PBRG Concept Note (CN)

1. **Sub-project title** : **Establishment of Bangladesh Agricultural Knowledge Bank (BAKB) for Large Scale Dissemination to Enhance Productivity**

2. **Sub-sector** : Crops, Livestock and Fisheries

3. **Thematic area** : ICT in Agriculture

4. **Name of the applying institution/organization with associated/collaborative/component organization with full address:**
   i) Bangladesh Agricultural Research Council (BARC)
   ii) Bangladesh Agricultural Research Institute (BARI)
   iii) Bangladesh Rice Research Institute (BRRI), Joydevpur, Gazipur
   iv) Bangladesh Institute of Nuclear Agriculture (BINA), Joydevpur, Gazipur
   v) Bangladesh Fisheries Research Institute(BFRI), Mymensingh and
   vi) Bangladesh Livestock Research Institute (BLRI), Savar, Dhaka **in collaboration with**
   vii) International Rice Research Institute (IRRI)- Bangladesh, House 103, Road 1, Banani, Dhaka 1213 and with component organizations

5. **Coordinator/Principal Investigator (Position, full address with phone no; as applicable) :**

   Dr. Mian Sayeed Hassan
   Chief Scientific Officer (Crops), BARC
   Farmgate, Dhaka
   Cell: 01911740390
   Email: sayeed63@gmail.com, s.hassan@barc.gov.bd

6. **Co-Principal Investigator(s)-(Proponent Institute/Collaborating Institute-Position, full address with phone no):**

i)	Hasan Md. Hamidur Rahman	Senior System Analyst, Computer and GIS Unit BARC, Farmgate, Dhaka Mobile: 01553270390
ii)	Dr. Md. Saiful Islam	Principal Scientific Officer, ASICT Division, BARI, Joydevpur, Gazipur Mobile: 01552388731
iii)	Dr. Islam Uddin Mollah	Chief & Head, Training Division, BRRI, Joydevpur, Gazipur Mobile: 01712034459
iv)	Dr. Nasrin Sultana	Principal Scientific Officer & Head Training, Planning and Technology Division, BLRI, Savar, Dhaka Mobile: 01914033344
v)	Md. Shahidullah	System Analyst BFRI, BAU Campus, Mymensingh Mobile: 01813226766
vi)	Dr. Hosneara Begum	Director (Research) BINA, BAU Campus, Mymensingh Mobile: 01714492742
vii)	Dr. Noel P. Magor	IRRI Representative, Bangladesh and Head Impact Acceleration Unit, IRRI, Dhaka, Bangladesh Mobile: 01755628995

7. **Objectives:**
    i)   To developa Bangladesh AgriculturalKnowledge Bank(BAKB) online platform

    ii)   To establish need based process for content development

    iii) To documentinnovative uses of the knowledge bank through various stakeholders (public, private, civil)

    iv)   To establish a smooth network among NARS Institutes for technology transfer and dissemination

8. **Duration:** Start- 1 January 2017 End- 30 December 2020

9. **Significance/justification of the research:**

Farmers are veryinterested to adopt modern agricultural technologies but due to unavailability of technological knowledge/information at their doorstep they cannot introduce intheir fields. Farmers and value chain actors are usually involved in many enterprises but they do not have access to all kinds of knowledge/information at one point. Within village communities women and young people also require this knowledge. There is still a gap in the national system – not all knowledge materials on various essential areas of agriculture (e.g. crops, livestock, and fishery) are available in an organized form in a credible single source.Moreover, there is a loose coordination among different national institutes and other technology generation agencies and this needs to be strengthened within an agreed national level framework. Furthermore, often knowledge products/services are produced without having their primary clients involved and therefore their needs/demands priorities are overlooked or remain un-addressed. In many cases the primary users of knowledge materials are not properly identified/analyzed.The knowledge transfer system in the country and elsewhere is rapidly changing and there are now multiple service providers engaged in the dissemination of technologies. The traditional approaches of technology dissemination are often expensive and are not able to reach all farmers on time. Use of modern ICT based technologies and multiple approaches for dissemination provide opportunities for large scale dissemination in a cost-effective and efficient manner.

