ANNEX A
PROJECT DESCRIPTION

The project is a collaborative effort involving Canada, Mexico, Guatemala, Argentina, and Costa Rica. Its primary goal is to empower cattle ranching families, especially women, youth, and Indigenous Peoples, to adapt to climate challenges and promote sustainability and inclusivity. Mexico and Guatemala are the target countries; Argentina and Costa Rica will participate through provision of technical assistance.

The implementing partner, IICA, is a multilateral organization headquartered in San José, Costa Rica. Founded in 1942: it is a specialized agency of the Organization of American States, focused on improving regional agricultural productivity and food security and supporting rural well-being and prosperity. The organization has a strong convening power in the region in its areas of expertise and an important network of subject-matter experts with vast experience in providing guidance to key multilateral and regional institutions such as the Economic Commission for Latin American and the Caribbean (ECLAC), CARICOM and the Food and Agriculture Organization of the United Nations (FAO).

The selection of Mexico and Guatemala as the target countries for this project is grounded in their vulnerability to climate change and the significant role of livestock management in their economies.

Communities within these countries face shared challenges related to climate adaptation and sustainable livestock practices. Unpredictable weather patterns result in floods, droughts and limit grazing supply, forcing farmers to cut down greater forest areas, resulting is significant environmental damage and negative impacts to biodiversity. The choice of these communities aligns with ongoing IICA projects, creating synergies for knowledge exchange and collaboration, ultimately enhancing the overall impact and sustainability of climate adaptation initiatives in the region.

The project adopts a “citizen science” approach (i.e., research conducted with participation of nonprofessional researchers), engaging cattle rancher families in vulnerable regions of Mexico and Guatemala, and offers technical assistance from Argentina and Costa Rica. It integrates satellite monitoring, focusing on climate adaptation, and aims to reduce climate vulnerabilities. The project will unfold over five fiscal years, with a phased approach designed to achieve its objectives and monitor its impacts effectively. It includes key components such as climate needs assessment, creation of citizen science groups, integration of satellite monitoring, a user-friendly digital platform, facilitation of sustainable practices, monitoring and evaluation, and influence on policy-making. Ultimately, the project will contribute significantly to poverty reduction by enhancing livelihoods, reducing climate vulnerabilities, and promoting gender equality among cattle rancher families.

Argentina's participation adds immense value through South-South technical cooperation, particularly in satellite monitoring expertise, further strengthening the project's capacity-building efforts. The inclusion of Costa Rica, which hosts IICA's headquarters and essential technical teams for various programs, will help ensure expert coordination and support, strengthening project efforts in Mexico, Guatemala, and Argentina.

The project is based on information, needs and lessons learned gathered from different initiatives developed by IICA and country partners, including government representatives, local

cattle associations, and local communities. Additional consultations are planned during project implementation to ensure ongoing stakeholder engagement, and to adjust activities based on feedback and changing circumstances.

This project will advance Canada's objectives under its Feminist International Assistance Policy, specifically Action Area 1 (Gender Equality and the Empowerment of Women and Girls) and Action Area 4 (Environment and Climate Action). It also advances the 2030 Agenda for Sustainable Development and the Sustainable Development Goals, specifically Goal 1 – No Poverty, Goal 5 - Gender Equality, Goal 10 - Reduced Inequalities and Goal 13 – Climate Action. This project further contributes to Canada's $5.3 billion international climate finance commitment, aligning with one of the four thematic areas of focus (climate-smart agriculture and food systems).

1.1. Expected Results and Implementation

1.1.1. Reach

In total, the project will directly benefit 1,300 cattle ranch families (500 Guatemalan and 800 Mexican). Improved livestock management practices can lead to increased food security, reduced environmental impact, and potentially greater economic stability. These benefits can extend to a larger number of individuals living in the project areas. Assuming a conservative multiplier of 3, targeting 1,300 families as beneficiaries could potentially lead to approximately 3,900 indirect beneficiaries from local communities. Policymakers, researchers, and organizations at the national and regional levels will benefit from the project's comprehensive adaptation indicators, which will influence climate adaptation policies. The data and insights generated by the project will inform policy decisions and contribute to more effective climate change adaptation measures, benefiting communities beyond the project's immediate scope.

