IDEAL COLLEGE OF ARTS AND SCIENCES
(Autonomous & NAAC B)
KAKINADA

List of Teachers *provided seed money* for Academic year 2022-23

Name of the Faculty	Projevct Title	Duration	Date of Grant DD-MM-YYYY	Amount granted(INR in Lakhs)
B Venkat Ratnam	College information system (CIS) using VB.net and SQL server	6 Months	09-08-2022	1.67
I vinod	Design and Development of Extruder.	6 Months	24-08-2022	1.65
Dr.G B S Manikanta Chowdary	Integrated Management of Fusarium wilt of chilli Caused by Fusarium Solani.	6 Months	07-09-2022	1.88
G Venkata Raju	Different spacing and effect of organic application on growth and yield of Green gram.	6 Months	27-09-2022	1.94

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IDEAL COLLEGE OF ARTS & SCIENCES(A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

18-07-2022

Title : Development of a College Information System (CIS) using VB.NET and SQL Server

Principal Investigator :Sri B Venkata Ratnam, Assistant Professor of Computer Science

Co- Investigator :

Project Summary :

The College Information System (CIS) project aims to develop a comprehensive software solution using VB.NET as the programming language and SQL Server as the backend database management system. The CIS will serve as a centralized platform for managing various aspects of college operations, including student information, faculty details, course management, attendance tracking, examination management, and more.

Key Objectives :

- Design and develop a user-friendly interface for the CIS with modules for student registration, course allocation, fee management, library management, and administrative functionalities.
- Implement a robust database structure using SQL Server to store and manage student records, academic programs, faculty details, and administrative information securely.
- Implement secure login mechanisms and access controls to ensure data privacy and prevent unauthorized access.
- Ensure seamless integration with existing college systems and interoperability with external systems for efficient data exchange.
- Incorporate reporting and analytics functionalities to generate insightful reports on student performance, attendance trends, financial summaries, and resource utilization.
- Design the CIS architecture to be scalable for future expansion and provide comprehensive documentation and support for maintenance.
- Conduct training sessions for college staff members to familiarize them with the CIS functionalities and provide ongoing technical support.

Expected Outcome :

- Streamlined administrative processes leading to increased efficiency in managing student records, academic programs, and other college operations.
- Centralized data storage and management resulting in improved accuracy and consistency of information.
- Availability of comprehensive reports and analytics facilitating data-driven decision-making by college administrators.
- A user-friendly interface and seamless integration leading to enhanced user satisfaction among both administrative staff and end-users.

Budget Allocation :

Budget Allocation :

Software Development Tools and Licenses: ₹30,000

Personnel Costs: ₹1,00,000

Hardware Infrastructure: ₹15,000

Training Expenses: ₹10,000

Miscellaneous Expenses: ₹12,000

Total Budget: ₹1,67,000

The allocated budget will cover essential expenses for the successful initiation of the CIS project, focusing on the initial development phase and basic infrastructure setup. Additional funding may be required for further stages of development and implementation, subject to project progress and requirements.

Plan of Work:

- Project Initiation
- System Design and Database
- System Implementation
- Testing and Quality Assurance
- Deployment and Training
- Maintenance and Support

B. V. Ratnam

Signature of the Principal Investigator

T. Satyanarayana
Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Sri B Venkata Ratnam, Assistant Professor of Computer Science at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

B.V.Ratnam

Sri B Venkata Ratnam

IDEAL COLLEGE OF ARTS & SCIENCES(A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

25-07-2022

Title : Design and development of extruder machine.

Principal Investigator : Sri I. Vinod Kumar, Assistant Professor of Food science and technology

Permanent Address : Ideal College of Arts and Sciences(A), Kakinada.

Project Summary :

Project aims to enhance food production processes by improving the extrusion technology tailored specifically for food applications. The goal is to create an efficient system capable of handling diverse food materials with precision. Emphasis is placed on hygiene, easy of cleaning, and flexibility to accommodate different food textures.

Key Objectives :

- The objectives of designing an extruder machine include achieving precise material shaping, maintaining consistent product quality, optimizing production efficiency, and ensuring operator safety.
- Additionally, considerations for energy efficiency, material compatibility, and ease of maintenance are crucial aspects in the design process.

Expected Outcome :

- Improved Efficiency: Enhance the extrusion process to achieve higher production rates and reduced processing time.
- Versatility: Develop a machine capable of handling a variety of food materials, allowing for flexibility in product formulations.
- Consistency: Ensure a uniform and consistent output in terms of texture, shape, and quality for different food products.
- Hygiene and Safety: Implement features that prioritize food safety and ease of cleaning, meeting industry standards for hygiene.

Budget Allocation :

Hardware Infrastructure: ₹ 1, 20,000

Personnel Costs: ₹30,000

Miscellaneous Expenses: ₹15,000

Total Budget: ₹1, 65,000

The allocated budget will cover essential expenses for the successful initiation of the project, focusing on the initial development phase and basic infrastructure setup. Additional funding may be required for further stages of development and implementation, subject to project progress and requirements.

