



METRICS FOR INTEGRATED SYSTEMS AND CONTEXTS

Côte d'Ivoire Climate Vulnerability Reduction Credit
Feasibility and Pilot Design



In support of UNDP Project CIV 10 00103170: "Renforcement de l'intégration de l'adaptation au changement climatique dans la planification du développement en Côte d'Ivoire"

Final Report - Summary
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The Higher Ground Foundation
- stand up to climate change

**Metrics for Integrated Systems and Contexts:
Côte d'Ivoire Climate Vulnerability Reduction Credit Feasibility and Pilot Design**

Abbreviated Version: Final
10 August 2022

Signed by:



Karl Schultz, Executive Chairman, The Higher Ground Foundation

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About the Higher Ground Foundation (HGF)

The Higher Ground Foundation facilitates adaptation to climate change through the development and promotion of an adaptation credit framework based on Vulnerability Reduction Credits (VRCs), which are generated through activities and interventions that are independently certified to reduce vulnerability in a quantifiable manner.

Since its founding in 2011, the Higher Ground Foundation has been run by a team of professionals headquartered in London, UK with participants based in Europe, North America, Africa, and Asia.

Currently, Higher Ground Foundation operates as an initiative of Climate Adaptation Works Ltd. (CAW), and all contracts and agreements with counter parties are signed with CAW.

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Introduction

Assessing and building climate adaptive capacities at the national level is both a great challenge and an opportunity to better ensure sustainable development in spite of climate change.

To this end, this study was undertaken as a scoping effort to aid Côte d'Ivoire in formulating a program of readiness and preparatory support through which it is addressing a number of obstacles to the advancement of its adaptation planning process.

For its part, Côte d'Ivoire (RCI) is formulating its NAP for action at the national and sectoral levels, including legislative initiatives such as a Climate Law and investigating creation of a National Climate Agency and National Climate Fund. The Green Climate Fund (GCF) is supporting, through United Nations Development Program (UNDP), a program of readiness and preparatory support through which it is addressing a number of obstacles to the advancement of its adaptation planning process, including, among other barriers:

- *Institutional and policy barriers*: lack of national to sub-national coordination,
- *Information and knowledge barriers*: lack of sufficient information to prioritize adaptation interventions, no Monitoring, Reporting and Verification (MRV) system for adaptation, and
- *Financial obstacles*: no financial mobilization strategy, private sector funding potential unexplored.

This study is a component of this readiness program, aiming to address the above barriers through introduction of the Higher Ground Foundation's (HGF's) climate Vulnerability Reduction Credit (VRC™) to support project development, funding, monitoring and evaluation, to scale up project mobilizations and finance, and to support the evolving national MRV system for adaptation.

Linked throughout all the above barriers, a principal challenge to the funding and mobilization of adaptation is acquiring and applying the knowledge, skills, and mechanisms to directly support and empower communities to be able to take a lead themselves in addressing climate hazards and associated impacts. This requires working and learning with stakeholders to advance informed, forward looking, and incentivized adaptation practices whose outcomes can be measured to show the impact of climate change adaptive management.

However, there is a lack of an articulated, cross-system, national adaptation framework for: outcome evaluation; intervention prioritization; incentives; planning; and learning from vulnerability reduction interventions. This leads to a lack of coherent direction in prioritizing and guiding adaptation practices, and processes.

As a result of this disconnect between adaptation aspiration and documented results, funding is available for projects, but proposed projects often have difficulties in securing funding. This somewhat counterintuitive outcome is apparent in the track record of funding approval by the GCF, which is heavily weighted to easier-to-measure carbon reduction projects. The GCF and other funders, along with vulnerable countries, are thus in need of viable instruments and frameworks to support their funding decisions and to scale up resourcing to meet adaptation needs.

The objective of this study was to carry out an initial analysis and feasibility assessment that will help to guide the RCI's Ministry of Environment and Sustainable Development and partners in the successful development of VRC projects and a registry that will enable RCI to more effectively identify, support, implement, communicate and secure funding of adaptations to climate change in accordance with its NAP under the 2015 Paris Agreement and the framework that has been developed with the GCF.