1.1.2. Intermediate outcomes

The overarching goal of this initiative is to foster enhanced autonomy, resilience, and equity among cattle ranching families, with a particular focus on women, youth, and indigenous groups, as they navigate the challenges of climate adaptation. This, in turn, will contribute to the development of more sustainable and inclusive communities. This will be achieved through the following intermediate outcomes:

- Significant increase in women's access to and control over climate adaptation resources and decision-making processes;
- Effective implementation of climate adaptation practices and long-term commitment and appropriation of climate adaptation tools and knowledge among cattle ranching families and Community-Led Resilience Committees;
- Enhanced commitment of policymakers to integrate ranchers' perspectives and gender-inclusive approaches in policy development.

1.1.3. Key Performance Indicators

a) # of climate adaptation practices adopted by cattle ranching families, disaggregated by sex, age, and ethnicity;

b) # of policy recommendations integrated into regional or national Climate Adaptation Policies, including gender-responsive policy recommendation;

c) # of people trained on gender-responsive, climate resilient and sustainable farming education;

d) # of people in developing countries who benefitted from Canada's adaptation finance;

e) Enhanced adoption of gender-responsive climate-smart agriculture and food systems solutions for nature-positive climate change mitigation and adaptation in developing countries;

f) # of hectares of farmland, rangeland, and other managed agricultural landscapes under climate-smart agriculture management as a result of Canada's Climate Finance;

g) # of direct beneficiaries (m/f) that implemented a minimum set of climate-smart agriculture or food systems strategies, technologies or practices that support low carbon pathways and reduce climate vulnerability as a result of Canada's Climate Finance.

1.2. **Gender Equality**

1.2.1. **Gender-based Analysis**

In the targeted cattle ranching communities, gender dynamics are notable for their disparities. Women's
participation in formal agricultural roles is limited. The underrepresentation conceals the vital contributions of women in roles related to animal care and household tasks, which are essential for the overall success of these activities. As livestock activities have historically been associated with men, this has made them the primary beneficiaries of state programs further perpetuating the invisibility of women in these contexts. The lack of land ownership for women also hinders their access to public support and decision-making in agricultural matters. This project specifically engages rural women, youth, and Indigenous Peoples, providing them with access to technical training, access to technologies, and a voice in decision-making processes that they would otherwise not have.

Moreover, decision-making within households reflects gender imbalances.
The economic structure within small cattle ranching communities is heavily influenced by traditional gender roles. Small-scale bovine livestock production in the region heavily relies on family labor and operates within small landholding units. While all family members play crucial roles within this system, livestock activities have historically been associated with men, making them the primary beneficiaries of state programs and perpetuating the invisibility of women in these contexts. Additionally, this project specifically engages with rural women, introducing an intersectional dimension that amplifies existing inequalities—stemming from both their gender and rural identity.
Across the region, rural women allocate a greater amount of time to reproductive work and spend considerably more hours on unpaid work, compared to their urban counterparts, ranging from 3 to 10 additional hours.

Gender Equality Outcomes

GE-02 – Gender Equality is Fully Integrated. There is at least one gender equality outcomes at the intermediate level of the logic model that aims to achieve changes in behaviour, practice, access, or performance that will contribute to gender equality.

IICA will ensure gender-sensitive indicators and targets are developed for the Performance Management Framework (PMF) for all gender equality outcomes, by country, and in communities, and included in the Project Implementation Plan (PIP), as well as engage GE resources identified in the activities budget.

1.2.2. **Immediate Outcomes:**

- 1110 Enhanced capacity of women to actively engage in climate adaptation discussions and decision-making
- 1210 Enhanced community engagement in data collection, interpretation and analysis enriched by the use of satellite monitoring technology
- 1220 Increased proficiency among ranching families, including women and youth, in utilizing the web-based platform and derived non-digital materials for informed decision-making
- 1230 Improved knowledge of climate adaptation and sustainable practices among cattle rancher families and Community-Led Resilience Committees
- 1310 Increased awareness and influence of ranchers in regional/national policy discussions.
- Outputs also include gender and intercultural approaches in the contexts of the affected populations. IICA is committed to collecting sex-disaggregated data for each of these immediate outcomes.

1.2.3. **Delivering and Measuring Gender Equality**

The full PMF for this initiative will be developed as part of the project planning phase, including relevant GE indicators. IICA will further develop appropriate project indicators once the baseline and gender analysis have been completed for each target country.

