

C/o Meghalaya State Housing Financing Cooperative Society, Upper Nongrim Hills, Behind Bethany Hospital, Shillong, East Khasi Hills District, Meghalaya – 793003 (CIN No. U75144ML2012NPL008509) Phone: +91-364- 2522921/2522992 Website: www.mbda.gov.in, E-mail: admin.mbda@gov.in

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# Expression of Interest for Onboarding of service providers for Precision Agriculture under Meghalaya Basin Management Agency (MBMA)



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## A. OVERVIEW OF THE AGRICULTURAL SCENARIO OF THE STATE

- 1. The State of Meghalaya is an agrarian economy with approximately 80% of the population dependent on agriculture and allied activities for their livelihood. With an aim of doubling farmers income, the Government of Meghalaya, under its various mission mode projects has promoted area expansion of high value crops, farmer collectivization for collective marketing, set up 180+ micro processing units and post-harvest infrastructures, offers credit support by means of interest free working capital loans and trial marketing grants.
- 2. The key findings from these initiatives reveal that despite having the potential to cultivate high-quality agricultural products with low residue, Meghalaya has not established a distinct presence in the market in terms of volume or product positioning, thus struggling to set competitive price ranges for trade. Insufficient productivity emerges as the primary challenge.
- 3. Structural constraints hindering productivity of crops are traditional jhum practices, small landholdings, remote hilly terrain, limited land parcels with accessibility, and inadequate market access. Consequently, agriculture has predominantly remained subsistence-oriented, with minimal adoption of commercial agricultural practices.
- 4. The State of Meghalaya is thus keen on focusing its efforts to **improve productivity by** adopting scientific agricultural practices.

## **B.** OBJECTIVE OF THE EOI

- 1. Seek vendors and service providers who offer an integrated solution to improve productivity of horticultural crops like Lakadong Turmeric, Ginger, Pineapple and Khasi Mandarin oranges.
- 2. Set up a pilot project for **Precision Agriculture integrating 4 services**:
  - (i) Irrigation Solutions.
  - (ii) Agronomy Solutions.
  - (iii) Farm management solutions.
  - (iv) Data analytics.
- 3. The period of pilot project is for **3 years** until the yield from baseline year is exceeding the state productivity by 2 times for each crop.



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- 4. The outcome of this data driven project is to predict quality and quantity of production, study the feasibility for expansion into other high value crops.
- 5. The area of the pilot project is **60 Ha**, spread across **15 sites** in various districts with different Agroclimatic zones, with each site having an area of 2 ha to 5 ha.

#	Сгор	Tentative Districts	Tentative Area (Ha)	Farm size (Ha)	No. of sites
1	Lakadong Turmeric	West Jaintia hills.	10	Each of 5 Ha	2
2	Ginger	West Jaintia Hills, Ribhoi, West Khasi Hills, East Garo Hills, West Garo Hills.	10	Each of 2 Ha	5
3	Pineapple	Ribhoi, West Khasi Hills, East Garo Hills, West Garo Hills.	20	Each of 5 Ha	4
4	Khasi Mandarin oranges	Ribhoi, East Jaintia hills, East Garo Hills, South Garo Hills.	20	Each of 5 Ha	4

6. The following crops have been identified for the first phase of the program.

# C. SCOPE OF ENGAGEMENT

#### 1. General requirements

- (i) Establish a baseline, plan, execute, monitor, report the findings of the project for a period of 3 years to attain the objective and outcome of the project.
- (ii) Deploy a dedicated team in Meghalaya to execute the project.
- (iii) Train local resources/ farm managers of each site.

## 2. Baseline survey

- (i) Engage in site survey to undertake **topography mapping and geo fencing**.
- (ii) Create a **database** for each site to capture current productivity, cropping pattern, cost of cultivation, other physio geographic data like soil parameters, solar insolation, rainfall, elevation etc., which can be superimposed on to track the progress for 3 years.



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## 3. Irrigation solutions

- (i) Engage in end-to-end irrigation solutions.
- (ii) Map the water source, sharing the technical specifications for water harvesting structures, storage structure, monitoring, and execution of the same.
- (iii) Implement and install suitable **irrigation plan according to the crop requirement**.
- (iv)Training the local manpower to operate the same.

#### 4. Agronomy solutions

- (i) Offer agronomy services with organic inputs.
- (ii) Offer agronomy services with residue free inputs.
- (iii) Provide advisory on a real-time basis to track the productivity and production.
- (iv) **Establish the cost of cultivation** for each crop and according to organic & residue free agronomy services.
- (v) Help **optimize the cost of cultivation** using alternative inputs sourced from the region.

#### 5. Farm management solutions

- (i) Capture **atmospheric data** like solar irradiation, rain gauge, wind speed, direction, temperature, humidity more according to crop requirement.
- (ii) Capture **soil data** like soil nutrients, temperature, moisture, EC, pH and more according to crop requirement.
- (iii) Capture Crop data indicating crop health, evapotranspiration, canopy humidity etc.,
- (iv)Analyze the captured data by a **team of agronomists for real-time advisory**.