Specifically, the study explores current prospects for:

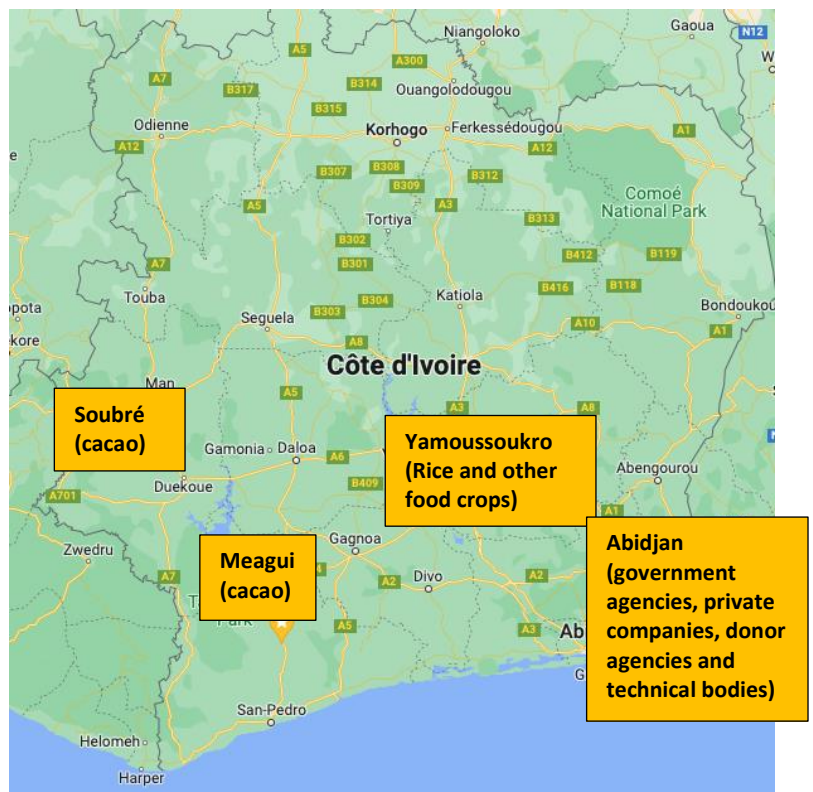
- (1) piloting a VRC project in-country,
- (2) deploying the VRC for project funding, and
- (3) using VRCs to support the national adaptation planning and management system.

This is based on an evaluation of the existing adaptation experiences and capacities, including:

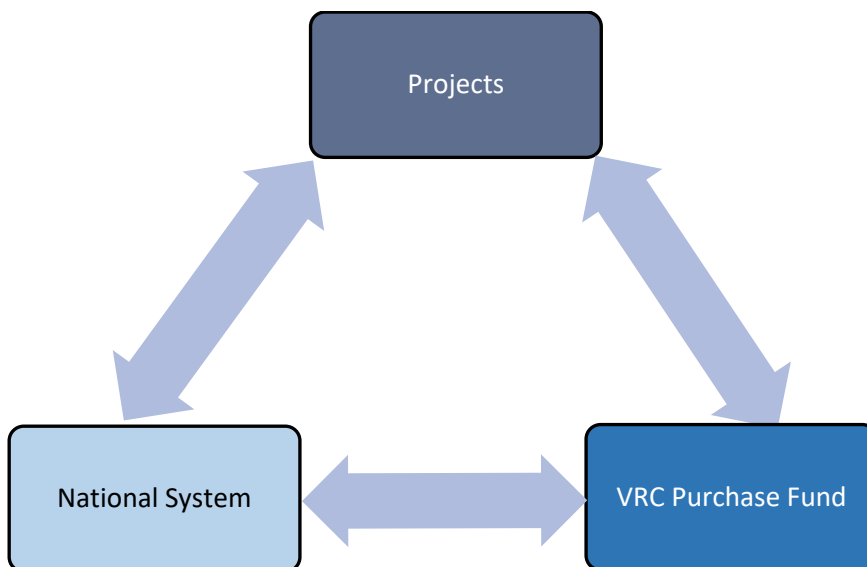
- (1) how projects have been identified, implemented, and evaluated and the data and analytical tools used;
- (2) the existing and potential domestic and international climate financial resources and potential for using VRCs as a financing instrument, and;
- (3) how the current and developing MRV and overall adaptation planning environment would be able to integrate VRCs.

