



गोवा GOA

Date 21/7/15 S. No. 2313 Value Rs. 100/- 651103
 Name of Purchaser Directorate of Agriculture, Goa
 Resident of
 Place of Vendor's Panaji,
 Mrs. Jessica F. C. D'SOUZA
 Licence No. A/C/STR/VEN/01/2013 dt. 7/08/2013

Signature of Vendor

Signature of Purchaser

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MoU) is executed at Porvorim, Bardez Goa on this 6th day of July, 2015.

BETWEEN

the Governor of Goa (hereinafter referred to as "the Government") of the ONE PART,

AND

National Bureau of Soil Survey and Land Use Planning (NBSS&LUP), which is one of the National Bureaux listed under the administrative control of Indian Council of Agricultural Research (ICAR), New Delhi registered under the provisions of the Societies Regulation Act XXI of 1860, and having its office at Amravati Road,

Signature of Vendor

Signature of Purchaser

Nagpur - 440 033, Maharashtra, represented herein by its Director, Dr. Surendra Kumar Singh, by virtue of F.No. 35(1)/2013-PER-III dated 14/02/2014 (hereinafter referred to as the "Consultant" which expression unless repugnant to the context or meaning thereof shall mean and include its successors, executors, administrators and assignees) of the Other Part.



Whereas, the Government intends to take up the work of Survey of Fallow Lands under Rashtriya Krishi Vikas Yojana (RKVY) in 10 talukas of State of Goa namely, Tiswadi, Bardez, Pernem, Bicholim, Ponda, Mormugao, Salcete, Canacona, Sanguem and Dharbandora in respect of the delineation of agricultural land use of State of Goa including fallow land at cadastral level, carrying out land resource inventory of cultivated and fallow land and development of agriculture land use plan of the State of Goa with special emphasis on fallow land rejuvenation.

Project Name:- "Characterization and Mapping of Land Resources of Goa in Reference to Cultivated and Fallow Land Use Systems" (hereinafter referred to as the "Project").

And whereas, the Government has decided to entrust the work of the Project to the Consultant;

And whereas, the Government and the Consultant have decided to reduce the terms and conditions of their agreement into writing.

Now, therefore, this MoU witnesses and the parties hereto hereby mutually agree and declare as under:

- 
- (I) In consideration of the payment of Rs. 100.00 lakhs (Rupees One Hundred Lakhs Only) by the Government to the Consultant as per the schedule of payment stipulated in clause (IV) herein, the Consultant shall execute the work of the Project as per the terms and conditions stipulated in the project proposal submitted by the Consultant to the Government and this MoU.
 - (II) Role of the Consultant:
 - (1) the Consultant shall look after the Planning, Co-ordination and execution of the Project;
 - (2) delineate the agricultural land use of State of Goa including Fallow Land at cadastral level using high resolution temporal satellite data;
- 

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- (II) Role of the Consultant:
- (1) the Consultant shall look after the Planning, Co-ordination and execution of the Project;
 - (2) delineate the agricultural land use of State of Goa including Fallow Land at cadastral level using high resolution temporal satellite data;

- (3) carry out land resource inventory of cultivated and fallow land of the State at 1:10000 scale including soil map and soil fertility map;
- (4) develop agriculture land use plan of the State of Goa with special emphasis on fallow land rejuvenation;
- (5) complete the work in following respective phases:-

1st Phase:

- (a) Procurement of Seasonal IRS P6LISS-IV data (2010-2014) – Merged data, Visual + Digital land use delineation of agricultural land, Indian 9-fold land classification system and Fallow land map of Goa State.
- (b) Seasonal RS P6 LISS-IV data of base year (2003-04) – Change detection, Fallow land conversion Zone map;

2nd Phase

- (a) Cartosat DEM (10 m) - Digital terrain analysis, Elevation, Slope, Contour (10m) and drainage.
- (b) Net sown area map – Landform, Soil Survey at 1:10000 scale.
- (c) Fallow Land Map – Overlay analysis, Landform-fallow land interaction map, Soil survey at cadastral level, Soil sample collection and analysis and Soil map of fallow land of State of Goa.

3rd Phase

- (a) Cultivated and Fallow land map, Soil information of agricultural land, Cadastral map information, Terrain information and Socio-economic and auxiliary data.
- (b) Multidisciplinary approach - Agricultural land use plan for cultivated and fallow land of Goa State.

(6) Following shall be the deliverables:-

(a) In the 1st Phase (0-6 months),

Fallow land map of State of Goa (10 taluks) on cadastral level.

(b) In the 2nd Phase (6-12 months)

Soil fertility cards to the farmers (Directorate of agriculture, Govt. of Goa)

Land resource inventory of cultivated and fallow land of State of Goa (10 taluks) at 1:10000 scale, including soil map and soil fertility map.

(c) In the 3rd Phase (12-18 months)

Suggested land use plan for increasing agricultural productivity especially in fallow lands.

(d) In the 4th Phase (18-24 months)

Web and mobile based farmers' advisory hosted on website of the Department.