Plan of Work:

- Project Initiation
- Design and development of machine
- Machine Implementation
- Testing of material and services
- Training
- Maintenance and Support

Signature of the Principal Investigator

Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, I. Vinod Kumar, Assistant Professor of Food Science and Technology at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

I. vinod.

I. Vinod kumar

IDEAL COLLEGE OF ARTS & SCIENCES(A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

22-08-2022

Title : Integrated Management of Fusarium wilt of chilli Caused by Fusarium Solani.

Principal Investigator : Sri Dr. G B S Manikanta Chowdary, Assistant Professor of Agriculture

Permanent Address : Ideal college of Arts and Sciences(A), Kakinada

Project Summary :

Fusarium wilt is a devastating fungal disease that affects chili crops worldwide. It is caused by various species of Fusarium fungi, primarily Fusarium oxysporum. Fusarium wilt poses a significant challenge to chiii production worldwide, but through concerted efforts in research, breeding, and integrated pest management, growers can minimize its impact and sustainably manage the disease.

Key Objectives :

Implementing measures to prevent the introduction and spread of Fusarium wilt in chili fields through practices such as sanitation, Early Detection and Diagnosis, Resistant Variety Development, Integrated Disease Management.

Expected Outcome :

The primary goal is to suppress Fusarium wilt incidence and severity in chili crops to minimize yield losses and maintain crop productivity.

- Increased Yield
- Improved Crop Quality
- Sustainable Production
- Resilient Cropping Systems
- Enhanced Profitability
- Long-term Disease Management
- Knowledge Transfer and Capacity Building

Budget Allocation :

- Research and Development (R&D): (40,000)
- Disease Monitoring and Diagnosis: (15,000)
- Cultural Practices: (25,000)
- Biological Control: (15,000)
- Chemical Control: (20,000)
- Extension and Outreach: (5,000)
- Infrastructure and Equipment: (10,000)
- Monitoring and Evaluation: (5,000)
- Contingency Fund: (10,000)
- Administration and Overhead: (43,000)

Total Budget: ₹1,88,000.00

The allocated budget will cover essential expenses for the successful initiation of the CIS project, focusing on the growers to consider local conditions, including climate patterns and pest pressures, when determining the fusarium wilt caused by chilli cultivation. Experimentation and observation can help fine-tune these practices to optimize crop performance and achieve desired outcomes.

Plan of Work:

- Project Initiation
- Layout Preparation of the field
- Bed preparation
- Seed sowing
- Integrated Pest, disease and water management
- Nutrient application
- harvesting

Signature of the Principal Investigator

T. Satyanarayana
Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Sri G.B.S. Manikanta Chowdary assistant professor of Agriculture at Ideal College of Arts & Sciences (A), Kakinada., hereby accept responsibility for the funding of the minor research project supplied by the college administration. I guarantee ethical standards are upheld, timely project completion, and effective use of funds. There will be frequent progress reports given, and results will be shared via academic channels. I promise to make sure the study project is carried out successfully, and I am grateful for this opportunity.

Sincerely,

Sri G.B.S. Manikanta Chowdary

IDEAL COLLEGE OF ARTS & SCIENCES(A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

13-08-2022

Title : Different spacing and effect of organic application on growth and yield of Green gram.

Principal Investigator : Sri G Venkata Raju, Assistant Professor of Agriculture

Project Summary :

Green gram, a vital leguminous crop valued for its high nutritional content and adaptability, requires careful attention to spacing for optimal growth and yield. Proper spacing ensures efficient resource utilization, adequate ventilation, and maximum sunlight exposure, contributing to healthier plants and higher yields.

Key Objectives :

Maximize Resource Utilization: Proper spacing ensures that each green gram plant has access to essential resources such as nutrients, water, and sunlight. By avoiding overcrowding, plants can utilize available resources more efficiently, leading to healthier growth and development.

Reduce Competition: Adequate spacing between green gram plants minimizes competition for resources, including water, nutrients, and light. This reduces stress on individual plants and promotes uniform growth throughout the field, resulting in higher yields.

Facilitate Air Circulation: Optimal spacing allows for better airflow between plants, reducing humidity levels and minimizing the risk of fungal diseases. Improved ventilation also helps in the efficient exchange of gases, promoting better photosynthesis and overall plant health.

Enhance Weed Control: Proper spacing between green gram rows and plants facilitates easier weed management. Ample space allows for effective mechanical or manual weed control methods, reducing weed competition and the need for herbicides.

Ease of Cultivation Practices: Well-defined spacing makes it easier to perform various cultivation operations, including planting, weeding, watering, and harvesting. Adequate spacing between rows and plants provides ample room for machinery or laborers to maneuver, improving overall efficiency and reducing labor costs.

