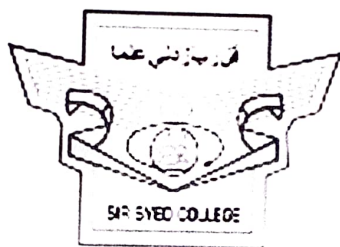


# MEMORANDUM OF UNDERSTANDING (MOU)

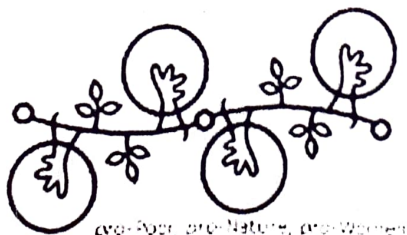
BETWEEN



**SIR SYED COLLEGE**

KARIMBAM, P.O., TALIPARAMBA  
KANNUR, KERALA, INDIA-PIN 670142

AND



**COMMUNITY AGROBIODIVERSITY CENTRE (CAbC)**  
**S. SWAMINATHAN RESEARCH FOUNDATION (MSSRF)**

PUTHOORVAYAL, P.O. MEPPADI, WAYANAD,  
KERALA - 673 577, INDIA

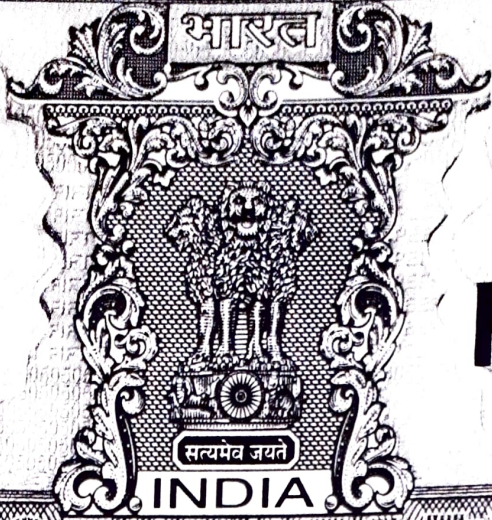
भारतवाय गर न्यायक

पचास  
रुपये

FIFTY  
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BE 544628

MEMORANDUM OF UNDERSTANDING (MOU)

This memorandum of understanding (MoU) entered into and executed on 18.02.17 between SIR SYED COLLEGE, KARIMBAM, P.O., TALIPARAMBA, KANNUR, PIN 670142

AND

COMMUNITY AGRO BIODIVERSITY CENTRE OF M S SWAMINATHAN RESEARCH FOUNTATION, KALPETTA, WAYANAD DISTRICT

Sir Syed College,

Whereas Sir Syed College established in 1967 to impart moral and liberal education to the backward minority communities of North Malabar region of Kerala; the college started functioning as a junior college under the University of Kerala in 1967. Subsequently it came under the University of Calicut in 1968 and under the Kannur University in 1996. The college is reaccredited by NAAC during the year 2017. College has completed 50 years of its glorious service and is today one of the biggest post graduate institutions under Kannur University. The college at present offers Under Graduate programmes in Botany, Chemistry, Forestry, Physics, Mathematics, Statistics, Zoology, Arabic, Economics, Functional English,

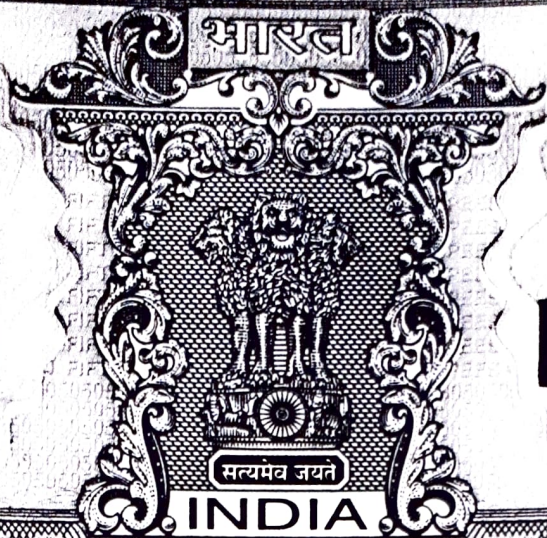
31856... തദ്ദേശീയ അംഗീകാരത്തിൽ  
കമ്പ്യൂട്ടർ സിസ്റ്റം, സി.സി.ടി. 3. 881, 895  
17.02.17.00 തീയതിയിൽ 50 ക.  
അഭിമാനം കൈമാൻ സ്റ്റാമ്പ് വേണ്ട  
എ. സത്യനാരായണൻ



