Terms of Reference
for
Selection of Mobile Application Data Hosting Company
for
“APNI KAPAAS” Android/iOS Application

1. **Project Name:**
E-Smart Farming; Value addition in farming system through promotion of Information & Communication Technologies (ICT) among cotton growing communities of Pakistan

2. **Project Background:**
Agriculture is increasingly becoming more knowledge-intensive. Having access to timely, accurate information that is tailored to specific locations and conditions is critical in helping farmers make the most of their resources in often changing circumstances. Over the past 15 years the information and communication technology (ICT) revolution has driven global development in an unprecedented way. Today ICTs are a transformative force for good in socio-economic development.

It has been amply demonstrated that enhancing the ability of farming communities to connect with knowledge banks, networks and institutions via information and communication technologies (ICTs) has improved their productivity, profitability, food security and employment opportunities substantially.

The agriculture sector faces many challenges posed by climate change, loss of biodiversity, drought, desertification, increase in food prices and inefficient supply chains. The sector is increasingly becoming knowledge-intensive, and the availability of the right information, at the right time, in the right format, and through the right medium, influences and affects the livelihoods of many stakeholders involved in agriculture and related fields.

Impact of digitization is now evident in each sphere of life; it has increased the speed and breadth of knowledge turnover with the society and economy. Digitization is also fascinating the second largest sector of Pakistan economy, agriculture. Young generation of farming communities have been spellbound by smartphones, watching videos, sharing information, pictures etc. Now it is imperative to devise e-farming tools that will help farmers as well as field personnel for information collecting, analyses and reporting. Proposed initiative is small step towards development and testing of digitization in farming system.

3. **Objective of the Task:**
Sustainable Agriculture & Food Programme (SAFP) of WWF-Pakistan under its “E-Smart Farming” project intends to hire a Mobile Application hosting services provider to provide efficient & reliable managed hosting services for the upcoming Mobile Application “APNI KAPAAS” and its related portals/panels. This mobile application will be used by the project beneficiaries (Farmers, cotton supply chain actors and textile industry) involved in production, sales & purchase of seed cotton. This mobile application will ensure live information sharing about cotton production & protection practices, soil health improvement, weather updates to strengthen decision support system and sustainable supply chain of quality cotton. Interface of the application will support WWF-Pakistan field trainers to manage all records pertaining to
farmers’ trainings, adoption records of farm practices of different farmers organized in the form of clusters. All the users will be able to sign-up by creating new accounts through an easy and credible way.

4. **Scope of Work:**
This android application will serve as the practical solution for farmers and cotton supply chain actors. All the information will be on one click away, regarding cotton production and supply chain of quality cotton. This application will be able to transform the conventional information sharing to E-smart tools.

5. **Purpose of the Document:**
The purpose of this document is to denote/specify the deliverables associated with this project and the procedure/approach, which will be followed by SAFP, WWF-Pakistan to assess, evaluate and select the firm/company for Mobile Application hosting services. This document also illustrates the requirements and the conditions, which shall be adhered to, to fulfill and qualify for the stipulated task (hosting Mobile Application and related portals/panels). The selected company will be required to provide shared managed portal/mobile app-hosting services for a period of **FIVE (5)** year with subsequent extension (as and if required), which is likely to be extended subject to satisfactory performance.

6. **Hosting & Server Support Requirements:**
Here are some details of Hosting & Server Requirements for Apni Kapaas;

**Critical Points to consider:**
1. Server Response Time and Speed of Performance
2. Scalability of Server Resources as per the quantum of data and user
3. High Uptime and Availability with minimum downtime
4. Redundant Server Environment
5. Pricing Structure and Flexibility
6. Other requirements (24/7 Tech HR support, Power and Hardware Back-up in case of unforeseen issues)
7. Sufficient Data Storage capacity to meet the requirements of the application
8. Company IT Policy on Data Security

**Server Support Options:**
1. In-house Data Server with Storage, Backup and 24/7 Tech Support
   a. Required hardware: Rack mount blade server with hardware storage raid controller support for data de-duplication to avoid data loss. Recommended Intel Xeon minimum 16 to 32 core processor with 10 to 20mb cache and minimum 8 GB RAM. Hard Drive must be 500gb to 1tb at least
   b. Back-up Redundant Server to switch to in case of hardware issues
   c. Back-up Power source
   d. 24/7 Tech HR support to address queries and issues promptly
2. Outsourced Remote Data Server and 24/7 Support Services
a. Same requirements as in 1 above

3. Cloud Based Server and Support Services. Options can be Amazon, Azure, Google Cloud

Other Requirements for Application Publishing:
- Apple Developers Account Access
- Play store Account Access
- Support URL that will be displayed on Apple/Play store. Basically a website URL where users can contact us for support
- Short and long description of the application that will be displayed on Apple/Play stores

7. Technical Proposal:
The interested companies’/services providers have to submit the following mandatory documents:

1. Company profile
2. Service Level Agreement (SLA)
3. Description of services offered
4. Details of Network infrastructure for dedicated/shared server web-hosting
5. A network security and back-up plan
6. A 24/7 Technical support plan

8. Financial Proposal:
The format of the financial proposals should be as follows:

1. Summary of the financial bids for 5 years’ contract
2. Detailed breakdown of all the costs.
3. Financial Proposal should include all taxes cost (cost mentioned in proposal will be considered final cost inclusive of all taxes)

9. Required Qualifications/Skills:
- Software houses, hosting services providers, IT departments having expertise in relevant domain can apply