The approach used in this study is to take stock of the existing and future “baseline” capacities, compare these to the [VRC Standard Framework](#) requirements (scientific, environmental, social, and governance), highlight the “gaps” between these, and consider how capacities could be developed to bridge these gaps.

The findings of the study serve as the foundation for the subsequent design and proposal to pilot VRCs in Côte d’Ivoire (Phase 2), through a pilot adaptation project using VRCs, detailed design of a system for integration of VRCs into climate funding facilities, including testing VRCs for funding the pilot project, and detailed design and testing of VRC deployment in the national MRV system.



Sites in Côte d’Ivoire visited by project team.



Using VRCs as a mediating mechanism among projects, finance, and national management.



VRCs background

Unlike greenhouse gas mitigation, measuring and evaluating adaptation is not a straightforward task of “counting tonnes.” Indeed, no one-size-fits-all definition of “adaptation” is likely to be agreed upon, which has led to the coining of a broad range of metrics designed to be applicable to unique adaptation contexts and reporting requirements. Only recently have the first efforts been made to fashion a generally agreed-upon adaptation metric framework.

The contribution of the VRC Framework to addressing many of these adaptation challenges is to present a metric of adaptation designed to quantify vulnerability reduction obtained from adaptation activities through a singular, or “universal,” metric constructed based on a set of robust principles, as described in Table V. Although VRCs can be extracted from a wide variety of activities embodying different approaches to “valuation,” each VRC generated measures the same monetary output—50 Euros worth of income-normalized avoided impact cost—making the VRC an example of a “universal,” single-indicator metric.

Vulnerability Reduction Credits (VRCs™)

- A [VRC™](#) is the monetized cost of the estimated impact of climate change, adjusted for the income level of the community, that will be avoided as a result of the project.
- The [Higher Ground Foundation](#) created the VRC instrument and developed an expert-reviewed Standard Framework to ensure VRCs met key scientific, environmental, social, and economic criteria.
- In brief, it is a credit for work done to avoid damages or losses owing to climate change - a vulnerability reduction credit.
- A VRC is €50 worth of income adjusted avoided impact costs.
- The VRC may serve as a finance instrument and as a metric that, alone or in conjunction with other metrics, can translate information on results at the project level to the national level to enhance reporting and management under Côte D'Ivoire's Paris Agreement transparency framework.



Adaptation challenges for Côte d'Ivoire

Challenges of climate change

Côte d'Ivoire's national development plan for 2021-2025 aims to achieve economic and social transformation to make the country an upper-middle income country. The plan includes balanced regional development, preservation of the environment and the fight against climate change. This pillar is critical as key issues identified in the RCI's Nationally Determined Contribution to the UNFCCC (NDC) include addressing self-sufficiency and food security, improved productivity and competitiveness, reduced population vulnerability, and increased resiliency to climate change. Poverty, health, food security, infrastructure, along with economic productivity are all impacted by climate change.

Agriculture as a priority case



Rice farm, Yamoussoukro.

In 2021, agriculture accounted for 21.4% of the overall GDP and 40% of the total workforce employment. Of the key impacts enumerated in the NAP process, four (increased temperature, increased rainfall variability, increased intensity and variability in heavy rainfall events, and increased duration of long-term droughts) have direct impact on all agricultural activities and outputs, whereas the fifth (sea-level rise) has potential impacts on coastal agriculture as well

as indirect effects on crops in terms of salinization. Given the overall exposure (in terms of percentage of GDP devoted to crop production) and sensitivity of this sector, the availability of prior research, results, and methodologies revealed in our desk, field, and literature review, and the general advice of key stakeholders we engaged with, we have focused primarily on agriculture vulnerability reduction in our initial adaptation project assessment.

VRC feasibility – project level

The key purpose of the proposed VRC-based pilot project is to serve as a “proof-of-concept” that reliable and replicable technologies and practices can be applied to measurably reduce vulnerability at the project implementation scale and that the results of this application can be quantified through simple and appropriate output-based metrics.