#### 6. Data Analytics

- (i) Real time data analysis of the farm management solutions.
- (ii) Cloud services for input, output, securing the data and overall data management.
- (iii) Transform data into conclusive inputs according to the calendar of operations of each crop, and district wise.
- (iv) **App based Data visualization** platform for the farm managers of each site.
- (v) **Centralized Data management dashboard** for monitoring and evaluation.



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## D. QUALIFICATION CRITERIA

SI No	Qualification Criteria	Documentation
1	The service provider(s) must be a registered business entity <b>within India.</b>	Documents like ROC registration, MoA of Company, AoA of Company, PAN, GST registration (if applicable), and / or any additional / substitute document signed by the competent authority must be furnished.
2	The service provider(s) must be operational for at least the <b>past 5</b> <b>years.</b>	Documents like ROC registration, MoA of Company, AoA of Company, PAN, GST registration (if applicable), and / or any additional / substitute document signed by the competent authority must be furnished.
3	The service provider(s) must be <b>specialized in 2 of the 4 solutions</b> as stated in the objective of the EOI	Proof of Concept, List of projects undertaken for each solution must be furnished
4	The service provider(s) must have an annual turnover of INR 1 Crore or more in any year in the past three consecutive years.	Certificate from Statutory Auditor/ Registered Chartered Accountant
5	In case of a JV, each of the service provider must have an <b>annual turnover</b> of 50 lakhs or more.	Certificate from Statutory Auditor/ Registered Chartered Accountant

## E. SELECTION CRITERIA

- 1. The Service provider shall deliver supporting documents as per parameters mentioned above to be qualified for screening.
- 2. The Service provider shall deliver a business proposal for evaluation by the procurement committee.
- **3.** Final selection of the eligible Service provider would be done on recommendations of the procurement committee based on the past project profile and business proposal of the service provider.
- 4. All assessment & decision taken by Meghalaya Basin Management Agency (MBMA) shall be deemed as final.
- 5. Meghalaya Basin Management Agency (MBMA) reserves the right to relax any of the criteria mentioned above depending on the bids received.



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# F. PREPARATION & SUBMISSION OF PROPOSAL

- 1. The service provider shall submit 'Form A', 'Form B' ', and 'Form C' along with self-attested documentary evidence to prove authenticity and eligibility.
- 2. Submission of Business Proposal:
  - Soft Copy of Business Proposal Submission: Soft copy of business Proposal shall be submitted in PDF format along with scanned signature on each page through email. The documents are to be sent to <u>humanresources@themeghalayanage.com</u> before the Proposal due date and time.
  - ii) Hard copy of Business proposal shall be submitted on following address: to Chief Executive Officer (C.E.O), Meghalaya Basin Management Agency, C/o Meghalaya State Housing Financing Co-operative Society Ltd., Upper Nongrim Hills, Shillong, Meghalaya 793003
- 3. Last Date and Time for submission of Proposal: 8th April 2024, 17:00.

# G. GENERAL TERMS & CONDITIONS:

- i. Meghalaya Basin Management Agency (MBMA) reserves the right to accept or reject all or any of the proposals without assigning any reason whatsoever.
- ii. Meghalaya Basin Management Agency (MBMA) reserves the right not to proceed with the Process at any time, without notice or liability.
- iii. The decision of the CEO, Meghalaya Basin Management Agency (MBMA) shall be final in all cases.

-Sd-

Chief Executive Officer (C.E.O)

Meghalaya Basin Management Agency (MBMA)

c/o Meghalaya State Housing Financing Co-operative Ltd.,

Upper Nongrim Hills,

Shillong, Meghalaya - 793003



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FORMS



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Form – A

То

Date:

Chief Executive Officer (C.E.O)

Meghalaya Basin Management Agency,

C/o Meghalaya State Housing Financing Co-operative Society Ltd.,

Upper Nongrim Hills,

Shillong, Meghalaya-793003.

Sub: Expression of Interest (EOI) for onboarding service providers for Precision Agriculture under Meghalaya Basin Management Agency.

Dear Sir / Mam,

I hereby confirm that ..... (insert Service provider name),

the Applicant satisfy the terms and conditions laid down in the EOI document.

The Applicant contact details for official correspondence shall be as below:

- Postal Address:
- E-mail:
- Mobile No.:
- Website name (if any):

I/we agree and undertake to abide by all the terms and conditions of the EOI Document. In witness thereof, I/we submit this Proposal under and in accordance with the terms of the EOI Document.

Yours faithfully,

(Signature, Name & designation)



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#### Form – B

- 1. Name of the service provider:
- 2. Date of Incorporation:
- 3. Profile of latest projects:

#	Project Location	Description of Services undertaken	Installation Area (Ha)	Client Name
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Note:** Additional information (Brochures, publications, accreditations from professional body) if any may be furnished.



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Form – C

**Business Proposal Presentation**