 4,771  |
| Additions                             | 4,899  | 4,899  |
| Disposals                             |        |        |
| At 31 December 2024                   | 9,670  | 9,670  |
| Net book value at<br>31 December 2024 | 36,330 | 36,330 |
| Net book value at<br>31 December 2023 | 41,229 | 41,229 |

8. ACCOUNTS PAYABLE AND ACCRUALS

2024                      2023

Accounts payable and accruals consists of the following:

|                                  |        |        |
|----------------------------------|--------|--------|
| Accounts payable - trade         | 42,405 | 45,386 |
| Belize pig council- cess payable | 44,278 | 9,209  |
| Other                            |        |        |
|                                  | 7,335  | 5,489  |
|                                  | 94,018 | 60,084 |

NOTES TO THE FINANCIAL STATEMENTS  
31 DECEMBER 2024

All amounts expressed in Belize dollars

|  | 2024             | 2023      |
|--|------------------|-----------|
| 9. PROJECT FUNDS LIABILITY   |                  |           |
| The BLPA holds a Belize Bank Limited account and an Atlantic Bank Limited account which maintains funds restricted to the completion of specific projects. | 110,576          |           |
|  | <hr/>            |           |
| 10. SERVICE REVENUE  |                  |           |
| Service revenue consists of the following:   |                  |           |
| Cess revenue   | 519,424          | 497,116   |
|  | <hr/>            |           |
| 11. PRODUCT SALES  |                  |           |
| Product sales consist of the following:  |                  |           |
| Citropulpa - pellets   | 126,486          | 173,115   |
| Veterinary supplies  | 462              | 80        |
| Tags   | 710,470          | 590,180   |
| Other  | 7,900            | 13,773    |
| Discount allowed   | {19,514}         |           |
|  | <hr/>            |           |
|  | {18,300} 825,804 | 758,848   |
| Less: cost of goods sold   | {413,922}        | {394,454} |
|  | <hr/>            |           |
| Net sales  | 411,882          | 364,395   |
|  | <hr/>            |           |
| 12. OTHER INCOME   |                  |           |
| Other income consists of the following:  |                  |           |
| Export subsidy fees  | 357,530          | 306,190   |
| Income from brand registration   | 6,380            | 6,120     |
| Income from membership   | 32,775           | 32,285    |
| BLR Administration   | 420,776          | 405,020   |
| Other  | 15,997           | 138,424   |
|  | <hr/>            |           |
|  | 833,452          | 888,039   |
|  | <hr/>            |           |
| 13. KEY MANAGEMENT COMPENSATION  |                  |           |
| Total key management compensation paid during the year   | 223,315          | 244,125   |
|  | <hr/>            |           |
| FYE 2023 key management compensation includes the Chief Executive Officer, General Manager, Finance Officer, BLR Manager and Veterinarian.                 |                  |           |

## 9.0 Sponsors



## **10.1 Acknowledgements**

Special Acknowledgments to the following persons who assisted in the preparation of the BLPA's Annual Report.

- a.** Mr. William Usher-BLPA CEO
- b.** Ms. Mindy Garcia- Operations/ Human Resource/BLR Manager
- c.** Mrs. Sarai Pineda- BLR Supervisor
- d.** Ms. Lexitah Cattouse- Membership and Records Officer
- e.** Dr. Andre Depaz- Veterinary Care & Sales Manager
- f.** Mr. Albert Moore- Finance & Accounts Manager
- g.** MCMH Associates- External Auditing Firm