Expected Outcome :

- Optimal Plant Growth
- Reduced Competition
- Improved Air Circulation
- Ease of Management
- Enhanced Weed Control
- Date of Sowing
- Optimized Growth Period

Budget Allocation :

- **Land Preparation:** (55,000) Cost of clearing land, plowing, leveling, etc.
- **Seeds/Seedlings:** (20,000) Cost per unit and total cost of seeds or seedlings required, including seed treatment.
- **Labour:** (25,000) Expenses related to hiring labor for planting, weeding, harvesting, etc.
- **Fertilizers and Chemicals:** (24,000) Cost of fertilizers, pesticides, herbicides, Bio fertilizers etc.
- **Irrigation:** (20,000) Expenses for setting up irrigation systems and water usage.
- **Equipment and Machinery:** (30,000) Cost of purchasing or renting equipment needed for cultivation.
- **Miscellaneous:** (20,000) Any other expenses not covered above.

Total Budget: ₹1,94,000.00

The allocated budget will cover essential expenses for the successful initiation of the CIS project, focusing on the growers to consider local conditions, including climate patterns and pest pressures, when determining the best spacing and sowing dates for green gram cultivation. Experimentation and observation can help fine-tune these practices to optimize crop performance and achieve desired outcomes.

Plan of Work:

- Project Initiation
- Layout Preparation of the field
- Bed preparation
- Seed sowing
- Pest, disease and water management
- Nutrient application
- harvesting

Signature of the Principal Investigator

Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

As an assistant professor of Agriculture at Ideal College of Arts & Sciences (A), Kakinada. I, Sri G Venkata Raju, hereby accept responsibility for the funding of the minor research project supplied by the college administration. I guarantee ethical standards are upheld, timely project completion, and effective use of funds. There will be frequent progress reports given, and results will be shared via academic channels. I promise to make sure the study project is carried out successfully, and I am grateful for this opportunity.

Sincerely,

Sri G Venkata Raju

IDEAL COLLEGE OF ARTS AND SCIENCES

(Autonomous & NAAC B)

KAKINADA

List of Teachers provided seed money for Academic year 2021-22

Name of the Faculty	Project Title	Duration	Amount granted(INR in Lakhs)
Dr. S Jagan Mohan	Roopchand Fish culture, development and breeding	6 Months	1.73
P V Lova Raju	Fish culture biofloc	6 Months	1.66
Sri Ch Ajjibabu	A Study on Common injuries in volleyball: Mechanisms of injury, prevention and rehabilitation	6 Months	1.68
Sri T Pradeep Sastry	The Seasonal Variability impact on Physico-Chemical parameters and Fish Biodiversity of Mangrove area, Andhra Pradesh, India	6 Months	1.53

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IDEAL COLLEGE OF ARTS & SCIENCES(A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

24-05-2021

Title : Roopchand Fish culture, development and breeding programme

Principal Investigator :Dr.S.JAGANMOHAN, AssistantProfessor of Fisheries and Aquaculture

Permanent Address : Ideal college of Arts and Sciences(A), Kakinada

Project Summary : Rupchand fish culture and breeding

Rupchand belongs to the pomfret verity. it is Fast growing and highly demand fish in Asian countries. In India, Andhra Pradesh is one of the largest producer and exporter of fishes. Fish contains high nutritive value along with vitamin and rich fatty acid contents. Due to the high Nutritional values, Fast growing and market potency. Rupchand fish selected for research and culture projects

Key Objectives :

1.Encourage and generate activities leading to utilisation of farmed products.
2.Farming of market potency fish species
3.supplimeent the nutrition and creating employment opportunities
4.Self -Employment with fish farming practices, Encouraging activities like Supplying fish and distribution of harvested fish.

Expected Outcome :

DIRECT BENEFITS:

- Food securities for surrounding communities
- Supply protein nutrition
- Supplementary income for families.
- Employment and Livelihood options for unemployed youths.

INDIRECT BENEFITS:

- Economic growth for communities
- Improve health standard, income levels
- Empower youth and women

Budget Allocation :

Earthen pond design and pond preparation: ₹90,000
Personnel Costs: ₹35,000
Infrastructure: ₹15,000
Training Expenses: ₹10,000
Miscellaneous Expenses: ₹17,000

Total Budget: ₹1,67,000

The allocated budget will cover essential expenses for the successful initiation of the Rupchand fish culture and breeding project, focusing on the initial development phase and basic infrastructure setup. Additional funding may be required for further stages of development and implementation, subject to project progress and requirements.

Plan of Work:

- Project Initiation
- Fish culture System Design and construction
- Pond Liners and infrastructure Implementation
- Fish culture
- Fish Harvest and Marketing
- Brooder and fish Maintenance and Support

Signature of the Principal Investigator

Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Dr.S.JAGAN MOHAN, Assistant Professor of Fisheries and Aquaculture at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

Dr. S. JAGAN MOHAN

IDEAL COLLEGE OF ARTS & SCIENCES(A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

Title:BIOFLOC FISH CULTURE SYSTEM

14-06-2021

Principal Investigator :**Sri.P. LOVARAJU,** AssistantProfessor of Fisheries and Aquaculture

Co- Investigator :Dr.S.JAGANMOHAN,AssistantProfessor of Fisheries and Aquaculture

Project Summary :**BIOFLOC FISH CULTURE SYSTEM**

Pangasius belongs to freshwater catfish verity. it is capable of high stocking densities,fast growing and highly demand fish in Asian countries. In India, Andhra Pradesh and west Bengal are the largest producer and exporter of fishes. Fish contains high nutritive value along with vitamin. Due to the high Nutritional values, Fast growing and market potency. It's meat is used for Commercial Apollo fish product preparations.Pangasius fish selected for research and culture projects.