IRRI has been involved extensively for nearly two decades firstly in the development of its own knowledge bank and with governments in the institutional development of their respective knowledge banks. Its technical expertise and rich experience for content development, facilitation, designing and formatting is expected to help greatly for improving the quality of the knowledge platform.

10. **Approaches/Methodology:**

The Bangladesh Agricultural Research Council (BARC) will coordinate the platform. A national level partnership will be established initially with five NARS institutes (BARI, BRRI, BFRI, BLRI & BINA) and gradually other important national partners (NARS, universities etc) will be included. A series of workshops and meetings will be conducted with these NARS partners to capture their experiences and learning so far. An assessment will be done to evaluate the quality, quantity and types of materials already available in existing knowledge sites and to understand the gap. Partners together will establish processes and procedures to set standards todevelop andformat materials, protocols for designing and uploading materials. Strong quality assurance protocols will be established by forming technical editing committees within respective NARS institutes and also at the BARC level. There will also be a strong capacity building component in the project for different people involved in the whole process: writing, video production, editing, designing, formatting etc.

A national level multi-stakeholder network will be established with all kinds of potential users of the knowledge platform. A series of consultation meetings and workshops will be held to assess demand and need for different types users e.g. farmers and different kinds of intermediary audiences (Knowledge centres, call centres, UDCs, Telcos, media, community radio, media, TV, video agencies, women's networks etc.) and accordingly develop formats of materials that are as

part of needed knowledge platform.The project will encourage all kinds of knowledge entrepreneurs (GO, civil, private, non-profit, projects) to come up with ideas about the use and utilization of the knowledge platforms through their own introduction of innovative extension and dissemination methods/models. Best innovative ideas will be widely promoted nationally and in different regions of the country through the network members and other means. An efficient and effective monitoring system will be established to get regular feed-back on the extent of use and the quality and usability of the knowledge materials from the end users.The project aims to work closely with the policy makers to give the agricultural knowledge platform a sustainable structure so that the platform is strongly integrated within the NARS system and also recognize the contribution of all kind non-NARS actors for knowledge dissemination.

11. Expected outputs/results and outcomes:

- A sustainable national agricultural knowledge platform that strategically define responsibility of all NARS institutes involved (BARC, BRRI, BARI, BFRI, BINA and BLRI);
- A process of development and maintenance of the knowledge bank(s)in a sustainable manner;
- A process of understanding demand of different primary clients (that is inclusive of women and youth) and response strategy to be able to make knowledge banks effective and user friendly;
- A network of actors nationally that can continuously work together to develop and disseminate knowledge beyond the life of the project;
- The authentic and recognized knowledge packaged in the knowledge banks is extensively used by primary clients (farmers) and by other actors (GO, NGO, projects, private sector agencies active in agriculture value chain, TV, radio, print media, call centres, farmer organizations, input dealers etc) to re-produce customized information for their respective clients;
- A data management system that can provide up to date information on the use of the knowledge bank platform and the extent of use by intermediaries and farmers.

12. Summary of Budget (in Taka):

Line Item	Year-1	Year-2	Year-3	Year-4	Sub-Total	% of grand total
A. Contractual Staff Salary (max. 30%)	2,542,250	2,547,250	2,552,250	3,802,850	11,444,600	29.6
B. Field Research / Lab expenses and supplies (min. 30%)	8,500,000	4,650,000	-	-	13,150,000	34.0
C. Operating Expenses (max. 12%)	1,355,000	705,000	675,000	675,000	3,410,000	8.8
D. Vehicle Hire and Fuel, Oil & Maintenance (max. 13%)	750,000	750,000	750,000	750,000	3,000,000	7.8
E. Training/Workshop/Seminar etc. (max. 5%)	500,000	1,000,000	1,000,000	1,000,000	3,500,000	9.0
F. Publications and printing (max. 5%)	25,000	50,000	50,000	350,000	475,000	1.2
G. Miscellaneous (max. 7%)	125,000	125,000	125,000	125,000	500,000	1.3
H. Capital Expenses (max. 30%)	3,220,000	-	-	-	3,220,000	8.3
Grand Total	17,017,250	9,827,250	5,152,250	6,702,850	38,699,600	100