Specifically, the following key technical criteria for project and methodology selection under the VRC Standard Framework must be met:

- Attributability of impacts to climate change (correlation with climate signal and availability of relevant climate data and projections to obtain impacts (a sufficiently intense climate signal));
- Representativeness of pilot impacts and data availability (replicability);
- Political and social viability, and;
- Economic and logistical viability.

Although the process and therefore tools needed for generically implementing an “adaptation project” are well understood, particularly in this context, the particulars of the VRC process indicate the need to build new capacities and methodologies. In addition, the availability and usability of data is a significant potential barrier, and the contingent evolving state of the climate system makes understanding how well we understand the degree to which adaptations can faithfully track the future climate state essentially unknowable (but, we hope to demonstrate, manageable with the right tools).



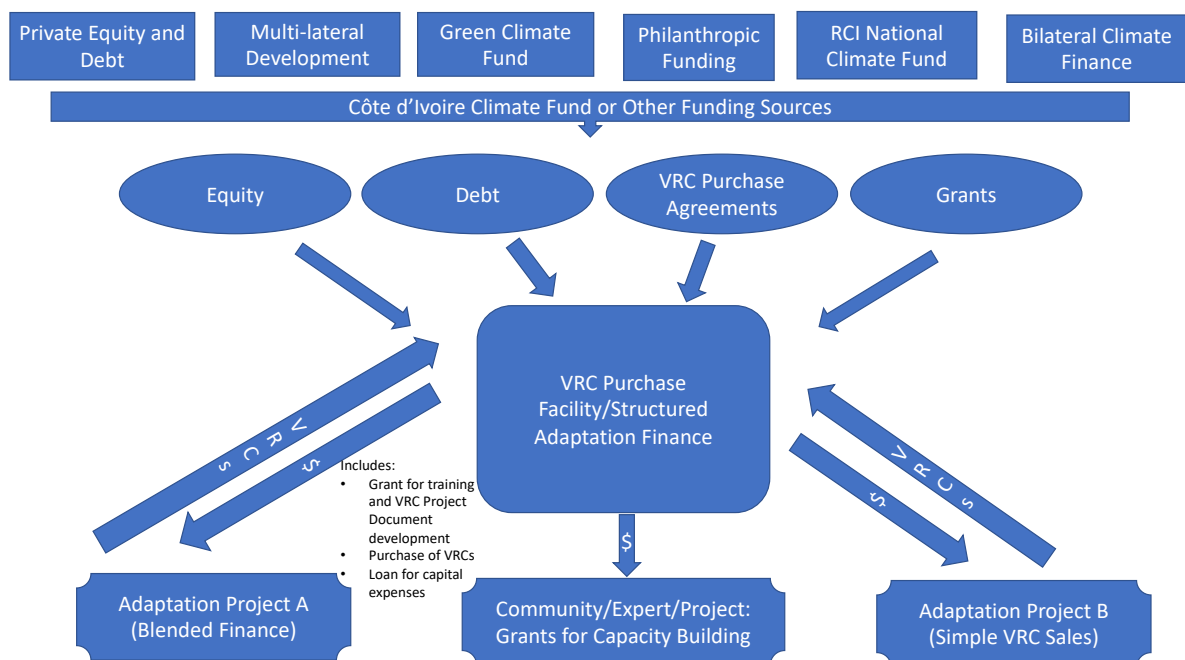
Cacao drying at coop warehouse, Meagui.

Feasibility of VRCs as a national financing instrument

A key potential contribution of the VRC instrument is to support the incentivization of adaptation and encourage good adaptation practices. VRCs may be priced, and adaptation activities funded through payment for VRCs earned. This study starts to consider if and, if so, how VRCs could be deployed alongside the existing and emerging national climate adaptation finance environment, in order to gauge the potential approaches, capacities and challenges for integrating VRCs for national to project-level funding in Côte d'Ivoire. This subsequent 'gauging' is undertaken by linking today's, and potential future funding capacities and institutional structures to the processes, governance conditions and assurances, and management systems that could integrate VRCs for finance.