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History and Commerce and Post Graduate programmes in Botany, Chemistry, Physics and Commerce. Conducting PG Diploma course in computational science aided by the UGC. Currently college is running 9 certificate courses in various departments especially Organic

farming techniques (Botany), Remote Sensing and GIS in Natural Resource Management (Forestry), Reproductive health and Parenting (Zoology) and Computational Chemistry (Chemistry). Botany and Chemistry departments are two prestigious research centers where one UGC Post Doctoral Fellow, 13 research guides and 43 research scholars engaged in various research studies. Already 11 students have been awarded Ph.D. from these two research centers. Sir Syed College is well known under Kannur University for bagging more number of academic ranks by the students of various departments.

**COMMUNITY AGROBIODIVERSITY CENTRE (CAbC)- MSSRF**

Whereas Community Agro biodiversity Centre (CAbC) established in 1997 at Wayanad district of Kerala state, as one of the regional centers of M.S. Swaminathan Research Foundation (MSSRF), Chennai, India; the centre start promoting community conservation systems of rural and tribal people of Wayanad district in particular and Kerala in general through research, extension and advocacy programmes. The centre works in partnership with rural, tribal and farming community families for sustainable agricultural and rural development. The activities of the centre have been designed in such a way that promote a pro-nature, pro-poor, pro-woman and a pro-livelihood orientation towards eco-technology development and its dissemination. Operational area of the Centre is confined to the Western Ghats regions in Kerala. Over a period of more than two decades, MSSRF has evolved with a

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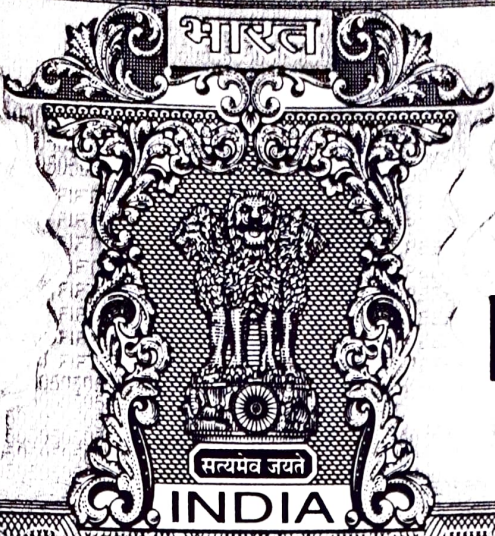




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- Collaborative research Projects of National and International importance
- International/ National Seminars and Workshops
- Sharing of Instrumentation facilities (GC-MS/FTIR Spectrophotometer/ UV-Visible Spectrophotometer/Oxygen Electrograph/ Weather station/ Leica M80 Stereo Microscope etc.)
- Frontier Lecture Series on Biodiversity Conservation, Food and nutrition and climate change
- Knowledge initiative; training and short term projects.
- Conduct EIA in Northern Kerala
- Consultancy service for Students/Researchers/Kudumbasrees/SHGs groups & farmers
- Scientific validation studies of indigenous knowledge related to plant diversity
- Preparation of data base by the outcome of scientific findings

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പ്രിൻസിപ്പൽ, സർവ്വകലാശാല, തിരുവനന്തപുരം  
 17.2.17 ടി.കെ.എസ്. കോളേജ്  
 തിരുവനന്തപുരം



- Conservation of Wetlands/Mangroves/Sacred groves/Ponds/Rivers of Northern Kerala by the involvement of students of various clubs
- Biodiversity characterization at landscape level using remote sensing and GIS in Northern Kerala
- Promote organic cultivation of Vegetables/Rice varieties through schools and Colleges NSS/NCC/Clubs
- Establishing a 24 x7 Environmental Information cell through toll free no.
- Render the technical services and space for both Interns & Research Scholars

## DEPARTMENT WISE COLLABORATION

### BOTANY

- Scientific validation Traditional Knowledge (TK) pertains to Wild food plant varieties and Medicinal Plants used by Ethnic communities
- Sharing of Instrumentation facilities (GC-MS/UV-Visible Spectrophotometer/Leica M.80 Stereo Microscope/Oxygen Electrode) for validating the traditional knowledge through Phytochemistry related project works.
- To replicate the components of Botanical Garden to different schools of Northern Kerala (Kannur, Wayanad and Kasaragod District)
- To establish Biotechnology and Tissue Culture facilities for multiplication of RET plants (*Funding is provided by BARC AND KSCSTE on-going Major project*)
- To conduct detailed study on Fungal diversity especially Mushrooms
- Provide technical support in preparing the PBR in the various Biodiversity Management Committees (BMC) of various Panchayath in Northern Kerala
- Render the technical support for promoting the cultivation of Wild edible yams and spices through NSS/NCC/Bhoomithra Sena/clubs at various schools of Northern Kerala.
- Render the service to conduct a study on the impact of allelopathic effect of a variety PGRs in agro-ecosystems of Kerala.
- Possible support for conducting the study on Below Ground Biodiversity in Western Ghats Region