Key Objectives :

1.Encourage and generate Biofloc fish culture activities leading to utilisation of farmed products.
2.indoor Farming of market potency fish species
3.supplimeent the nutrition and creating employment opportunities
4.Self -Employment with Biofloc fish culture practices, Encouraging activities like Supplying fish and distribution of harvested fish.
5.Increase the protein sources and encourage the sustainable production practices.
6.Fish as Source of protein as well as income source.
7. Employment opportunity for uneducated and unemployed people ,mobile them to work together for common benefits

Expected Outcome :

DIRECT BENEFITS:

- Food securities for surrounding communities
- Supply protein nutrition
- Supplementary income for families.
- Employment and Livelihood options for unemployed youths.

INDIRECT BENEFITS:

- Economic growth for communities
- Improve health standard, income levels

Budget Allocation :

Biofloc system design and preparation: ₹95,000

Personnel Costs: ₹30,000

Infrastructure: ₹15,000

Training Expenses: ₹10,000

Miscellaneous Expenses: ₹16,000

Total Budget: ₹1,66,000

The allocated budget will cover essential expenses for the successful initiation of the Pangasius fish culture and breeding project, focusing on the initial development phase and basic infrastructure setup. Additional funding may be required for further stages of development and implementation, subject to project progress and requirements.

Plan of Work:

- Project Initiation
- Biofloc Fish culture System Design and construction
- Biofloc system and infrastructure Implementation
- Biofloc Fish culture
- Fish Harvest and Marketing
- Brooder and fish Maintenance and Support

Signature of the Principal Investigator

Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Sri P.V.LOVARAJU, Assistant Professor of Fisheries and Aquaculture at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

Sri.P.V.LOVARAJU

IDEAL COLLEGE OF ARTS & SCIENCES (A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

28-10-2021

Title : A Study on Common injuries in volleyball: Mechanisms of injury, prevention and rehabilitation.

Principal Investigator : Sri CH. Ajji Babu, Assistant Professor of Physical Education

Permanent Address : Ideal college of Arts and Sciences(A), Kakinada

Project Summary :

Volleyball is a popular sport known for its fast-paced nature and dynamic movements, making players susceptible to a range of injuries. This research project aims to comprehensively investigate the common injuries in volleyball, focusing on understanding the mechanisms of injury, implementing effective prevention strategies, and developing rehabilitation protocols.

Key Objectives :

- **Mechanisms of Injury:** Investigate the biomechanical aspects and player-specific factors contributing to common injuries, providing insights into how these injuries occur.
- **Prevention Strategies:** Develop evidence-based prevention strategies, including training programs, equipment modifications, and rule considerations, aimed at reducing the occurrence of injuries in volleyball.
- **Rehabilitation Protocols:** Design and recommend effective rehabilitation protocols for common volleyball injuries, emphasizing timely and successful recovery to minimize long-term impact on players' performance and well-being.

Expected Outcome :

The Method can apply in identification of types and frequencies of injuries prevalent in volleyball, implementation of effective injury prevention measures, Rehabilitation Protocols.

Budget for required Materials:

- **Personnel:** ₹101,000
- **Research Materials:** ₹17,000.
- **Equipment :** ₹39,000
- **Surveys and Data Collection:** ₹10,000.
- **Program Development and Workshops:** ₹15,000.
- **Rehabilitation Protocol Design :** ₹15,000.

- **Travel :** ₹8,000.
- **Miscellaneous :** ₹7,000.
- **Contingency :** ₹8,400.

Total Budget: ₹1,68,000.00

Plan of Work:

- Literature review on volleyball injuries.
- Rehabilitation Protocol Design & Implementation.
- Analysis & Synthesis.
- Guidelines, Documentation & Dissemination

Signature of the Principal Investigator

Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, CH Ajji Babu, assistant professor of Physical Education at Govt College of Arts & Sciences (A), Kakinada, hereby accept responsibility for the handling of the minor research project supplied by the college administration. I guarantee ethical standards are upheld, timely project completion, and effective use of funds. There will be frequent progress reports given, and results will be shared via academic channels. I promise to make sure the study project is carried out successfully, and I am grateful for this opportunity.

Sincerely,

CH Ajji Babu

IDEAL COLLEGE OF ARTS & SCIENCES (A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

08-11-2021

Title : The Seasonal Variability impact on Physico-Chemical parameters and Fish Biodiversity of Mangrove area, Andhra Pradesh, India

Principal Investigator: Sri T Pradeep Sastry, Assistant Professor of Zoology

Permanent Adress: Ideal College of Arts & Sciences(A), Kakinada

Summary:

In general, the condition of mangroves reflects the biodiversity of the respective coastal areas. The Mangrove area coastlines with their mangrove vegetation have massive role in safeguarding the coastal biodiversity.

