

Satellite Based Basmati Rice Study during

Kharif 2011 & Kharif 2012

Detailed Terms of Reference

Basmati rice is one of the important products of export monitored by APEDA. The traders and exporters would be helped immensely if the estimates of crop are available to them before the harvest. Therefore, APEDA proposes to award a study for satellite based crop acreage assessment, crop health monitoring and yield estimation of Basmati rice.

Companies who have undertaken such or similar studies on acreage estimation and yield forecasting of cereal crops, at least for three years, before the harvesting may submit their bids for carrying out the study during Kharif 2011 and Kharif 2012.

The offers are to be submitted in two parts, in sealed covers, separately for Technical and Financial bids. Both the envelopes may be superscribed as **'Bid for Satellite Based Basmati Rice Study'** and addressed to Shri A.K. Gupta, Advisor (Cereals), Agricultural and Processed Food Products Export Development Authority (Ministry of Commerce & Industry, Govt of India), 3rd Floor, NCUI Building, 3 Siri Institutional Area, August Kranti Marg, (Opp. Asiad Village), New Delhi-110 016, by May 10, 2011.

The information contained in the Technical Bid would include details of the company's main business, turn-over in last three years and experience in this field. The list of earlier clients for conduct of such studies in agriculture sector may please be provided. The scope of work and deliverables may clearly be spelt out in the Technical Bid.

Source of raw satellite data and technical capability of the bidder to arrive at results from such data will be clearly spelt out, along with names and technical qualifications of the scientists.

The Financial Bid will contain information on the cost of study, payment terms etc. The Financial Bids of only those bidders will be opened whose Technical Bids are found acceptable by the Evaluation Committee.

Scope of Work

Proposals are invited for conducting the satellite based crop acreage assessment, crop health monitoring and yield estimation of basmati and non-basmati rice, study for Kharif 2011 and Kharif 2012 in the states Punjab, Haryana, Himachal Pradesh, Uttarakhand, Delhi and following districts of Uttar Pradesh and Jammu & Kashmir:

Uttar Pradesh: - Agra, Aligarh, Badaun, Bagpat, Bareilly, Bijnor, Bullandshahr, Etah, Etawah, Farrukhabad, Firozabad, Gautam Budh Nagar, Ghaziabad, Hathras, JP Nagar, Kannauj, Mainpuri, Mathura, Meerut, Moradabad, Muzaffar Nagar, Oraiya, Pilibhit, Rampur, Sahajahanpur, Saharanpur

Jammu & Kashmir: - Jammu & Kathua

While conducting the study, under-mentioned shall be covered on districtwise basis:

1. Acreage estimation of all rice, basmati crop differentiated in traditional and evolved varieties and other (non-notified) selected varieties. Also a comparative data with previous two years will be provided.
2. Satellite based Crop Health Monitoring and Analysis (without field survey).
3. Satellite derived NDVI based yield estimation and estimated production.
4. Variety wise Crop maturity survey, describing the percentage of acreage under particular crop growth.
5. Climate based yield modeling using historical yield and climate data (10 years) in order to predict yield well in advance with minimal dependability on satellite data.
6. Questionnaire based sample survey of farmers for area/districts mentioned above with a sample size of at least 400 farmers. The contact details of the farmers included in the survey may be provided. This sample survey should cover all the identified states.
7. Acreage estimation for total rice and basmati rice in Punjab area of Pakistan.
8. Validation of accuracy levels achieved will be carried out with at least 1000 GPS points, in association with BEDF/Trade representatives.
9. Pie-chart distribution of Basmati and non-notified varieties will be provided.

10. Percentage wise sale/distribution of basmati seeds by different agencies including Govt. sources, private sector and farmers and the price paid for each variety.
11. The reports will be submitted for the months of July, August, September, October and November in the respective years. In case of unusual weather conditions and pests/diseases attack, effecting yields, fortnightly report will be given during crop maturity time. Final Report and post-arrival/post-harvest report in December of the respective year. Farmers Questionnaire based survey report will also be submitted in December of the respective year.
12. The reports will be submitted in electronic format, CDs and Hard-copies, besides 5 Presentations to be made in the Conference Hall of APEDA in New Delhi.

Deliverables

1. Five monthly reports on district-wise Basmati Rice Crop acreage and area estimation statistics in the study area.
2. Final Report showing statistics and maps.
3. Validation report based on CCE data and Farmers Survey
4. Deviation between satellite and field survey figures

Payment Terms

1. 50% along with Work Order, on award of study, on submission of Invoice along with Bank Guarantee for the amount, valid for six months.
2. 20% on submission of report Volume 05 and invoice for the amount.
3. 20% on submission of report volume 08 and invoice for the amount.
4. 10% on submission of final report volume 09 and invoice for the amount.

