



**Letter of Agreement for Technical Cooperation
Between the IAMOVEMENT and IICA
for implementation of activities under the project
Strengthening Coastal and Marine Climate Resilience through Upland and Coastal
Ecosystem Based Adaptation and Community Engagement**

Annex I – Scope of Work

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1.0 Introduction

The small islands developing states of the Caribbean Region are projected to be among the most impacted by climate change. Virtually all these island states have already experienced the adverse impacts of increasing temperatures, ocean acidification, severity of droughts, more intense rainfall, frequency of hurricanes and sea level rise. Exposure to these climate hazards is high, and especially coastal areas where as much as 60-70% of the population lives and depends on coastal/marine ecosystems to support their livelihoods.

Coastal areas are affected by sediment laden and contaminated runoff caused by buildings and infrastructure development, agriculture with high agrochemical use, domestic and industrial effluents and chemicals generated through waste disposal and landfills. Coupled with coastal developments causing loss of vital ecosystem species like mangroves, which would typically serve as valuable buffers, this has affected the health and diversity of coral reefs and fish populations; which in turn affects economic opportunity of coast dwellers, such as fishermen and those directly or indirectly linked to the tourist industry.

Upland zones and populations are also vulnerable to climate change impacts. More concentrated, intense rainfall increases rates of erosion, soil loss and land slippage in upland zones, which can lead to costly property damage and loss. Combined with poor farming practices, upland crop production is compromised by increasing climate risks, and in turn compromises upstream watersheds. Loss of vegetation on slopes due to agricultural expansion has contributed to land degradation, topsoil loss, and increased levels of pollution and sediments to reach coasts. With increasing climate risks, farm productivity is decreasing.

2.0 Background

Ecosystem-based approaches (EbA) have been determined to be viable in tackling climate change adaptation. According to the Convention on Biological Diversity (CBD), the ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. It is based on the application of appropriate scientific methodologies focused on levels of biological organization which encompass the essential processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems.

Through this project, in upland areas, EbA activities will be implemented in order to protect respective downstream watersheds and marine environments, targeting agroecosystems on farms and surrounding slopes, coastal and upland communities generating various forms of water borne pollutants, new and old infrastructural sites and other land development and/or uses which have caused degradation, such as quarries and landfills. The respective coastal sites indicated will be included for project impact monitoring so the effects of upland actions on downstream systems can be adequately documented.

The project's EbA approach focuses on community engagement and implementation of nature-based solutions to reduce the upland drivers of degradation and conserve ecosystems and their services; raise awareness of climate risks; provide additional nature-based livelihood opportunities; and facilitate monitoring of ecosystem health to ensure sustainability.

3.0 Issue to Be Resolved

Marine environments in many of the targeted communities are increasingly threatened by development on upland watersheds and exacerbated by climate change. The non-climate stressors affecting marine environments will thus be the target of this EbA project, through the Vetiver System (VS) and other integrated land, soil and water management techniques, to enhance the resilience of coastal ecosystems, communities and economies to climate change.

The VS will be the core EbA intervention to be implemented as part of the Proposed Project and will be based on a successful participatory methodology developed through the VEEP model¹. The VS is a tried and tested plant-based solution which uses vetiver grass as a bioengineering tool to tackle many soil and water related challenges. Vetiver grass roots can extend up to 10-ft deep within 2 years, assisting with slope stabilization, erosion and sediment control, soil and water conservation, and even phytoremediation. The Vetiver Education & Empowerment Project (VEEP) model, originally developed in Trinidad and Tobago, will be used to introduce vetiver grass and the VS to selected rural communities in participating countries, so that it can become an additional tool in their existing approaches to land management, and livelihoods.

EbA activities, focussing heavily on the VEEP Model will be utilised to facilitate the restoration of marine-coastal ecosystem health and improvement of sustainable livelihood opportunities in targeted communities which are increasingly threatened by development on upland watersheds and exacerbated by climate change through community engagement and implementation of nature-based solutions.

4.0 Specific Objectives

- 4.1 assist in detailed selection of specified sites/geographic communities in the participating project countries for implementation of VS-EbA measures and provide technical expertise towards co-design for Vetiver System (VS) installations and development of maintenance plans to ensure success of the interventions;
- 4.2 make use of the Vetiver Education & Empowerment Project (VEEP) training model to introduce and build skills and social capacity of community members, farmers and other relevant stakeholders in vetiver grass and the Vetiver System (VS) so that it can become an additional tool in their existing approaches to land management and livelihoods;
- 4.3 help foster and facilitate the generation of livelihood opportunities, through the establishment of green businesses centred around the use of vetiver grass and other

¹ See details on the VEEP Model in Attachment 1

EbA measures where appropriate; including the production and sale of sustainable handicrafts, and the propagation, sale and design-implementation of vetiver solutions to tackle soil and water related challenges;

- 4.4 support the dissemination of information and awareness building of nature-based and climate smart approaches using innovative community engagement and educational approaches; among project communities, and elsewhere on the participating islands and region, through various knowledge sharing approaches including educational graphics, videos, social and traditional media, etc.

