



Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru - 560 012

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Dr. S. G. Sreekanteswara Swamy
Executive Secretary

27th March, 2017

Ref: 7.1.03/SPP/

The Principal
Alva's Institute of Engineering and Technology
Shobavara Campus,
Mijar, Moodbidri - 574 225.
Mangaluru.

Dear Sir,

Sub : Sanction of Student Project - 40th Series: Year 2017-2017

Your Project Proposal Reference No. : 40S_BE_0839

Ref : Your Project Proposal entitled " **RS AND GIS BASED SITE SUSTAINABILITY ANALYSIS FOR SOLID WASTE DISPOSAL FOR MOODBIDRI AND KARKALA REGION**

I am happy to inform that your project proposal referred above, has been approved by the Secretary, KSCST for "Student Project Programme - 40th Series" and has been sanctioned with a budgetary break-up as detailed below:

Students	Mr. Kishore.K and others	Budget	Amount (Rs)
		Materials/Consumables	4,000.00
Guide/s	Prof. Sanjāy S	Labor	-
		Travel	500.00
Department	Civil Engineering	Miscellaneous	-
		Report	500.00
		TOTAL	5,000.00
Rupees Five Thousand			

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.
- Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.
- Please quote your **project sanction reference number printed above** in all your future correspondences.
- Important: After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following points:

- Title of the project
- Name of the College & Department
- Name of the students & Guide(s)

4) Keywords

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

- 5) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
 - 6) Objectives (about 17 lines)
 - 7) Methodology (about 30 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
 - 8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
 - 9) Scope for future work (about 20 lines).
- (Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)**

e) Projects selected for Seminar / Exhibition will be awarded.

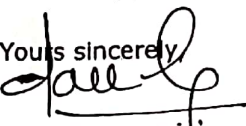
The following are the extract of comments / suggestions of the expert. The students and project guides are hereby directed to implement the same and will be looked into during evaluation of the project.

*** PLEASE VISIT URBAN LOCAL BODIES OF MOODBIDRI AND KARKALA TOWN AND CONTACT ENVIRONMENTAL ENGINEERS FOR MORE DETAILS.**

The sanctioned amount will be sent separately by our Accounts Department.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly.

Please visit our website for further announcements / Information and for any clarifications please email to spp@kscst.iisc.ernet.in

Yours sincerely

 (SGS Swamy)

Copy to:

- 1) The Head of the Department of
Civil Engineering
Alva'S Institute Of Engineering And Technology
Shobavana Campus,
Your Project Proposal Reference No. :
Mangaluru.
- 2) Prof. Sanjay S
Department of Civil Engineering
Alva'S Institute Of Engineering And Technology
Shobavana Campus,
Your Project Proposal Reference No. :
Mangaluru.
- 3) The Finance Officer, KSCST, Bangalore

**"RS AND GIS BASED SITE SUITABILITY ANALYSIS
FOR SOLID WASTE DISPOSAL FOR MOOBBIDRI
AND KARKALA REGION"**



PROJECT REPORT

Submitted by

GANESH R	KISHORE K
4AL13CV036	4AL13CV043
M MANJUNATHA	PRAVEEN KUMAR R
4AL13CV046	4AL13CV068

In partial fulfillment of the requirements for the degree of

BACHELOR OF ENGINEERING

In

CIVIL ENGINEERING

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI-590018.

Under the Guidance of

INTERNAL GUIDE

Mr. SANJAY S
Assistant Professor
AIET, Mijar

EXTERNAL GUIDE

Dr.H.GANGADHARA BHAT
Professor of Marine Geology
Mangalore University, Konaje.



Department of Civil Engineering
ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY
MOOBBIDRI-574225, KARNATAKA

2016-2017

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR MOODBIDRI D.K. -574225 – KARNATAKA.

DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE

Certified that the project work entitled "RS AND GIS BASED SITE SUITABILITY ANALYSIS FOR SOLID WASTE DISPOSAL FOR MOODBIDRI AND KARKALA REGION" is a bonafide work carried out by

GANESH R	4AL13CV036
KISHORE K	4AL13CV043
M MANJUNATHA	4AL13CV046
PRAVEEN KUMAR R	4AL13CV068

Are bonafide students of Department of Civil Engineering of Alva's Institute of Engineering and Technology in partial fulfillment for the award of BACHELOR OF ENGINEERING in **CIVIL ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2016-2017. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Mr. Sanjay. S
Project Guide

Dr. H. Gangadhara Bhat
External Guide

Prof. B Durgaprasad Baliga
Head of the Department

Dr. Peter Fernandes
Principal

Prof. H. GANGADHARA BHAT
Coordinator
Geoinformatics
Dept. of Marine Geology
Mangalore University
MANGALAGANGOTHRI - 574 199

Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

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

Name of the Examiners

Signature with Date

ABSTRACT

Solid waste management is a global environmental problem in today's world. There is an increase in commercial, residential and infrastructure development due to the population growth and this has negative impact on the environment. Urban solid waste management is considered as one of the most serious environmental problems confronting municipal authorities in developing countries. The main objective of our study is to prepare a suitable location for dumping solid waste generated from Karkala and Moodbidri Municipal areas. The base map of the study area has been prepared from Survey of India Topographical maps and converted into digital format. Geology, geomorphology, soil and land use maps of the study area are prepared from Indian Remote Sensing Satellite (Resourcesat) imagery.

Recently, due to an increase in the awareness of environmental risks from landfills, there has been a movement towards the selection of new solid waste disposal sites for the city, these days in order to solve environmental problem, a multi criteria analysis approach using remote sensing and GIS are applied and become successful. GIS can be used to convert geo-referenced data into computerized maps and map analysis tools can be used to manipulate maps in an efficient way. Remote sensing and Geographical information analysis were used in this study to find out suitable site of waste disposal. All the thematic vector layer were integrated and introduced in to overlaying and weightage analysis to carry out Site Suitability Index (SSI) using spatial analyst tool in Arc GIS 10.1 to target potential sites for waste disposal.