1. Title

Engagement of Technical Agency for Development of Knowledge Portal for Climate Change Centre at Bankers Institute of Rural Development.

2. Background information on the project

The Paris Agreement on Climate Change, while emphasizing the need for global climate action, also highlighted the need for mobilizing means of implementation through the submission of Nationally Determined Contributions(NDCs). As per India's National Determined Contribution (NDCs) submitted to UNFCCC, India would need around USD 206 billion between 2015 and 2030 for adaptation actions alone. Further, investments are also required for strengthening Institutional capacity towards climate change issues. Such finance is likely to come from different sources – public and private, national and international. Also, finance may flow through several instruments such as grants, loans, capital markets as well as equity.

Given the complexity of finance landscape as well as the urgency for action, it is nowadays recognized that, adaptation to and mitigation of climate change requires investments not only in physical infrastructure but also in strengthening capacities of individuals and institutions. The need for strengthening such capacities for dealing with climate finance has the objectives of mobilizing additional finance from existing sources, enhancing leverage potential of climate finance as well as accessing finance from national and international sources. To achieve each of these objectives, different capacities are required and have to be distributed amongst diverse actors.

In this direction, NABARD and GIZ have cooperated successfully since 2008 in demonstrating innovative solutions to strengthen resilience of communities dependent on natural resources and agriculture for their livelihoods. The collaboration has furthermore given instrumental tools for strengthening capacities of various actors and institutions involved in delivering innovative solutions to communities.

The long-standing collaboration of NABARD and GIZ on climate change has, since 2014-15, taken a focused approach on capacity development on climate finance. This includes supporting NABARD in its accreditation as the National Implementing Entity (NIE) for India under Green Climate Fund (GCF). This was followed by several strands of work focusing on climate finance project development support, conducting write-shops on accessing climate finance and developing a Management Information System (MIS) for climate finance in India. In 2016 NABARD and GIZ recognized the need for scaling up capacity development initiatives on Climate Finance in India. The collaboration with the Bankers' Institute for Rural Development (BIRD) was identified as a key area for future cooperation. Additionally, it was also highlighted that the lessons, approaches and methods developed under bilateral cooperation needs to be offered to other neighbouring countries and least developed

countries in Africa that do not have institutions of the capacities of NABARD or BIRD (partner institutions) and have significant capacity gaps on climate finance.

3. Project Objective and Description

The overall objective of the project is to support the development of a Centre of Excellence for capacity development on climate finance at BIRD, that enables relevant target groups to mobilise and access national and international climate financing sources.

The Centre will primarily focus towards following planned measures;

Measure I: Development of standardized, demand based training modules keeping in mind regional audience as well.

Measure II: Development of state of the art didactics and elements of effective learning landscape.

Measure III: Establishment of a system for knowledge management on climate finance in the form of an online knowledge portal.

Measure IV: Development of network with knowledge partners and training institutions both in India and abroad.

The measure III proposes to establish a web based knowledge portal, which is conceptualized as a common portal for sharing information and to offer a broad array of resources and services, such as knowledge collaboration, networking, maps, climate change action, contact information system and several other valuable information related to Climate Change.

The portal is also conceptualized as a one-stop service portal for information exchange and dialogue, intended to fill the existing data and knowledge gaps. It will also support in providing consolidated sources of climate finance-related information and services to all stakeholders for mitigation, adaptation and technology transfer. It can provide access to case studies and success stories and can include a feedback and review system for documentation related to climate finance.

The purpose of designing a knowledge portal with focus on Climate Finance is to create an easy to use unified point of access to knowledge and services related to climate financing. This in turn should help the users to mobilize and access sources of climate financing. The key intended users of the portal are officlas of line departments from state governements, banks (public as well as private), Non-Bank Financial Institutions, Farmer Producers Organizations (FPOs), and NGOs.