5.0 Expected Results and Products

In keeping with the objectives of the project, Expected Results are that:

- 5.1 Farmers, community members and other relevant stakeholders in the target communities have the knowledge, skills and access to planting material and tools required to establish and maintain the Vetiver System to improve land management and enhance livelihoods.
- 5.2 The Vetiver System (VS) and other EbA approaches are implemented over a large scale in select upland areas located within and around the project communities resulting in measurable reductions in land based challenges such as erosion, slippage, topsoil loss, agro-chemical and landfill pollution, etc, and there is subsequent improvement in the quality of downstream marine environments through reduced runoff contamination
- 5.3 Green businesses centred around the use of vetiver grass, including, but not limited to vetiver grass nurseries for plant sales and VS project deployment, and handicrafts, introduced to selected groups and/or individuals to facilitate the generation of livelihood opportunities.
- 5.4 Farmers, community members and other relevant stakeholders in the project countries have a greater awareness and appreciation of the environmental, economic and other benefits of vetiver grass through production and dissemination of a range of information products.

6.0 Verifiable indicators

The verifiable indicators, as will be measured through the overall project M&E system are:

- 6.1 Approximately 250-300 members from six (6) target communities on four (4) Caribbean islands will have undergone complete classroom and field trainings in the VEEP program model and the Vetiver System (VS) and other EbA approaches by project completion. Training in these approaches are aimed at mitigating land-based pollution from contaminating marine environments; along with other key stakeholders such as Ministry of Agriculture staff and extension officers, and relevant IICA or project partners

- 6.2 The geographic watershed areas of six (6) target communities among the four (4) project islands will have extensive implementation of Vetiver System (VS) solutions (30,000 – 60,000 plants per upland community watershed area) and other EbA measures installed and established to maturity by project completion
- 6.3 Measurable reduction in contamination of riverine and ocean environments downstream of the VS/EbA interventions, at the six (6) target project locations, from pollutants such as sediments, agricultural and/or industrial chemical runoff, domestic grey-water sewerage, and landfill leachate. The reduction targets will be established on completion of the baseline data.
- 6.4 At least two (2) new, registered and operational green-businesses or cooperatives established on each of the project islands by the end of the project, focused on: (i) the propagation and sale of vetiver plants, and offering of expertise for VS installation to clients elsewhere on the island; and (ii) the production and sale of vetiver handicrafts.
- 6.5 At least ten (10) print and audio-visual specialized products on nature-based and climate smart approaches produced using project activities and results and disseminated across the Region.

7.0 Core Activities

IAMovement, in keeping with the Objectives and Expected Results of the Letter of Agreement, will provide the technical leadership required for the activities to be undertaken, specifically, the specialized technical expertise and implementation experience in the 'Vetiver Education & Empowerment Project (VEEP)' model, as a tried-and-tested community knowledge-transfer mechanism for the Vetiver System (VS) as a bioengineering tool for the duration of the project. To this end, the Core Activities will be to:

- 7.1 **Conduct direct training** in each of the project countries, to:
 - 7.1.1 provide Vetiver System (VS) training in select communities, working alongside local NGO partners and IICA offices who will be providing coordination and logistical support, during project Year 1. Each training will be carried out over 8-day periods to approximately 30 community individuals, and which will include both classroom and field training, as well as key activities to support VS-EbA implementation such as site selections, vetiver plant propagation and preparation training, nursery establishment, combination with other EbA approaches being introduced by IICA and the project, and implementation of VS-EbA interventions, which will be continued and completed after IAMovement VS-technical specialist departs.
 - 7.1.2 implement vetiver grass handicraft training modules in selected communities in the project countries, working alongside local NGO partners and IICA offices who will be providing coordination and logistical support, during project Year 1. Each training will be carried out over 8-day periods to approximately 20 community individuals and will

entail hands-on activities focused on the various steps required to produce an array of handcrafts, made with vetiver grass leaves and roots.