This chapter enables the understanding of the biological process in the mangrove area .The knowledge regarding the physical, chemical and biological characteristics of water are collected sufficiently. The zooplankton creates the substantial relationship in the food chain levels thereby promoting the production of fisheries. A detailed comparative report of the biodiversity with respect to fishes have been analyzed. The present study helps to reduce existing threats and aids in the improvement of local management, improving legislation that facilitates mangrove protection and sustained use, establishment of strategic protected areas and rehabilitation of degraded mangrove areas.

Objectives:

- To analyze the water quality in the Mangroves region
- To compare the fishes in the study area
- To compare the fish biodiversity of the Mangrove area.

Methodology:

I identified different areas of Mangroves for the research. I further proposed that I collect water samples both high tides and low tides of sea water i.e. three samples from each tide from identified areas. I further proposed to collect two water samples in every season along the year i.e., Telugu seasons; 1.Spring season (March, April) 2.Summer season (May, June) 3.Rain season (July, August) 4. Sutumn season (September, October) 5.Winter season (November, December) 6.Cool

season (January, February). Therefore I collect 432 Samples from sea and brackish water along the year. I further submit that the collected water samples immediately after the collection, I analyze the samples in laboratory and record the same.

The followings are to be identified from the water samples;

1. Temperature (thermometer)
2. pH (pH meter)
3. Salinity (Titration)
4. Dissolved oxygen (Titration)
5. Alkalinity (Titration)
6. Hardness (Titration)
7. CO_2 (Titration)

Simultaneously, I collect Fishes from the same identified areas of mangroves and identify the statistics of such species i.e. size, weight and feeding habit of them.

Expected Outcomes:

- Identification of seasonal trends and patterns in physico-chemical parameters (e.g., temperature, salinity) within the Andhra Pradesh mangrove area.
- Understanding of how seasonal variability influences fish biodiversity, including species composition, abundance, and distribution.
- Insights into the interrelationships between physico-chemical parameters and fish biodiversity in the mangrove ecosystem.
- Provision of scientific evidence to support targeted conservation and management efforts for sustaining mangrove habitats and fish populations.
- Contribution to the development of adaptive management strategies to mitigate the impact of seasonal variability on the Andhra Pradesh mangrove ecosystem, promoting resilience and long-term sustainability.

Project Budget Allocation:

Total : Rs. 1,53,000

Field Surveys and Sampling Equipment: Rs. 30,000

Laboratory Analysis of Physico-Chemical Parameters: Rs. 25,000

Fish Biodiversity Assessment Tools and Techniques: Rs. 20,000

Research Personnel (Salary and Benefits): Rs. 45,000

Travel and Accommodation Expenses: Rs. 15,000

Data Analysis Software and Statistical Tools: Rs. 8,000

Publications and Dissemination Costs: Rs. 5,000

Contingency Fund: Rs. 5,000

Total Budget: Rs. 1,53,000

Plan of Work:

Conduct seasonal field surveys to collect physico-chemical data and fish samples. Analyze water samples for temperature, pH, salinity, dissolved oxygen, and nutrient levels. Use gill nets, traps, and visual surveys to capture and identify fish species. Employ statistical tools to analyze seasonal variations in physico-chemical parameters and fish biodiversity. Interpret findings to understand the impact of seasonal variability on the mangrove ecosystem. Compile results and insights into a comprehensive report for dissemination to stakeholders and publication in scientific journals.

T. Pradeep Kumar

Signature of the Principal Investigator

T. Satyanarayana

Principal

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Sri T Pradeep Sastry, Assistant Professor of Zoology at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

T. Pradeep Sastry

Sri T Pradeep Sastry

UNDERTAKING LETTER

I, Sri T Pradeep Sastry, Assistant Professor of Zoology at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

T. Pradeep Sastry

Sri T Pradeep Sastry

IDEAL COLLEGE OF ARTS AND SCIENCES

(A.P. Govt. Aided., Autonomous & NAAC B)

KAKINADA

List of Teachers provided seed money for Academic year 2020-21

Name of the Faculty	Projevct Title	Duration	Amount granted(INR in Lakhs)
V Jeevankanth	IOT based smart home appliance control system	6 Months	1.76
B Chinna Babu	Study On the Development and Growth of leafy vegetables in Hydrophonics	6 Months	1.68

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Principal
Ideal College of Arts & Sciences (A)
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IDEAL COLLEGE OF ARTS & SCIENCES (A), KAKINADA

IoT-based Smart Home Appliance Control System Project Report

Dt:22-06-2020

Title: Development of a home automation system using IoT technology

Principal Investigator: V Jeevan Kanth, Assistant Professor of Computer Science

Co- Investigator:P P R Mohan

Project Summary:

This report outlines the potential of an IoT-based smart home appliance control system and the rationale for seeking seed funding to develop and launch this product. The report highlights the growing market for smart home solutions, the unique value proposition of the proposed system, and the team's capabilities to execute the project successfully. This report details the development of an IoT-based smart home appliance control system. The report covers the project's objectives, system design, implementation, testing, and results.

