



**Inter-American Institute for Cooperation on Agriculture (IICA)
New Zealand High Commission to Barbados**

Description of Action

**Project Title: Transforming the Greenland Livestock Research Station into a
World Class Breeding and Nutrition Centre for Barbados Blackbelly Sheep**

1. Time frame and venue

June 27, 2017 – June 27, 2019: Greenland Livestock Research Station, Greenland, St. Andrew, Barbados

2. Background-Rationale

One of the main strategies identified by the Government of Barbados to improve national food and nutrition security is the improvement in production and productivity of the small ruminant sector. While there has been increasing diversity in small ruminant production in Barbados, pride of place within this sub-sector remains with the Barbados Blackbelly Sheep (BBS). A 2013 small ruminant market survey¹ in Barbados showed that small ruminants account for 7% of all animals slaughtered at licensed abattoirs, with BBS accounting for almost 95% of small ruminants slaughtered. At present, the limited availability of consistent, quality breeding stock and the high cost of feed are significant constraints to investment in the BBS business. However, with the renewed interest and attention given to the full value-chain development for a BBS Industry², there is optimism that a sustainable and economically viable sector can be developed.

The Greenland Livestock Research Station (GLRS)

The Greenland Livestock Research Station is central to small ruminant industry in Barbados. The Station is the genetic pool from which most of the small ruminant farmers receive their first animals and on which they rely for replenishment of their breeding stocks. Three hundred breeding ewes and twelve rams are normally maintained at the Station. The core business of the GLRS is (1) to maintain and preserve a flock of purebred indigenous Barbados Blackbelly Sheep; (2) to produce and sell high quality breeding stock to small farmers to upgrade their herds so that they can produce more high quality lambs; and (3) to respond to the increasing local demand for Blackbelly lamb meat, while at the same time, contributing to reduction in the importation of lamb and saving foreign currency. It is therefore imperative that for any national industry development plan for the Barbados Blackbelly Sheep to be sustainable, sufficient stocks of high quality

¹ IICA Office in Barbados, 2013. IICA Report on Small Ruminant (Barbados Blackbelly Sheep) Market Study.

² Initiatives being undertaken by the Ministry of Agriculture, Food, Fisheries and Water Resource Management (MAFFW), Caribbean Agricultural Research and Development Institute (CARDI), IICA Office in Barbados, Food & Agriculture Organisation, the Sheep and Goat Association (under the Barbados Agricultural Society (BAS)), UWI Cave Hill Centre for Entrepreneurship, Barbados Investment and Development Corporation (BIDC), Culinary Association of Barbados, Leathers of the Caribbean, and private sector companies.



animals, and management systems based on the availability of locally formulated and economical feed rations, must be available.

3. Objectives of the Action

3.1. General

To upgrade the GLRS into a world-class Barbados Blackbelly Sheep Breeding and Nutrition Centre.

3.2. Specific objectives

1. To retrofit an existing building at GLRS to become an Insemination Unit for the purpose of insemination and the collection and storage of semen;
2. To establish a feed processing plant (including hammer mill, chipper and pelletizer) for the production of local feed rations and storage of prepared stocks;
3. Training of BBS farmers and technicians in Best Practices of BBS breeding and nutrition and including a study tour of GLRS personnel in New Zealand.

4. Importance of the GRLS Improvement Exercise

The Greenland Livestock and Research Station has been involved in the genetic improvement of the Barbados Blackbelly Sheep since 1984, producing some of the highest quality sheep in the Caribbean. The semen from these high quality rams is in great demand, and requests have been received from at least 11 Caribbean countries (including Trinidad & Tobago, Suriname, Guyana, Belize, St. Vincent, St. Lucia, Grenada, Antigua, St. Kitts and Nevis, Anguilla), and even as far as Texas U.S.A., for semen from the Barbados Blackbelly Rams. Overseas clients, especially those from the USA are willing to pay up to US\$200 for a straw of semen. Therefore setting up of an Artificial Insemination (AI) Centre for the collection, processing and storage of Barbados Blackbelly semen at GLRS is very necessary going forward. Additionally, given the heavy burden feed cost plays in BBS operations, solutions need to be sought to convert the affordable, readily available, nutritious forage alternatives into feed convenient to the farmers. These interventions would lead to the vast improvement in profitability of sheep production in Barbados.

5. Outcomes

The following will be the outcomes of the Project:

1. Installation of a Breeding Unit capable of conducting AI procedures;
2. Installation of Feed Processing Plant and Nutrition Laboratory;
3. Training manual on Best Practices for BBS Breeding and Nutrition Management developed;
4. At least 20 small ruminant farmers and technicians from the Caribbean trained in BBS Breeding and Nutrition Best Practices; and
5. One study tour to NZ for the benefit of GLRS technicians executed.
6. Technical and Financial Project Report.



6. Methodology

The project will be executed by the IICA Barbados Delegation with support from MAFFW, CARDI, FAO, Chapingo University (Mexico) and New Zealand Sheep Breeding experts.

The establishment of the Breeding Unit will involve the procurement of equipment and furniture and the retrofitting of an existing building at GLRS. Professors Jose Muniz and Raymundo Rangel (Chapingo University) will guide this exercise by approving the list of materials required and supervising the installation of the equipment.

The establishment of the Feed Processing Facility and Nutrition Laboratory will be led by MAFFW and CARDI with technical support provided by IICA and FAO.