4. Objectives and Scope of Assignment

Key objectives:

- To develop and design a user-friendly Knowledge Portal for Climate Change Centre (CCC), Bankers Institute for Rural Development (BIRD), Lucknow;
- To test the Knowledge Portal and transfer the portal on the Server recommended by BIRD;
- To develop competency of relevant BIRD officials in order to enable them use and maintain the Portal after the project duration.

4.1 Overall design and structure

The selected agency in close coordination with BIRD and GIZ will develop an innovative new design and structure for the Knowledge Portal. Apply it to all pages, sections and sub-sections across the portal, user friendly, attractive with innovative navigation, display of all static contents, pictures across the portal including links to Contacts /feedback/ Disclaimer/Sitemap/Subscribe to newsletter etc.

4.2 Home page (Introductory page of the Portal)

- Attractive and responsive layout shall be designed using BIRD and GIZ approved content and logos.
- BIRD and GIZ approved menu bar.
- Some suggested components of the Portal are mentioned in Annexure A.
- Google maps feature for NAFCC/GCF funded projects included whereever required (location details with google map link).
- Section on Updates and Events: Contents in this section will be generated through standardised templates by administrator. Images can be added along with the update. Automatic deletion function shall be associated with 'date of expiry' (for Advisory on Project Proposal, Funding, Events, Updates etc).
- Social media integration (Facebook, Twitter, LinkedIn, WhatsApp, Telegram, etc.). Posting to and from applications should be provided.
- Portal should interconnect various knowledge repositories and resources on Climate Change/Finance to create a corpus of knowledge that is easily available, accessible, and retrievable and can facilitate exchange and sharing of information among various stakeholders i.e. line departments, Government and Private Banks, Non-Bank Financial Institutions, farmers, FPOs, NGOs, Community Based Organizations and Self-Help Groups.

4.3 Expected Functions of Portal

- An inbuilt system for query-based search and retrieval of relevant information, maps, charts, publications, tools, methodologies etc. by the users.
- Access options of information from relevant, and reliable/authentic web links;
- Categorization/Classification of information based on some standard filters like geography, source of funding, project theme etc.;
- Upload function for CCC BIRD to upload documents, photographs, videos, audios etc.;
- Maintain and update function for data base of all the events (workshops, trainings, seminars etc.) organized by CCC BIRD including information on participants, resources persons, presentations, any media coverage about the events etc.;
- Share function for relevant information like lessons learnt & best practices and make it available to climate change practitioners and communities;
- An archive for Climate Change/Climate Finance related information and knowledge and wisdom for future reference, retrieval and re-use of data for Climate finance planning and research purposes;
- Course section/ page with categorized listing of relevant courses that are available (with links to the respective sites). This page can be updated as and when more courses are offered by various institutions in India and abroad;
- Bulletin Boards, Online Discussion Forum and Blogs: The portal should provide bulletin board for Climate Finance and Climate Action related news updates, forum for discussions on various aspects and blogs on current and topical issues; and
- Virtual space for exchange, learning and advocacy.

5. Work Packages and deliverables

Work Package 1: Knowledge Portal design module in consultation with BIRD and GIZ.

This Work Package is scheduled from 25th November, 2018 to 25th December, 2018. During this phase, the selected technical agency will perform the following tasks:

- Understand existing BIRD website and how a new knowledge portal will be created and linked to it.
- Conduct background scoping, research work screening/assessment of available knowledge portals (KP) on CC/CF. This should be done for at least 5-6 portals for projects of similar nature (Strength Weakness Opportunities Threats (SWOT) analysis) and present their salient features and innovations as part of Concept for Design and Structure of the Knowledge Portal.
- Support in terms of understanding the job at hand will be provided from GIZ and BIRD

- Use UX/UI designer to show case the flow and design best suited for user experience.
- Conduct discussions with BIRD and GIZ to understand the roles and expectations of different stakeholders in the Portal as well as their role in data acquisition, processing, reporting or use/decision making, so that the content is accordingly developed.
- Give a presentation of the understanding of the entire process and steps of developing the Portal to BIRD and GIZ.
- Prepare and hand over the Implementation Plan as well as Concept for Design and Structure of the Knowledge Portal. Sitemap should be finalised and signed by both parties.