## CHEMISTRY



- FTIR-ATR characterization of honey samples and their adulteration with sugar syrups using chemometric analysis.
- Determination of sugar profile by gas chromatography.
- Detection of Pesticide in soil, water and biological samples by GC-MS
- Micro and macro nutrient analysis in potential medicinal plants
- Analysing Physical/chemical qualities of water and Soil samples
- Determination of water content by hand held refractrometer
- Determination of pesticide content in honey by GC-MS

## FORESTRY

- Tribology, Biodiversity documentation and anatomical characterization of woody specimens and other field based programmes of CAB-C- MSSRF, Wayanad.
- The CAB-C-MSSRF, Wayanad would help the staff and students of the Department of Forestry, in the academics and research on ethnobiology, Ethno taxonomy, non-wood forest products and propagation techniques of wild plants

## ZOOLOGY

- Study on the detailed diversity of Fauna in Northern Kerala, especially Moths, Beetles and Butterflies
- Replicate the Knowledge of Butterfly Garden to different schools of Northern Kerala (Kannur, Wayanad and Kasaragod District)
- A Database on Shola Insects will be prepared in association with MSSRF. (**Funding is provided by MoEF on-going Major project**)
- Forest Entomology and GIS Laboratory of our department will provide necessary data for use.
- Honey Bee Culture will be done in the college. The by-product will be supplied for further use.
- Ethno Zoological studies will be taken in future. The Dataset will be provided for additional investigation.
- Preparation of Updated Faunal Diversity Volumes.



**Principal**  
Sir Syed College, Taliparamba  
Kannur.



**Director**  
Community Agro biodiversity Centre,  
Kalpetta, Wayanad

Dr. ABDUL AZEEZ. P. T., M.A Ph.D  
PRINCIPAL, SIR SYED COLLEGE  
TALIPARAMBA-670142



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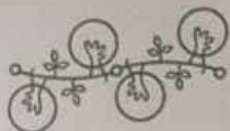


2.



Dr. V. Palakrishnan  
Head  
M.S. Swaminathan Research Foundation  
Community Agrobiodiversity Centre  
Puthoorvayal P.O., Wayanad





M S SWAMINATHAN  
RESEARCH FOUNDATION

Community Agrobiodiversity Centre

Puthoorvayal PO., Kalpetta, Wayanad, Kerala 673 577

Tel.: +91 4936 20 4477, 20 7019

Fax: +91 4936 20 7019

E-mail: office@mssrfcabrc.res.in

www.mssrfcabrc.res.in

C E R T I F I C A T E

This is to certify that the results of the research work written in the thesis entitled "Phytochemical Characterisation of Wild and Cultivated Legumes from Northern Kerala" submitted by Ms. Aswathi. V., CSIR- Research fellow, under the supervision of Dr. Abdussalam, A. K. Assistant Professor, Department of Botany, Sir Syed College, Taliparamba, Kannur in Partial fulfilment of the requirement for the award of **Doctor of Philosophy in Botany, University of Kannur** is truly based on her direct interviews with the selected indigenous individuals from the tribal communities of **Wayanad district** namely *Kattunayaka* and *Paniya*.

Ms. Aswathi. V. has followed the guidelines and code of conduct needed for documentation of the traditional knowledge during the period of her research work from **April 2017 to April 2022** in this institution under the guidance and supervision of **Dr. N. Anil Kumar, Former Director, CABc MSSRF.**

**Dr. Shakeela V.**  
(Director of Community Agrobiodiversity Centre, MSSRF)

28/02/2023

**Community Agrobiodiversity Centre**

OUR VISION: An eco-sensitive self-reliant society empowered in conservation and sustainable & equitable utilization of biodiversity. OUR MISSION: Achieve social prosperity through conservation, enhancement and sustainable & equitable use of biological diversity by adopting and disseminating economically viable, ecologically sensitive and socially inclusive approaches & processes.

Registered Office:

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