The partial PMF contains the following:

Some relevant indicators include:

- Percentage increase in the autonomy and resilience of cattle ranching families, disaggregated by gender, age, and indigenous status
- Number of climate adaptation practices adopted by cattle ranching families, disaggregated by sex, age, and ethnicity
- Number of policy recommendations integrated into regional or national Climate Adaptation Policies, including gender-responsive policy recommendation

1.2.4. **Gender Equality financial and human resources**

The outputs and activities matrix aligns resources with gender equality efforts. This includes the conducting of workshops with cattle ranching families, including women, men, youth and marginalized groups under a citizen science approach to gather insights on climate vulnerabilities, including specific gender-related knowledge gaps and training needs and their ideas for adaptation.
The project will also allocate recourses to complete Gender-Sensitive Impact Assessment. The budget commits funding to gender expertise and material at the country and local-levels; including: 1) Specialist in gender (Guatemala), 2) Gender Equity and Youth Specialist (HQ

Costa Rica); 3) Gender Sensitivity Awareness and Outreach Materials; and 4) Technician's guides for gender-inclusive practices.
ICA will complete the gender equality analysis in the early stages of the implementation period and ensure that all indicators in Performance Management Framework (PMF) are disaggregated by intersectional identities as well (sex, age, ethnicity, and geographical region). IICA to further ensure intersectional approach in GBA+ follow up and consultations with local WROs and provide context-specific analysis into cultural gender customs, roles and responsibilities of Indigenous and rural women in livestock management and family farming of selected regions. The GE strategy will outline how partner will safeguard an intersectional and gender-sensitive approach to project implementation.

1.3. **Environment**

This project falls within category B of the Environmental Integration Process (EIP) as it presents some environmental risks mostly related to assess the climate exposure, sensitivity and adaptive capacity of cattle ranching families and identify relevant adaptation strategies, practices and technologies to be implemented within the project.

CC2- Adaptation

The selection of Mexico and Guatemala as the targeted countries for this project is grounded in their vulnerability to climate change and the significant role of livestock management in their economies. This vulnerability includes risks such as floods, prolonged droughts, heat stress, and unpredictable weather patterns in both countries. The livestock subsector is particularly vulnerable to hydrological stress processes under climate change scenarios, affecting small and medium ranchers using extensive grazing methods. In the targeted areas of the project, cattle ranching is already experiencing impacts from climate change, which are expected to intensify. These impacts include changes in herbage growth and quality, greater incidences of drought, greater intensity of rainfall, heat stress in animals (particularly in the tropics and subtropics), increased water demand by livestock, changes in the distribution and the abundance of disease vectors, and significant health risks associated with flooding, making it increasingly difficult for cattle rancher families to continue their livelihoods.
The project centers around reinforcing the innovation system for climate-resilient, low-emission livestock practices. Practices, such as rational grazing and agroforestry offer a pivotal opportunity for both climate change adaptation and mitigation. These and other environmentally friendly practices, guided by data-driven decision-making, can aid in climate change adaptation by bolstering ecosystem resilience to extreme weather events and fostering food security through diversified production. Simultaneously, they can contribute to climate change mitigation by reducing methane emissions from livestock and sequestering atmospheric carbon dioxide. This involves providing technical support, building capacity, facilitating access to technology and promoting data-driven sustainable practices within existing livestock production units. Leveraging the capabilities of satellite data and remote sensing technologies, this project seeks to empower both female and male farmers by enabling them to monitor climate, land use, pasture quality, and resource distribution, thereby facilitating a more precise and targeted approach to sustainable livestock management. Integrating informed decision-making via remote sensing data, along with gender-sensitive indicators, can advance the transition to sustainable livestock systems.

Potential environmental impacts

The initiative is expected to generate primarily positive environmental effects aimed at tackling critical issues attributed to cattle ranching activities such as deforestation, soil degradation resulting from overgrazing, greenhouse gas emissions, water resource contamination, and biodiversity loss.

These positive outcomes will be achieved through targeted capacity-building efforts designed to enhance land management, mitigate GHG emissions, strengthen climate change adaptation, improve animal welfare, optimize production, and restore ecosystem services. Good productive practices in livestock are an effective means of reducing emissions through reducing herd size on farms with excessive stocking rates, improving the quality of the diet (digestibility), improving reproductive indicators, reducing the slaughter age, and improved health and genetics to obtain more production with fewer animals. Likewise, improved pasture management and the introduction of trees into the landscape (for example through silvopastoral systems) will contribute to conserve and increase carbon sinks in woody vegetation and soils. In terms of adaptation, the adoption of more productive and low-emission livestock production models implies co-benefits for food security and in reducing the vulnerability of livestock units to water stress and increasing the resilience of livelihoods of people who depend on livestock as the basis of their income. This comprehensive approach relies on data-driven decision-making to address these environmental challenges effectively.