VRCPF structure and participants

The starting point for assessing the feasibility of VRCs for supporting finance of adaptation projects, is to formulate a basic structure that can be tested. As Figure 5 describes, a variety of different donors or investors could contribute to a 'VRC Purchase Facility'. The most fundamental contribution would be promises of money for VRC purchase agreements. The adaptation project owners would be paid this money as they were periodically created and sold to the Facility. The Facility could keep these or could transfer these to a funding entity. As discussed above, the proposed national climate fund could be the centralized aggregator and counter-party for all these funders and for all official national adaptation projects.



Potential Functional Positioning of VRC Purchasing Facility

Although the VRCPF can be modeled to a certain extent following existing structures, as in fact the VRC mechanism is, to a certain extent, designed to extend the functionality of “carbon” credits for mitigation to the domain of adaptation, it will represent a prototype and methodological clarification and capacity building will be required to build it and then integrate it into a potential national finance structure. As VRCs will eventually be operating within what will be a market, a significant effort will be needed to obtain data related to what are currently latent demand and supply volumes.

Feasibility of VRCs for national planning

The third component of the VRC pilot project is to design and “stress-test” a proposed integration of the VRC metric for project-level adaptations into a proposed national climate adaptation agency as a planning and management system. This aspect of the pilot project considers the national climate adaptation strategy, plans, program and institutional arrangements at national and sub-national levels, and the needs for climate impact and adaptation metrics for tracking and reporting on needs and progress of adaptation programs in Côte d’Ivoire. It looks at how VRCs can support these functions, their value added, and the gaps in capacity that need to be overcome.



Project team meeting with COPRO RIZ rice cooperative representatives and farmer.

The National Management System will need to be defined to organizationally conform to what is still a proposed system---the National Adaptation Agency---and corresponding capacity needs to be built. This component will also be heavily influenced by the final form attained by relevant laws and international contributions such as the NAP and NDC as well as the degree to which various standards such as Sendai and SDGs are adhered to.

Conclusions, recommendations, and next steps

This study outlined the issues and opportunities for the effective deployment of VRCs in Côte d'Ivoire for projects, funding, and national management and communications. We have uncovered more questions than answers, as our goal was to highlight the challenges so that a pilot project, and direct work on formation of a VRC Purchase Facility with funders and projects and a national management system.

Recommendations and roadmap



*Opening of Workshop on VRCs,
Jean Douglas Anaman, PNCC,
Abidjan, 10 March 2022.*

While there are many unknowns in our understanding of the implementation feasibility, we have found from our engagements with experts, officials, funders, and farmers that there is both

interest in and capacity to pilot VRCs for Côte d'Ivoire. It is only through pilot work, that many of the unknowns will become knowns at the project, funding, and national management levels.

Therefore, we recommend that HGF works together with the national government, funders, and experts to formulate a practical, costed project, in a "Phase 2." This project will demand considerable funding and expertise, in which over a three-year period the Higher Ground Foundation and a team of experts in agricultural climate adaptation, community engagement, finance, national climate monitoring, reporting, and verification, and administrative systems shall work in a coordinated manner to establish how VRCs may be deployed to realize a more climate resilient, less vulnerable Côte d'Ivoire through better application of metrics, governance, and financial provision for climate adaptation projects.

Next Steps

Prior to commencement of this Phase 2, the period from July – December of 2022 will be an opportunity to share this study with relevant potential stakeholders and partners, secure feedback and improve the Phase 2 project concept. This entails further validation of the data and analytical environment, recruitment of key experts to further refine the project design, and engagement with funders and Ivorian government officials. It also includes discussions with the UNDP and Green Climate Fund to get valuable feedback on how the project will

serve to meet funder objectives, especially as they relate to improved attribution of adaptation results, project sourcing, and scaling of adaptation finance, along with how the pilot project may serve as a replicable model for other countries with their own unique contexts.

The findings of this study, and the formation of prospectuses, will be presented at the upcoming UNFCCC Conference of Parties 27 in Sharm el Sheik, Egypt this November. It will also be an opportunity for MINNED and the Higher Ground Foundation to sign a Memorandum of Understanding that strengthens the mutual commitment to making “VRCs for Côte d’Ivoire” a positive reality.