Key Objectives

- Develop an IoT-based system for controlling smart home appliances remotely.
- Provide a user-friendly interface for monitoring and managing appliances.
- Integrate with various smart appliances and platforms for seamless operation.
- Enhance convenience, security, and energy efficiency in the home environment.

System Design

The system comprises three main components:

- **Hardware:** Single-board computer (e.g., Raspberry Pi) with Wi-Fi connectivity, sensors (e.g., temperature, humidity), and actuators (e.g., relays) for connecting to appliances.
- **Software:** Custom application running on the hardware, responsible for communication with sensors, actuators, and the cloud platform.
- **Cloud platform:** Secure platform for storing user data, managing device connections, and enabling remote access from smartphones or other devices.

Hardware Selection

- **Single-board computer:** Based on processing power, memory requirements, and connectivity options.
- **Sensors:** Chosen based on the desired functionalities (e.g., temperature sensor for smart thermostat).
- **Actuators:** Selected based on the appliance type and control requirements (e.g., relay for switching on/off lights).

The allocated budget will cover essential expenses for the successful initiation of the project, focusing on the initial development phase and basic infrastructure setup. Additional funding may be required for further stages of development and implementation, subject to project progress and requirements.

Financial Projections:

We have developed detailed financial projections that forecast [key financial metrics, e.g., revenue, profitability, market share]. These projections demonstrate the potential for the proposed system to achieve financial success and generate significant returns for investors.

Signature of the Principal Investigator

PRINCIPAL

Principal
Ideal College of Arts & Sciences (W)
KAKINADA

UNDERTAKING LETTER

I, Mr. V Jeevan Kanth, Assistant Professor of Computer Science at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

V Jeevan Kanth

IDEAL COLLEGE OF ARTS & SCIENCES(A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

Dt:08-06-2020

Title :Study On the Development and Growth of leafy vegetables in Hydrophonics

Principal Investigator :Sri B. Chinna Babu, Assistant Professor of Agriculture

Co- Investigator :Sri K. Raju, Assistant Professor of Agriculture

Project Summary :

Hydroponic systems can often produce higher yields compared to traditional soil-based methods due to better control over environmental factors such as nutrient levels, pH, and water availability. By delivering nutrients directly to the plant roots in a dissolved form, hydroponic systems can maximize nutrient uptake efficiency, leading to healthier plants and reducing the need for fertilizers.

Key Objectives :

Maximize Crop Yield: Hydroponic systems aim to produce high yields of crops by providing optimal growing conditions such as consistent nutrient availability, water, and light.

Water Conservation: Hydroponic systems use water more efficiently compared to traditional soil-based agriculture by recycling and reusing water within the system, minimizing wastage.

Nutrient Efficiency: Hydroponic systems deliver nutrients directly to plant roots in a dissolved form, maximizing nutrient uptake and minimizing nutrient loss, leading to healthier plants and higher yields.

Space Utilization: Hydroponic systems can be designed for vertical farming or compact configurations, allowing for efficient use of space, making them suitable for urban agriculture and maximizing production per square meter.

Year-Round Production: Hydroponic systems can be operated indoors or in controlled environments, enabling year-round production regardless of external climate conditions, ensuring consistent food supply and reducing reliance on seasonal crops.

Quality Control: With precise control over environmental factors such as light, temperature, humidity, and nutrient levels, hydroponic growers can produce high-quality crops with consistent flavor, texture, and nutritional content.

determining the fusarium wilt caused by chilli cultivation. Experimentation and observation can help fine-tune these practices to optimize crop performance and achieve desired outcomes.

Plan of Work:

System Setup: Install the growing container, fill it with the chosen growing medium, and set up the water pump and aeration system if necessary.

- Prepare the nutrient solution according to the specific requirements of the plants you're growing and adjust the pH and EC levels as needed.
- Plant seeds or seedlings in the growing medium, ensuring proper spacing and depth.
- System Maintenance
- Nutrient Solution Management
- Pruning and Training
- Harvesting
- Cleaning and Sterilization

B. china Babu

Signature of the Principal Investigator

K. Jhansi

PRINCIPAL

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, B Chinna Babu, assistant professor of **Agriculture** at Ideal College of Arts & Sciences (A), Kakinada., hereby accept responsibility for the funding of the minor research project supplied by the college administration. I guarantee ethical standards are upheld, timely project completion, and effective use of funds. There will be frequent progress reports given, and results will be shared via academic channels. I promise to make sure the study project is carried out successfully, and I am grateful for this opportunity.