The training manual on Sheep Breeding will be developed by Chapingo University while IICA, FAO, CARDI and MAFFW will collaborate on developing the BBS Nutrition training manual and delivering the training on both Sheep Breeding and Nutrition Best Practices.

The study tour to New Zealand will be implemented with the support of Pacific Basin Exports (NZ) and the South Pacific Travellers' World (NZ).

The procurement of materials, equipment and services will be conducted in accordance with IICA rules and regulations.

6.1 Participants

MAFFW technicians and local BBS farmers will be the main beneficiaries of the project. Other beneficiaries would include regional small ruminant technicians and farmers.

The project will draw on expertise from the Chapingo University, Mexico; the FAO, CARDI and sheep experts in New Zealand to guarantee the success of the project.



7. Budget

Activity	Cost (US)	Cost (BDS)	ICR (BDS) 8.1%	Total (BDS)
1) Retrofit Insemination Unit	20,000.00	40,000.00	3,240.00	43,240.00
Equipment	7,500.00	15,000.00		
Furnishings	7,500.00	15,000.00		
Expertise	5,000.00	10,000.00		
2) Installation of Feed Processing Plant	58,500.00	117,000.00	9,477.00	126,477.00
Equipment	53,500.00	107,000.00		
Expertise	4,000.00	8,000.00		
Promotion	1000.00	2,000.00		
3) Training in BBS Best Practices (regional; 20 pax.)	22,750.00	45,500.00	3,685.00	49,185.50
Airfare and accommodation	20,000.00	40,000.00		
Training facility	n/a	n/a		
Catering	2,500.00	5,000.00		
Stationery	250.00	500.00		
Report	n/a	n/a		
4) Small Ruminant study tour to New Zealand (3 pax.)	15,000.00	30,000.00	2,430.00	32,430.00
Airfare and accommodation	15,000.00	30,000.00		
Report	n/a	n/a		
5) Contingency	1,927.61	3,855.23	312.27	4,167.50
TOTAL	118,177.61	236,355.27	19,144.77	255,500.00

IICA will administer the resources transferred in adherence **with IICA's rules and its administrative and accounting procedures**, for the implementation of the activities called for in the present document.

The financial resources transferred to IICA have been credited to the bank account provided by IICA Barbados and will be held in the currency of the transfer.

Conditions of payment

For the implementation of the Action, the New Zealand High Commission has made a financial contribution of BDS\$255,500.00 (Two Hundred and Fifty Five Thousand, Five Hundred Barbados dollars) in five payments.



The New Zealand High Commission agrees to pay IICA 8.1% (ICR) for administrative costs.

8. Other Terms and Conditions

Mechanism for coordination and decision making

In order to ensure the smooth provision and successful conclusion of the cooperation called for in the present Technical Cooperation Document, the Parties designate the Policy Adviser on behalf of New Zealand High Commission and a Technical Specialist on behalf of IICA, who will be responsible for planning, implementation and monitoring of the Action.

Amendments

Amendments to this document must be mutually agreed, and shall be made in writing through an exchange of official correspondence during the term of the contract.

Reports

IICA will prepare a Final Report (technical and financial), which once approved, will constitute the definitive conclusion of the contractual relationship between the Parties and will prevent either from taking further legal action or making further legal claims. If no comments are received within fifteen (15) working days of the submission of the Final Report, it would be deemed acceptable.

Conflict resolution

Any disagreement that may arise as to the interpretation of the present document shall be resolved by mutual agreement between the Parties.

Privileges and Immunities

Nothing conferred in the present document, or related to same, is to be considered an express or tacit renunciation of the immunities and privileges, exonerations and benefits enjoyed by IICA and its personnel in accordance with international law, treaties or international agreements or the national legislation of its Member States.

Anti-fraud and Anti-corruption Policy.

IICA has in place mechanisms for the prevention, detection, reporting, denouncing and sanction of fraud and corruption that are an integral part of its best practices of governance and administration. Pursuant to its code of ethics, its values and the respective law in the country in which it operates, IICA maintains a zero tolerance approach with respect to fraud and corruption. This policy applies to both personnel of the Institute, as well as to individuals and companies with which it maintains a relationship in different activities.

Reciprocity

Each Party agrees to acknowledge the contributions of the others to the implementation of the activities agreed upon, in publications, reports, informational material, messages and other means used for disseminating information on these activities.



Any document bearing the name or logotype of IICA, which is to be published as part of a special project, joint project, research project or any other activity, must comply with IICA's rules and regulations governing publications.

Timeline

- ✓ Effective legal instrument: June 27, 2017
- ✓ Maximum date for settlement of the agreement: October 31, 2019
- ✓ Scheduled date for delivery of Final financial and technical report: June 27, 2019
- ✓ Date of termination of the legal instrument: June 27, 2019

**FOR THE NEW ZEALAND
HIGH COMMISSION**

**FOR THE INTER-AMERICAN INSTITUTE
FOR COOPERATION ON
AGRICULTURE**

A handwritten signature in cursive script, reading 'H.E. Jan Henderson', written over a horizontal dotted line.

**H.E. Jan Henderson
NZ Ambassador to Barbados**

A handwritten signature in cursive script, reading 'Ena C. Harvey', written over a horizontal dotted line.

**Ena C. Harvey
Representative
IICA Barbados Delegation**

Place: *Barbados*
Date: *14 September
2017*

Place: *Barbados*
Date: *September 14, 2017.*