Note- We have also incorporated/provided (within this ToR) the detailed characteristics of the Knowledge Portal in form of Expected functions and Tentative contents of the Portal. The list of tentative content may be seen as Annexure A.

Work Package 2: Knowledge Portal Development, Testing and Reporting

This work package is scheduled from 26th December, 2018 till 10th April, 2019. In this work package, the agency will perform the following tasks:

- Design and structure the portal as per in the phase I.
- Developement/finalization of Concept for Design and Structure of the Knowledge Portal. BIRD and GIZ shall approve the overall structure of the Portal (AGILE methodology).
- Develop clear and comprehensive content and technical components for the portal.
- Test the requirements in close coordination with GIZ and BIRD.
- Security Certification from concerned agencies e.g. Security Auditor and BIRD/NABARD/Appropriate Cyber Cell will be done.
- Portal has to be audited by third party which should be Cert-In (National nodal agency for responding to computer security incidents as and when they occur) approved agencies and give the certificate, which has to be verified by BIRD's/NABARD's/appropriate agency and Cyber Cell in case vendor is not BIRD/ NABARD empanelled company. During the audit, the selected agency has to work with the auditor and solve the queries raised by the auditor.
- Appropriate measures should be taken to ensure security and minimise vulnerability to hacking/viruses/Trojans, etc.
- The portal should be fully tested at every level.
- The portal will be finalised with approval from BIRD/NABARD.
- Provide Data Security Audit Certification.
- All the necessary reports (Technical Architecture (Hardware/Software); User Acceptance Test Report (UATR); Final Report) will be designed, created and implemented for the respective portal and its components.

Work Package 3: Portal deployment, maintenance and training.

This Work Package is scheduled from 11th April, 2019 till 30th June, 2019. During this phase, the agency will perform the following tasks:

- Implementing / Transferring the portal to BIRD/NABARD's/Appropriate Server.
- Coordination of the issues related to migrating the website on BIRD/NABARD's/Appropriate server.
- Web Security (SSL Certification)
- Provide all the required information to BIRD / help to implement the SSL certification for the website.

Once the Knowledge Portal is integrated into the BIRDs/NABARD website, the following will be delivered:

- Provide source codes for the portal (CD/DVD), all modules within the system and template licences. Limited customisation by administrator without editing code must be provided e.g. through an admin panel.
- Training material: Develop clear and comprehensive Operational and Technical Reports/Manuals for training and maintenance of the portal and provide training to the test users and administrators.
- Operation and Maintenance- Provide technical support to maintain the portal during the contract period. The selected agency shall be available till 30th December,2019 to provide services if there are technical faults in running the online Portal.
- Carry out error/bug fixes and small enhancements to keep the portal fully functional at all times during the contract period
- Support users and administrators in any technical web-portal related issues .

Backup

- Design the backup plan and implement the same.
- Provide a complete backup of the website in CD/DVD after completion of the testing and go-live.

6. Deliverables

WP	Task	Deliverable	Timeline (due to)	Number of days (up to)
1.	**Knowledge Portal design module in consultation with BIRD and GIZ.**		**sum**	**20**
		SWOT analysis, Concept for Design and Structure of the Knowledge Portal	Till 15th December 2018	15
		Implementation Plan	Till 20th December 2018	5