Sincerely,

B Chinna Babu

B Chinna Babu

IDEAL COLLEGE OF ARTS AND SCIENCES

(A.P. Govt. Aided., Autonomous & NAAC B)

KAKINADA

List of Teachers provided seed money for Academic year 2019-20

Name of the Faculty	Project Title	Duration	Amount granted (INR in Lakhs)
Dr K Swamiji	Efficacy, issues and challenges of village secretariat system-a model initiative of government of Andhra Pradesh	6 Months	1.81
Ms ACh Sravanthi	Status of renewable energy using mathematical modeling	6 Months	1.72

K. Nirmala Rani
IQAC
CO-ORDINATOR
IQAC
Ideal College of Arts & Sciences (A)
KAKINADA

K. Thanikachalam
PRINCIPAL
Principal
Ideal College of Arts & Sciences (A)
KAKINADA

IDEAL COLLEGE OF ARTS & SCIENCES (A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

Title of the project: EFFICACY, ISSUES AND CHALLENGES OF VILLAGE SECRETARIAT SYSTEM-A MODEL INITIATIVE OF GOVERNMENT OF ANDHRAPRADESH

Principal Investigator : Dr K Swamiji, Assistant Professor of Political Science
Permanent Address : Ideal College of Arts and Sciences(A), Kakinada.

Project Summary:

The project, "EFFICACY, ISSUES, AND CHALLENGES OF VILLAGE SECRETARIAT SYSTEM-A MODEL INITIATIVE OF GOVERNMENT OF ANDHRA PRADESH," seeks to comprehensively assess the performance and implementation challenges of the Village Secretariat System introduced by the Government of Andhra Pradesh. The initiative, designed to bring governance closer to rural communities, involves the establishment of Village Secretariats to streamline service delivery and enhance local development.

Objectives

- Effectiveness Evaluation: Analyze the efficiency of the Village Secretariat System in achieving its intended goals of improving service accessibility, transparency, and local governance.
- Impact Assessment: Examine the socio-economic impact of the initiative on rural areas, focusing on education, healthcare, infrastructure, and overall community well-being.
- Identification of Issues: Investigate and document the challenges faced during the implementation of the Village Secretariat System, including administrative, infrastructural, and community-related issues.
- Stakeholder Perspectives: Gather insights from key stakeholders, including government officials, Village Secretariat staff, and local residents, to understand their perspectives on the initiative.

Expected outcome:

- A comprehensive assessment of the Village Secretariat System's effectiveness in enhancing local governance and service delivery.
- Identification of key challenges and issues faced during the implementation of the initiative.
- Insights into the impact of the Village Secretariat System on rural development and community well-being.

Budget proposal:

- Personnel: 60,000
- Travel and Accommodation: 30,000
- Data Collection and Analysis: 20,000
- Technology and Software:15,000
- Communication and Dissemination: 25,000
- Miscellaneous: 21,000

Total : INR 1,81,000

Plan of work :

- Preparation and Planning
- Data Collection
- Data Analysis
- Report Writing
- Communication and Dissemination
- Project Conclusion

K. Saraniji

Signature of the Principal Investigator

K. Jhansi

PRINCIPAL

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Dr K Swamiji, Assistant Professor of Computer Science at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

K. Swamiji

Dr K Swamiji

IDEAL COLLEGE OF ARTS & SCIENCES (A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

Title: Assessing Renewable Energy Status in India: Mathematical Modeling

Principal Investigator: Ms A Ch Sravanthi, Assistant Professor of Mathematics

Permanent Adress: Ideal College of Arts & Sciences(A), Kakinada

Project Summary:

The project aims to evaluate the current status of renewable energy in India through mathematical modeling techniques. By leveraging data analytics and mathematical frameworks, the project seeks to analyze various aspects of renewable energy adoption, including production, consumption, distribution, and potential growth. Through rigorous mathematical modeling, the project intends to provide valuable insights into the efficiency, scalability, and sustainability of renewable energy solutions in the Indian context. The findings from this assessment will contribute to informed decision-making processes for policymakers, energy industry stakeholders, and sustainability advocates, ultimately fostering the advancement of renewable energy initiatives in India.

Objectives:

- Analyze the current state of renewable energy adoption in India.
- Develop mathematical models to forecast future trends in renewable energy utilization.
- Optimize budget allocation to support effective implementation of renewable energy projects.

Methodology:

a. Data Collection: Gather data on existing renewable energy infrastructure, energy consumption patterns, government policies, and socio-economic factors influencing adoption.

b. Mathematical Modeling: Utilize regression analysis, time series forecasting, and other mathematical techniques to predict future trends in renewable energy adoption.

c. Budget Allocation: Develop an optimized budget allocation plan considering factors such as geographical suitability, energy demand, cost-effectiveness of renewable technologies, and policy incentives.

d. Stakeholder Engagement: Engage with policymakers, industry experts, and community stakeholders to validate findings and ensure alignment with on-ground realities.

Expected Outcomes:

- Detailed assessment of the current status and potential growth of renewable energy adoption in India.
- Mathematical models providing insights into future trends and scenarios.