Final report submission

- (7) The software's shall be compatible for all forms of windows operating systems.
- (8) The 1st phase shall be completed within 6 months from the date of signing of this MoU, while the 2nd phase (6-12 months), 3rd third phase from (12-18 months) and 4th Phase from (18-24 months). The entire Project shall be completed within 24 months from the date of signing of this MoU.
- (9) The Consultant shall submit the draft report and arrange successful demonstration before finalization to the Government for comments/suggestions which shall be incorporated in the final report.
- (10) The Consultant shall furnish 15 hard bound copies of the report alongwith two soft copies to the Government;
- (11) The Consultant shall commence the work of the Project immediately after awarding of work order and after signing this MoU. Draft report of every phase shall be provided for approval to the Government.
- (12) The Consultant hereby undertakes to rectify any erroneous readings, whenever discovered during Quality Control (QC) or later during processing the data or after submission of data, without any extra cost.
- (13) The Consultant shall provide in-house "*Free of Cost*" customized training of the officials of Government and related user agencies on the data base generation, retrieval usage and compatibility and provide hardware and software assistance for a period of 2 years.
- (III) Role of the Government:
- (1) The Government shall help in providing digitized cadastral map of Goa, to guide in collecting soil samples and to provide assistance in ground truthing for fallow and cultivated land mapping.

- (2) Government shall enter into correspondence with the other Department/agencies in case required by the Consultant to facilitate collection of information/documents by the Consultant.
- (3) Government shall supervise the entire work and may depute official/officials for the purpose from time to time and may suggest changes from time to time as may be demanded.
- (4) Government shall verify the imageries/documents provided by the Consultant before effecting the payment.
- (IV) Schedule of Payment shall be as follows:-
- (1) 25% as an advance on signing of MoU.
 - (2) 50% after delivery of fallow map of the State of Goa.
 - (3) Balance on submission of the final report.
- (V) The Project will be monitored and reviewed by the Government and the Consultant through existing internal project review mechanism.
- (VI) The Quality Assurance (QA) (Monitoring and Evaluation) team shall carry a random check of work. The accuracy in survey and mapping should meet the standards as laid down under the guidelines framed by the Department of Space, in respect of survey and mapping of various thematic mapping.
- (VII) The Quality Assurance (QA) (Monitoring and Evaluation) team shall also validate and audit the spatial and non-spatial database generated by the Consultant as deemed fit prior to its finalization and submission and it shall be binding on the Consultant to incorporate the corrections, modifications, suggested by the Quality Assurance (QA) (Monitoring and Evaluation) Team.
- (VIII) The Quality Assurance (QA) (Monitoring and Evaluation) team shall also validate and audit the spatial and non-spatial database generated by the Consultant as deemed fit prior to its finalization and submission and it shall be binding on the Consultant to incorporate the corrections, modifications, suggested by the Quality Assurance (QA) (Monitoring and Evaluation) Team.
- (IX) Force Majeures:
In the event of either party being rendered unable by Force Majeures to perform any obligations required to be performed by them under this MoU, the relative obligation of the party affected by such Force Majeures shall, upon notification to the other party, be suspended for the period during which Force Majeures event lasts. The cost and loss sustained by either party shall be borne by the respective parties.

The term "Force Majeures" as employed herein shall mean acts of God, earthquakes, war (declared or undeclared), revolts, riots, fires, floods, rebellions, epidemics, tsunami, explosions, hurricanes, sabotage and civil commotions.

Upon the occurrence of such cause (s) and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing immediately but not later than 24 (twenty four) hours of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of its claim.

Time for performance of the relative obligation suspended by the Force Majeures shall then stand extended by the period for which such cause lasts.

(X) Premature termination of MoU:

In the event of breach of any of the terms and conditions of this MoU by the Consultant, the Government shall be entitled to terminate this MoU. In the event of such termination, the Consultant shall not claim any compensation from the Government and the Government shall be free to award the work of the project to any other agency.

(XI) Arbitration:

In the event of any dispute or difference of opinion arising under or out of or in any way relating to or concerning these presents or effects of these presents, the same shall be referred to the sole arbitration of a person to be appointed by the Secretary (Agriculture) to the Government of Goa. The Consultant shall not raise any objection to such appointment on the ground that such sole arbitrator is a Government servant or that in the course of his duties as such Government servant he had expressed views on all or any of the matters in dispute or difference. In the event of such arbitrator being transferred or vacates his office or refuses or is unable to act as such for any reason whatsoever, it shall be open to the Secretary (Agriculture) to the Government of Goa to appoint another person in his place. The arbitrator so appointed shall be entitled to proceed with the reference from the stage at which it was pending. The arbitrator may, with the consent of both the parties to these presents, extend the time for making the award. The award of the arbitrator shall be final and binding on the parties to these presents. Save as aforesaid, the Arbitration and Conciliation Act, 1996 (Central Act 26 of 1996) and the rules made thereunder shall apply to the arbitration proceedings under this clause.



(XII) Reasonable Cause:

The Consultant shall exercise reasonable skill, care and diligence in the performance of its obligations under this MoU.

(XIII) The Project proposal covering delineation of fallow and cultivated land in the State of Goa, Using Remote Sensing data of higher resolution submitted by the Consultant to the Government shall form part and parcel of this MoU.

In witness whereof the parties hereto have signed this MoU on the day, month and year first hereinabove mentioned.

Signed, sealed and delivered by



Shri Orlando Rodrigues,
Director of Agriculture and
Ex-Officio Joint Secretary
to the Government of Goa,
For and on behalf of the Governor of Goa.


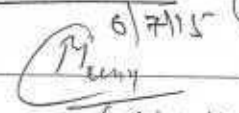

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Dr. S.R. Singh,
Director,
National Bureau of Soil Survey and
Land Use Planning (ICAR),
for and on behalf of the Consultant,

by virtue of F. No. 35(1)/2013-PER-III dated 14/02/2014

Witnesses:

1.  (NRSINGH)
06/07/15
 2.  (Chintamani B. Peeni)
06/07/15
-  06/07/15
(Rajendra Hegde)
- ICAR - CCARI - Goa