_____
Signature(Endorsement by Head of the proponent organization/ authorized representative)
Name : **Dr. Abul Kalam Azad**
    Executive Chairman, BARC
Seal and date : _____

_____
Signature of the Coordinator
Name : **Dr. Mian Sayeed Hassan**
    Chief Scientific Officer (Crops),
    BARC, Farmgate, Dhaka
Date : _____

_____
Signature (Endorsement by Head of the proponent
organization/ authorized representative)

Name : **Dr. Abul Kalam Azad**
      Executive Chairman, BARC
Seal and date : _____

_____
Signature of the Co-Principal Investigator
Name : **Hasan Md. Hamidur Rahman**
Senior System Analyst, Computer & GIS Unit
BARC, Farmgate, Dhaka
Date : _____

_____
Signature (Endorsement by Head of the proponent
organization/ authorized representative)
Name : **Dr. Md. Rafiqul Islam Mondal**
      Director General, BARI, Gazipur
Seal and date : _____

_____
Signature of the Co-Principal Investigator
Name : **Dr. Md. Saiful Islam**
Principal Scientific Officer, ASICT Division,
BARI, Joydevpur, Gazipur
Date : _____

_____
Signature (Endorsement by Head of the proponent
organization/ authorized representative)

Name : **Dr. Bhaugo Rani Bonique**
      Director General, BRRI, Gazipur
Seal and date : _____

_____
Signature of the Co-Principal Investigator
Name : **Dr. Islam Uddin Mollah**
      Chief & Head, Training Division,
      BRRI, Joydevpur, Gazipur
  Date : _____

_____
Signature (Endorsement by Head of the proponent
organization/ authorized representative)

Name : **Dr. Nurun Nahar Begum**
      Director General, BLRI, Savar, Dhaka
Seal and date : _____

_____
Signature of the Co-Principal Investigator

Name : **Dr. Nasrin Sultana**
      Principal Scientific Officer & Head
      Training, Planning and Technology
      Division, BLRI, Savar, Dhaka
  Date : _____

_____
Signature(Endorsement by Head of the proponent
organization/ authorized representative)
Name: **Dr. Md Shamser Ali**
      Director General, BINA, BAU Campus,
      Mymensingh
Seal and date : _____

_____
Signature of the Co-Principal Investigator
Name : **Dr. Hosneara Begum**
      Director (Research)
      BINA, BAU Campus, Mymensingh
Date : _____

_____
Signature(Endorsement by Head of the proponent
organization/ authorized representative)
Name: **Dr. Yahahi Mahamud**
      Director General, BFRI, BAU Campus,
      Mymensingh
Seal and date : _____

_____
Signature of the Co-Principal Investigator
Name : **Md. Shahidullah**
      System Analyst, BFRI, BAU Campus
      Mymensingh
Date : _____

_____
Signature(Endorsement by Head of the proponent
organization/ authorized representative)
Name : **Dr. Noel P. Magor**
       RRI Representative, Bangladesh
       and Head Impact Acceleration Unit,
       IRRI, Dhaka, Bangladesh
Seal and date : _____

_____
Signature of the Co-Principal Investigator
Name : **Dr. Noel P. Magor**
       RRI Representative, Bangladesh
       and Head Impact Acceleration Unit,
       IRRI, Dhaka, Bangladesh
Date : _____