2.	**Knowledge Portal Development, Testing and Reporting**		**sum**	**130**
		Introductory page of the Portal (homepage) including content	Till 15th January 2019	20
		Responsive layout / BIRD based menu-bar (www.birdlucknow.in)	Till 30th January 2019	10
		Theme based menu/modules	28th February 2019	30
		Data Security Audit Certification	30th March 2019	25
		Security Audit Certificate of the Portal	30th March 2019	**20**
		Reports	10th April, 2019	25
3	**Portal deployment, maintenance and training**		**sum**	**110**
		Web Security (SSL Certification)	Till 05th March 2019	5
		Migration of the Portal to BIRD/NABARD/Appropriate Server	Till 15th April 2019	30
		User Manuals for operation and maintenance of the portal	Till 15th March 2019	30
		Handover of Source codes; module and template licenses	Till 05th April 2019	10
		Training materials for operation and maintenance of the portal	Till 15th April 2019	30
		Training to test users and administrator- An interactive training class should be taken by the agency at the BIRD 's premises. This should cover user manual explanations and demonstration of how the system should be used and administered.	Till 30th June 2019	03
		Launching and Inauguration of the Portal by the BIRD.	Till 05th April 2019	01
	Backup			
		Backup plan implementation	Till 30th April 2019	1
		Complete backup of the website in CD/DVD	Till 30th April 2019	--
			Total days	**260**

7. Responsibility of the Bankers Institute of Rural Development (BIRD), Lucknow: BIRD will be responsible for-

- Taking ownership of the portal.
- Finalizing the domain name for the Knowledge Portal.
- Providing the content to the selected agency for upload in the portal including Information on various links, text, images & other details like projects, content and text for pages would be provided to the selected agency.
- Validating of the content to be uploaded.
- Designating a nodal officer for the portal, who has good understanding of the Climate Change related issues.
- Operating and Maintaining the portal after 30th December, 2019 as selected agency will only available till 30th December 2019.
- Finalizing of Hashtag and handlers to notify and publish content using social media platforms.
- Avoiding and reducing third party vendor dependency to the minimum and identificating reliable server where the portal will be hosted.
- Designating an IT official of the IT cell as a technical person, as he/she has to provide technical services if there are technical faults in running the online Portal, as selected agency will only available till 30th December 2019.
- Providing technical support in terms of content for the portal, till the date of project completion.
- Providing the space required for the portal will be provided by the BIRD server that hosts the BIRD website.
- Designating authorized users Uploading of content by any user should be moderated and approved. Any uploaded content to be edited or deleted shall be done by authorised users having roles and levels. Activity notification should be provided as SMS or email to relevant users.
- Deciding Inauguration date of the Knowledge Portal.

8. Additional requirements from the Selected Agency-

The selected agency should also ensure the following additional tasks:

- A REST (Representational State Transfer) based API should be developed that will be responsible for access to the database of the Knowledge Management to facilitate any kind of query that may be required by other application for integration purpose.
- The Knowledge Portal should preferably be developed on APIs (Application Programming Interface) to easily integrate with other websites and platforms.
- The portal should have provision for third party support with Google, YouTube, etc and it shall allow integration of social media platforms such as Facebook, Twitter, etc., where closed groups can be created and operated;
- The Knowledge Portal should be developed with the latest open source technologies.

- Selected agency should provide Operational and Maintenance services (including Bug fixing) to the BIRD (free of cost) till December 2019.
- The portal should be designed keeping in mind Data Security and Privacy norms as per National Informatics Centre and Ministry of Electronics and Information Technology, Government of India Rules and Regulations.
- The complete application shall be moderated by authorised users only.
- The portal shall have open and restricted entries. Limited space should be allowed for free access.
- Roles such as Visitor, Editor, Author, Administrator, etc. have to be clearly defined.
- The selected agency should ensure that the portal shall maintain a light weight, **mobile and tablet compatible,** friendly and interactive design; data posting shall be made through latest information graphic tools only.
- The Knowledge Portal shall be linked to the BIRD website and will be a subset of the main BIRD website.

9. Confidentiality

The prospective developer must agree and sign the data protection contract. Note that all materials, all the information contained in any documentation and visuals related to the project are confidential and remain the intellectual property of BIRD and GIZ. No presentations or duplication of these documents may be made without their prior written approval.

10. Required qualification/ experience for the consulting agency

10.1 Agency should have following experience in conducting the assignment:

The agency is required to submit detailed technical and financial proposal comprising a profile that contains the current CVs and summary of relevant professional experiences of both—organizational as well as individual experts.