- 7.1.3 procure and facilitate training for soil and water testing using smart-phone connective devices from FFEM (foundation for environmental monitoring - <http://ffem.io/>) supplier, for all community members interested, project stakeholders (IICA, local NGO partners, MoA staff, etc)
- 7.2 **Build capacity of local NGOs/CBOs** and/or assist in identifying interested individuals for the establishment and development of local green businesses (for VS field implementation and handicrafts) during Year 1; and assist with planning of how these established communities will support the project VS-EbA implementation activities and grow through the project as a result.
- 7.3 **Contribute to an information and communication strategy**, working closely with IICA and local NGO teams to:
 - 7.3.1 compile, curate and regularly update information and media for each country project for showcasing on agreed communication media (including The Vetiver Network West Indies (TVNWI) web platform (www.tvnwi.org))
 - 7.3.2 develop content and graphic design for educational communication pieces, to share and showcase the project to members of public, communities, and on social and traditional media for duration of project period;
 - 7.3.3 select and contract a professional video production team, and coordinate and carry out the capture of the project in all island countries, to produce a high-quality and calibre documentary film, which can serve as a representative piece to showcase project impacts and results to members of public, and technical, NGO, and government communities to further build support for the EbA approaches which the project includes; as well as likelihood for repetition and scaling; and
 - 7.3.4 produce two (2) or shorter educational infographic video(s) to reinforce trainings and support wider community education on Vetiver System (VS) and other included EbA approaches; for building ecological and climate resilient agriculture and land management approaches.
- 7.4 **Monitor progress**, through return-visits to each project country in:
 - 7.4.1 Year 2, to spend time with community individuals and projects, to assess development, provide recommendations, capture project progress, assist in selection of any final satellite VS-EbA project sites, and provide on-the-ground additional training on a needs basis to community individuals or other stakeholders on any aspects of the VEEP program, Vetiver System (VS), green business development and operation, etc.

- 7.4.2 Year 3, to provide final on-site feedback and recommendations, for existing EbA sites, and green business development and operation, as part of the Monitoring and Evaluation and Results Capture process.

8.0 Operating & Organisation Strategy for Execution

The operating strategy is premised on the fact that IAMovement's inputs are a part of the larger project, where objectives and outputs are possible only with inputs of all other key stakeholders working together. Importantly this includes IICA as project lead with principal oversight; local NGOs/CBOs, contracted by IICA's local offices and provided with technical support from IAMovement's VS and VEEP Specialists.

In Antigua & Barbuda and Dominica, there will be one (1) target community and geographic area in each country for the project; In St Lucia and Trinidad & Tobago each, there will be two (2) target communities and geographic areas involved in the project. IAMovement will:

- 8.1 work alongside IICA's project management staff, IICA Technical Coordinators in the four participating countries and additional IICA specialists assigned to provide part-time technical backstopping, to design, coordinate and implement the project in the four participating countries. In every instance, all efforts will be made to ensure that gender and youth participation is explicitly accommodated and facilitated.
- 8.2 provide additional part-time technical staff (VS and VEEP Specialists) to support implementation of key training modules, VS and EbA design planning and oversight support, and general technical support and guidance towards the overall management and implementation of the project.
 - 8.2.1 The VS and VEEP Specialists will play a key role in the project, bringing unique expertise and capacity to support successful implementation of the Vetiver Education & Empowerment Project (VEEP) model activities in each of the project countries.
 - 8.2.2 In addition to being largely responsible for delivering the outputs under this Letter of Agreement, the VS and VEEP Specialists will also serve a key role interfacing and building capacity of the local partner NGO/CBOs for the implementation of their VEEP programs; which will include guidance on budget management and activity planning and implementation.
- 8.3 assist the IICA's project management staff and Technical Coordinators to select lead NGOs or CBOs to serve as a permanent presence on the ground within the project communities, to coordinate and manage the day to day implementation of the VEEP model, and VS-EbA interventions; before, during and beyond occasions when IICA and IAMovement teams are present on site to carry out training modules, site visits, and project design planning.
 - 8.3.1 The VEEP model's core and most active implementation period in each community will run for roughly 12 months with VS/EbA implementation to continue and be completed, with maintenance support provided over an additional period of 12-24 months.

8.3.2 The local VEEP-implementing NGO/CBOs in each country will report directly to the National Technical Specialist in IICA's local offices, which will be carrying out direct contracting and disbursement of funds to these organizations in coordination with IICA's Project Coordinator and Project Financial Officer.

