

Date: 11/03/2017

## Letter of Intent for Asset Mapping

Between

**National Remote Sensing Centre, Hyderabad - 500037**  
**ISRO, DOS**

and

**Alva's Institute of Engineering and Technology, Mijar, Moodbidri**

ISRO has developed an online Portal - Bhuvan Panchayat ([www.bhuvan-panchayat.nrsc.gov.in](http://www.bhuvan-panchayat.nrsc.gov.in)) with the space-based inputs towards resource-based and integrated spatial developmental planning of rural areas in a user-friendly enabling environment under the project 'Space based Information Support for Decentralized Planning (SIS-DP)'. In order to utilize the Portal for decentralized planning by Panchayat Raj Institutions (PRIs), ISRO has initiated a new project called Empowering Panchayati Raj Institutions Spatially (EPRIS) with the goal to empower PRIs by utilizing the Portal for developmental planning at Panchayat level. Towards achieving the goal, it is essential to have the information of existing assets so that one can assess the gap area and plan for new assets.

NRSC has initiated implementation of EPRIS project covering 10% of Panchayats with the help of Partner Institutions namely, SRSACs, NIRD and NGOs. Further to fasten the activity, the asset mapping workshop was conducted through distance learning from IIRS on 27th June 2016 to several academic institutions. During the workshop many academic institutions showed interest to participate in the asset mapping exercise. To carry out the asset mapping activity with Academic Institutions in a stipulated time of 3 months, ISRO has identified a nominal amount of Rs. 2000 per gram Panchayat for the logistics support. To avoid duplication of work, this Letter of Intent for asset mapping has been prepared for joint signature by NRSC & academic institutions.

In this Letter of Intent, National Remote Sensing Centre (NRSC) is the nodal agency for capacity building, asset mapping and activity planning for empowering PRIs, NRSC and Alva's Institute of Engineering and Technology, Mijar, Moodbidri, agree to exercise their best efforts in fulfilling the following obligations for asset mapping in the selected Gram Panchayats (as per list shown in Annexure-1):

1. All the community assets lying in the selected Gram Panchayat area are to be mapped using the latest version of Bhuvan Panchayat Asset Mapping Mobile App, freely downloadable from the Bhuvan Panchayat Portal ([www.bhuvan-panchayat.nrsc.gov.in](http://www.bhuvan-panchayat.nrsc.gov.in)).
2. The asset mapping is to be done in co-ordination with the local Elected Panchayat Representatives / Panchayat functionaries and validated by the concerned Elected Panchayat Representative / Panchayat functionary.
3. The assets successfully mapped by the Bhuvan Panchayat Mobile App will be available on the Portal after moderation.
4. The following documents, available in Bhuvan Panchayat Portal for free download, may be referred for the detailed methodology: (i) Asset Directory and Mapping Guidelines, and (ii) Bhuvan Panchayat Asset Mapping App User Manual.
5. Remuneration will be paid to the University at the rate of Rs. 2000 per Gram Panchayat on signing of this Letter of Intent.

Dr. Ravi  
20/3/17

V. S.  
27/3/17

*[Signature]*

6. University/Institutes should make their own arrangement for Smart phone(s) for collecting the asset data in the field
7. After successful mapping of all the assets utilization of fund with necessary certification by the Panchayat Representative/ Panchayat functionary need to be submitted to NRSC
8. After successful asset mapping, developmental activity planning using Bhuvan Panchayat platform will be planned separately by capacity building of the locals with the participated academic institutions at Panchayati Raj Institutions.

This letter of intent is valid until successful completion of the task as per the above obligations, or 3 months from the date of signing this letter, whichever is earlier. The obligations under this letter of intent can be nullified on mutual consent. This letter of Intent is not intended to and shall not constitute in any way a binding or legal agreement, or impose any legal obligation or duty on either party.

Signatures



वी. रघु वेंकटरामन  
V. Raghav Venkataraman  
National Remote Sensing Centre  
CGM-RC, NRSC



Alva's Institute of Engineering and  
Technology  
PRINCIPAL  
Alva's Institute of Engg. & Technology,  
Mijar, MOODBIDRI - 574 225, D.K.



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भारतीय अन्तरिक्ष अनुसंधान संगठन  
राष्ट्रीय सुदूर संवेदन केन्द्र  
क्षेत्रीय सुदूर संवेदन केन्द्र - दक्षिण  
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Government of India  
Department of Space  
Indian Space Research Organisation  
National Remote Sensing Centre  
**Regional Remote Sensing Centre-South**  
ISITE Campus, Marathahalli Outer Ring Road,  
Bengaluru - 560 037, India  
Phone : 080 - 23026022, Fax : 080 - 23026025

**Dr. K Ganesha Raj**  
General Manager

RC: BG: 13.3

May 31, 2019

Dear Dr. Peter Fernandes,

**Sub: Project work for BE Student – reg.**  
**Ref: Your Email dated 29th May 2019**

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With reference to the above subject, we have received the bio-data of **Ms. Aruna Kumari V** student of BE (Computer Science), at your Institute. After due consideration, we hereby convey our acceptance to accommodate the student to carry out her Internship work under the guidance of RRSC-South Scientists during the period 5<sup>th</sup> July to 20<sup>th</sup> August 2019.

In this connection, you may kindly note that accommodation, transport and internship stipend will not be provided to the students during their project work and the students are expected to strictly follow the rules and regulations of the Centre as it is a high security area.

Further, the students may be advised to produce college identity cards, bonafide certificates/mark lists and also bring two passport and stamp sized photographs (each one), for issuance of RRSC-S identity (temporary) cards.

With Best Regards,

Yours Sincerely,

*K Ganesha Raj*  
(K Ganesha Raj)

**Dr. Peter Fernandes**  
Principal

**Alva's Institute of Engg. & Technology**  
Shobhavana Campus, Mijar  
Moodbidri-574225

*H.O.D.*  
Dept. Of Computer Science & Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225

Cc: Dr. Dattathreya , Dean Planning & Sr.Prof., Alva's Institute of Engg. and Technology

Shri R Hebbar (Sci/Engr-"SG"), Student Coordinator, RRSC-South, Bengaluru



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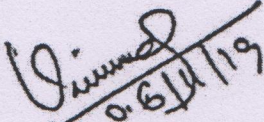
RC: BG: 13.3

November 06, 2019

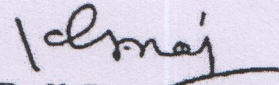
### CERTIFICATE

This is to certify that the Internship project work entitled "Automatic coconut tree detection using Deep Learning" has been successfully carried out at this centre by Ms. Aruna Kumari V (USN:4AL16CS018) a bonafide student of Final year BE (Computer Science) course, Alva's Institute of Engineering and Technology, Moodabidri under the guidance and supervision of the undersigned during the period 5th July to 20th August 2019.

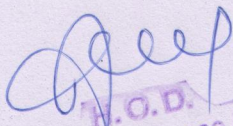
Guided by

  
0.6/11/19

Vinod P V  
Scientist/ Engineer 'SD'  
RRSC-South, Bengaluru



Dr. K Ganesha Raj  
General Manager  
RRSC-South, Bengaluru

  
T.O.D.  
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