The project carries minimal environmental and social risks as it centers around reinforcing the innovation system for climate-resilient, low emission livestock practices. This involves providing technical support, building capacity, facilitating access to technology and promoting data-driven sustainable practices within existing livestock production units.

Corresponding environmental mitigation and enhancement measures:

- The organization will conduct a comprehensive adaptation needs assessment in collaboration with the communities.
- Tailored recommendations that meet the local adaptation needs of cattle ranchers in the region will be developed and will include scientifically proven and locally adapted approaches such as the conservation and enhancement of vegetation in production units, the implementation of silvopastoral systems with native species, rotational grazing systems with adjustments to stocking rates, rainwater harvesting systems, drainage canals, soil conservation practices, improvement of livestock nutrition, forage conservation techniques, enhancement of cattle reproductive efficiency, genetic selection and improvement, improvement of animal health status, and waste management.

To confirm and refine the preliminary analysis of the project's environmental impact, a robust monitoring strategy and comprehensive safeguards will be implemented throughout the project's duration. This approach includes:

- Establishing a detailed monitoring framework that outlines specific environmental indicators to be tracked.
- Developing and implementing a set of environmental safeguards to prevent, minimize, and mitigate any potential negative impacts on the environment.
- Utilizing an adaptive management approach that allows for adjustments in project strategies and activities based on monitoring results.
- Collaborating with environmental experts and organizations, such FAUBA, UNAM and CATIE, to validate monitoring methods and results.

- Producing periodic reports on the environmental impact of the project and making these reports publicly available.
- Employing the project’s developed climate adaptation indicators to provide specific insights into how well the project is addressing climate-related risks and vulnerabilities.

The project's contribution to environmental outcomes can be rated as nature positive, as it contributes to sustainable, climate-resilient development by empowering local communities, reducing vulnerability to climate change, promoting gender equality, and enhancing livelihoods through the adoption of sustainable technologies and practices.

ANNEX B – Estimated Budget for the Project

Line Items	Summary of Eligible Costs	Contribution by			
		The Department	Organization		Total
			Cash	In-Kind	
1.1	Remuneration - Organization's Employees				
	a) Organization's employees other than 1.1 b) or 1.2)	$271 568	$293 201	$0	$564 769
	b) Personnel on long-term assignment overseas	$0	$0	$0	$0
1.2	Remuneration - Local Employees	$951 409	$122 092	$0	$1 073 501
1.3	Fees - Subcontractors				
	Canadian and international Subcontractors	$38 280	$0	$0	$38 280
	Local Subcontractors	$961 280	$0	$0	$961 280
	Sub-Total - Fees - Subcontractors	$999 560	$0	$0	$999 560
Sub-total - Category: Remuneration/Fees		**$2 222 537**	**$415 293**	**$0**	**$2 637 830**
1.6	**Reimbursable Costs - Eligible for a Fixed Overhead Compensation Rate**				
1.6.1	Travel Costs	$402 010	$0	$0	$402 010
1.6.2	Benefits and allowable expenses for Personnel on long-term assignment	$0	$0	$0	$0
1.6.3	Costs for Students and Trainees	$45 298	$0	$0	$45 298
1.6.4	Other Training Costs	$1 129 857	$0	$0	$1 129 857
1.6.5	Goods, Assets and Supplies	$221 600	$0	$0	$221 600
1.6.6	Administration Costs directly related to the Project	$55 000	$0	$457 929	$512 929
1.6.7	Other costs directly related to the Project : Software development	$387 984	$0	$0	$387 984
Sub-Total - Category: Reimbursable Costs - Fixed Overhead Compensation		**$2 241 749**	**$0**	**$457 929**	**$2 699 678**
Sub-Total : Category : Reimbursable Costs		$2 241 749	$0	$457 929	$2 699 678
Sub-total : Eligible Costs		**$4 464 286**	**$415 293**	**$457 929**	**$5 337 508**
1.9	**Compensation for Indirect/Overhead Costs**				
	Fixed rate on 1.1 through 1.6	$535 714			$535 714
Sub-Total – Category : Compensation for Indirect/Overhead Costs		**$535 714**			**$535 714**
TOTAL CONTRIBUTION TO PROJECT		**$5 000 000**	**$415 293**	**$457 929**	**$5 873 222**
			$873 222		
TOTAL VALUE of PROJECT					**$5 873 222**