9.0 Budget

Item	Amount
Direct Costs for Technical Activities, Travel and Training expenses	
Component 1 - Building Technical Capacity	
Vetiver System & VEEP training (32 days total among 4 countries (12 classroom days/28 field days), IAM IPP USD400/day, 2 local facilitators (150/day/ea.), class size 20 (\$35/day) (training costs = 1400/day)	\$44,800.00
Vetiver handicraft training (32 days total among 4 countries, Handicraft training specialist USD300/day, 2 local facilitators (150/day/ea), class size 15 (\$35/day) (training costs = 1125/day)	\$36,000.00
Vetiver Specialist (1) or VEEP coordinator (1): Roundtrips from T&T for VS classroom/field and handicraft training periods, to each of Dominica, St Lucia & Antigua (8 round trips total; to teach island for (i) classroom and hands-on field training (2 weeks), (ii) handicrafts (1 week))	\$3,400.00
VS & VEEP training (VS specialist from Trinidad to Tobago) (1-person x 2 trips)	\$100.00
VS Handicraft Training (handicrafts coordinator from Trinidad) (2 persons x 1 trip)	\$100.00
St. Lucia - Vetiver specialist or VEEP coordinator for both VS and Handicraft training trips (1 person, 21 nights)	\$5,313.00
Dominica - Vetiver specialist or VEEP coordinator (1 person, 21 nights)	\$6,615.00
Antigua & Barbuda -Vetiver specialist or VEEP coordinator (1 person, 21 nights)	\$5,376.00
Tobago - Vetiver specialist or VEEP coordinator (1 person, 21 nights)	\$4,200.00
Tobago - Handicrafts trainer from Trinidad (1 person, 6 nights)	\$1,200.00
Suitcases and containers/bags for equipment	\$250.00
Airport transport	\$250.00
Technical services for training preparation, support and execution	\$1,000.00
	\$108,604.00
Component 2 - Project EbA Interventions Implementation and Socio-Economic Green Business development to support EbA approach sustainability	
Soil + Water testing smart-phone connective devices from (FFEM - supplier); 3 per country, for local partner NGO(s) + IICA/IAMovement office	\$4,000.00
Flights + taxes: Vetiver Specialist (1) or VEEP coordinator (1): Roundtrips from T&T for VS maintenance and business development periods, to each of Dominica, St Lucia, Antigua & Barbuda (3 round trips total during Yr 2; to teach country)	\$1,800.00
Roundtrip Vetiver specialist or VEEP coordinator - Tobago (1 trip)	\$100.00
St. Lucia- Vetiver specialist <u>or</u> VEEP coordinator (1 person, 5 nights)	\$ 3036.00
Dominica- Vetiver specialist <u>or</u> VEEP coordinator (1 person, 4 nights)	\$2,835.00
Antigua and Barbuda -Vetiver specialist <u>or</u> VEEP coordinator (1 person, 2nights)	\$1,536.00
Tobago - Vetiver specialist <u>or</u> VEEP coordinator (1 person, 4 nights)	\$1,600.00
Suitcases and containers/bags for equipment	\$800.00

Item	Amount
Direct Costs for Technical Activities, Travel and Training expenses	
Airport transport	\$500.00
Technical support for the development of Green Enterprises throughout the project	\$8,000
Technical support to NGOs/organisation implementing VS/VEEP in Tobago	\$1,674.00
Field labour & Support for maintenance, monitoring and reporting	\$5,500.00
	\$31,381.00
Component 3 - Knowledge Management and Communication Outreach	
Website developer - for redesigning/creating and maintaining web platforms and repository for project developments/success/findings (The Vetiver Network West Indies (TVNWI) website: www.tvnwi.org, and/or other)	\$1,800.00
Documentary filmmaker Tobago travel: (1 person + 1 LPP) (2 trips in Yr 1 and Yr 2)	\$200.00
International Multi-Island Trip - Documentary filmmaker Roundtrip travel to T&T, St Lucia, Dominica, Antigua & Barbuda (2 trips, in Yr1 + Yr 2)	\$4,000.00
St. Lucia - Documentary filmmaker (1 person, 8 nights)	\$2,024.00
Dominica - Documentary filmmaker specialist (1 person, 8 nights)	\$2,520.00
Antigua and Barbuda - Documentary filmmaker specialist (1 person, 10 nights)	\$1,536.00
Tobago - Documentary filmmaker (1 person, 8 nights)	\$1,600.00
Software costs for video production team	\$3,500.00
Social Media budget to support boosted posts from project social media page, and pages of local partner NGOs, for key communications throughout project	\$1,800.00
Graphics Design for educational brochures for Vetiver System (VS) and other EbA approaches, co-developed and co-designed with communities, to support ongoing sharing of knowledge and 'how to' on an ongoing future basis in community and country (reprintable design; one (1) per country tailored to country's greatest/focus/interest/needs and with local photos, etc)	\$4,000.00
Graphics designer for educational infographic images on Vetiver System (VS) and other included EbA approaches	\$4,500.00
Printing of educational brochures printing for distribution within target communities and country	\$2,500.00
Producers for educational infographic video(s) to reinforce trainings and support wider community education on Vetiver System (VS) and other included EbA approaches; for building ecological and climate resilient agriculture and land management approaches	\$8,000.00
Documentary film and videos production (team, equipment, shooting, interviews, editing, musical score) to capture and produce high quality multi-island project film on Vetiver System (VS) in the Caribbean region, and the EbA project (3 and 5 min trailer versions; and feature length 30-40 mins long)	\$14,000.00
	\$51,980.00
Component 4 - Monitoring & Evaluation	
Vetiver System (VS) technical specialist and VEEP advisor (part-time) - 33 months at \$1,533/month	\$55,000.00
Technical support for monitoring, evaluating and documenting the impact of Field Vetiver systems and handicraft interventions	\$8,232.50
Technical support services for Stakeholder Outreach and Public Communication/Awareness Events	\$996.12