- Experience and technical expertise in the field of Website and Web Portal Development on Climate Change /DRR/ Rural Development related projects through the support of National/Regional, Bilateral- Multilateral agencies.
- Experience and knowledge of working with National/State Government bodies on Webportal development, Climate Change Adaptation/DRR issues, Agriculture and Rural Development.
- Familiarity of Climate Change related portals across the globe.
- Demonstrated experience in execution of Website development/ Knowledge Portal/apps related innovative startup Projects/programs/Government of India recognized programs.
- Excellent reporting, writing and presentation skills

- Prior experience of working with GIZ or other multi-lateral/ bilateral organizations would be preferred.

10.2 Agency should have following administrative and financial requirement in conducting the assignment:

- Average annual turnover for the last three financial years should be at least 100,000 Euro
- Number of employees as at 31.12.2017 should be at least 10.
- The technical assessment is only based on reference projects with a minimum commission value of 20,000 Euro

Team composition, number of working days and qualifications

Project Manager
Engineering degree in Computer Sciences / IT Project Management experience of at least 7 to 8 years / experience in open source software development / excellent English language skills .

Web Application Developer
Engineering degree in Computer Sciences / experience in web application development for Knowledge Management Systems of at least 5 years / experience in open source software development / excellent English language skills .

UI/UX designer
Engineering degree in Computer Sciences / certification in user experience design / experience in designing tools for web and mobile UI designs of at least 5 years / excellent English language skills .

Testing expert
Engineering degree in Computer Sciences / certificate in software testing / at least 3 years testing experience and excellent English language skills.

Sl no	Team Composition	No of Working days
1	Project Manager	90
2	Web Application Developer	95
3	UI/UX Designer	25
4	Testing expert	50
Over all		**260 days**

Duration of the assignment: 25th November 2018 – 30th June, 2019.

(Annexure -A)

Tentative Contents of the Portal (It includes external and internal contents)

- Climate Change Action Profile including Vulnerability Assessment
- Laws/Policies/Plans
- Programmes/Projects/Schemes
- Data/Statistics of CC
- Climate Change related Institutional and legal Framework
- Government Departments/Agencies
- Scientific & Technical Institutions
- Organizational Resources: Database of Education/training centres and other organizations working for CC, their activities, research, outreach etc.
- Civil Society/NGOs
- Corporate Sector- Public- Private Partnership- Corporate Social Responsibility
- Media/Social Media. Social media App integration (Facebook, Twitter, LinkedIn, WhatsApp, Telegram, etc.).
- Database of Human Resources: experts, consultants, trained personnel's, experts on project formulation on Green Climate Fund, Projects awarded on GCF etc.
- Audio-visual materials: satellite images and remote sensing data, Video records/CD-ROMs of Best Practices, Multi Media- Animated videos for climate action, training etc.
- Database of print literature (Library): Bibliographic database of books / monographs, scholarly journals, research /survey reports/Case Studies/ training material /other publications etc.
- Research & Documentation of own and other products.
- Web-links : Websites of stakeholder government departments, Ministry of Environment, Forest and Climate Change, NABARD, Indian Council for Agriculture Research, GCF, Adaptation fund, UNFCCC, Organization working as Implementation entities of GCF, Kisan Portal, Indian Meteorological Department, NGOs, etc. including linkage with existing Knowledge Portals.
- Links on Employment, Training & Capacity Building and Funding opportunities.
- Indigenous knowledge, traditional wisdom and customary practices.
- Registration and Subscription to the announcement feeds. Here any one can query, map, compare, chart and summarize key climate and climate-related information. FAQ Section and facility of Blog.
- Newsletters/Information on Events.
- Section on Updates : Contents in this section will be generated through standardised templates by administrator. Images can be added along with the update. Automatic deletion function shall be associated with 'date of expiry' (for Advisory on Project Proposal, fundings, Events, Updates etc).