Item	Amount
Direct Costs for Technical Activities, Travel and Training expenses	
	\$64,228.62
	\$256,194.00

10.0 Attachment I: Details on the VEEP Model

The VEEP model was first developed in Trinidad & Tobago in 2016, supported by a GEF Small Grants Project, and implemented by the Paramin Development Committee (PDC) and Vetiver TT Ecological Engineering Solutions Ltd, in Paramin; one of Trinidad’s largest hillside farming communities. The VEEP model is a multi-activity approach which serves to introduce vetiver grass as a simple and cost-effective green engineering tool to rural communities, to aid with major soil and water related challenges, and which can also be used to improve the quality of lands for cases of agriculture, and generate livelihood opportunities.

Moreover, the VEEP model was developed to consider the reality that many efforts at training and new interventions can be unsuccessful due to a lack of interest, “buy-in” or incentive for communities to continue using the proposed solutions after the project period; and thus, the activities within a VEEP approach were carefully considered and selected (and later refined through future iterations and repetitions of the project), to maximize adoption and uptake of vetiver grass and Vetiver System (VS) solutions by communities, in a way that would last. After Paramin in 2016-2017, the VEEP model was improved and replicated for the Rehabilitation of Quarries in Trinidad in 2018-2019, and a very condensed version (mini-VEEP) was implemented in Canaries, St Lucia in 2018.

The main activities involved in VEEP which have been found to make it successful include:

- **Identification of key project implementing partner(s)/individual(s)** at the NGO/community level (often based in the communities) to serve as project leads for implementation, who show keen interest and enthusiasm for the project and willingness to be ‘champions’ for it
- **Selection and contracting of a similarly committed local project coordinator** based in the community to help lead and oversee implementation of VEEP activities (may be same person/s) as identified project ‘champions.
- **Community outreach and education sessions or ‘walk-throughs’** as part of awareness and interest-building process, and informing about project intentions, goals, timelines, etc.
- **Selection of project participants** – community members, farmers, stakeholders etc. who demonstrate interest and commitment to the project, and stand to benefit in some way – through implementation of the Vetiver System (VS) on their lands and projects, or livelihood/employment opportunity interest
- **Project timeline planning** for trainings, site/field implementations, maintenance during establishment, etc
- **Carrying out of technical project training modules** (classroom and field) on vetiver grass and the Vetiver System (VS)
- **Project site selections and carrying out of for Vetiver System (VS-EbA) interventions**
- **Establishment of vetiver nurseries**, to provide ongoing supply of vetiver plant stock to the community and other interested stakeholders (who can purchase) in the future
- **Carrying out vetiver handicraft making and developing training** within the community, which should include diverse group, importantly women and children, as this has been found to help improve overall community buy-in, interest and general organic discussion/knowledge sharing about the project – including about the land-VS-EbA aspects, beyond handicrafts

- **Co-creation of educational material with the local project leads/NGO** (e.g. stiff tri-fold brochure) personalized to the project and community to include photos from trainings and field activities etc; which can serve for ongoing educational reference, and sharing with other members beyond the community after the project
- **Production of short educational videos and/or high-quality documentary film**, capturing project participants, and their perspectives and experiences; to boost project pride and ownership, and where film can be submitted to shown in local film festivals, TV stations, online, etc.
- **Exploration and effort to develop livelihood opportunities**, through propagation and sale of vetiver grass plants, offers for project installation/implementation using the VS to tackle challenges such as land movement, slippage and erosion; and the production and sale of vetiver grass handicrafts.