- Optimized budget allocation strategies to maximize the impact of investment in renewable energy initiatives.
- Recommendations for policymakers and stakeholders to accelerate the transition towards renewable energy sources.

Budget Allocation (in INR):

Total Budget: Rs. 1,72,000

- Data Collection and Analysis: Rs. 30,000
- Mathematical Modeling Development: Rs. 40,000
- Budget Allocation Analysis: Rs. 30,000
- Stakeholder Consultation and Engagement: Rs. 20,000
- Reporting, Documentation, and Dissemination of Findings: Rs. 22,000
- Contingency: Rs. 30,000

Plan of Work:

Assessing Renewable Energy Status in India through Mathematical Modeling. Steps include research, literature review, model development, parameter identification, calibration, scenario analysis, validation, report preparation, presentation, and feedback incorporation. This concise plan aims to provide insights into India's renewable energy landscape, aiding policymakers and industry stakeholders in informed decision-making.

Signature of the Principal Investigator

PRINCIPAL

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Ms A Ch Sravanthi, Assistant Professor of Mathematics at Ideal College of Arts & Sciences (A), Kakinada, hereby undertake the responsibility for the minor research project funding provided by the college management. I assure efficient utilization of funds, adherence to project timelines, and upholding ethical standards. Regular progress reports will be provided, and outcomes will be disseminated through academic channels. Grateful for this opportunity, I pledge to ensure the successful execution of the research project.

Sincerely,

Ms A Ch Sravanthi

IDEAL COLLEGE OF ARTS AND SCIENCES

(A.P. Govt. Aided., Autonomous & NAAC B)

KAKINADA

List of Teachers provided seed money for Academic year 2018-19

Name of the Faculty	Project Title	Duration	Amount granted (INR in Lakhs)
Dr G Steeven Raju	Impact Of MGNREGA On the Livelihood Patterns Of Rural Households	6 Months	1.94

K. Nirmal Rani

IQAC

CO-ORDINATOR
IQAC
Ideal College of Arts & Sciences (A)
KAKINADA

PRINCIPAL

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

IDEAL COLLEGE OF ARTS & SCIENCES (A), KAKINADA

APPLICATION FOR FINANCIAL SUPPORT TO MINOR RESEARCH PROJECT FUNDED BY MANAGEMENT

18-06-2018

Title : **Impact Of Mgnregs On The Livelihood Patterns Of Households Of Selected.**

Principal Investigator : Dr G Steven Raju, Assistant Professor of Economics.

Permanent Address : Ideal college of Arts and Sciences(A), Kakinada

Project Summary :

The study hypothesized that the successful employment genaration scheme (MGNREGS) shall fill the gap of seasonal unemployment, subsistence incomes, brings out qualitative change in the food consumption package, promotes welfare of women and children, reduces debt burden, and hence improves overall livelihoods of the poor households. Many of the earlier studies revealed that there are many irregularities in the implementation of the programme. In many cases, it is found that the works are not provided to the workers in time. Contractors play a dominant role and the nature of exploitation is one of the major constraints in the implementation of the programme involved, setting aside the very purpose of the programme. Most of the Sarpanches of villages, M.P.T.C/Z.P.T.Cs are involved in supervising the works, which are undertaken in their jurisdiction. In the selected sample areas the middlemen too, are involved in these works..

Key Objectives :

1. To review the earlier employment generation programmes and implementation aspects of MGNREGS at macro level.
2. To analyse different issues relating to performance of MGNREGS activities in the selected mandals.
3. To assess the status of socio and economic conditions of selected areas households.
4. To explain the change in the major economic indicators of the selected households after their participation in the MGNREGS activities.

Expected Outcome :

- Gain insights into the overall effectiveness of the Village Secretariat System in achieving its intended goals.
- Evaluate the socio-economic impact of the initiative on rural communities, including improvements in education, healthcare, infrastructure, and overall quality of life.
- Identify and analyze the challenges and issues faced during the implementation of the Village Secretariat System, ranging from administrative hurdles to community engagement.

- Gather diverse perspectives from various stakeholders, including government officials, Village Secretariat staff, local residents, and community leaders, to understand their experiences and insights.

Budget for required Materials:

- Personnel (Research Team): 60,000
- Travel and Accommodation: 30,000
- Data Collection and Analysis: 20,000
- Technology and Software: 15,000
- Communication and Dissemination: 25,000
- Miscellaneous: 21,000

Total Budget: ₹1,94,000.00

Plan of Work:

- Literature review on volleyball injuries.
- Rehabilitation Protocol Design & Implementation.
- Analysis & Synthesis.
- Guidelines, Documentation & Dissemination

G. Steeven Raju

Signature of the Principal Investigator

PRINCIPAL

Principal
Ideal College of Arts & Sciences (A)
KAKINADA

UNDERTAKING LETTER

I, Dr G Steven Raju, assistant professor of Economics at Ideal College of Arts & Sciences (A), Kakinada., hereby accept responsibility for the funding of the minor research project supplied by the college administration. I guarantee ethical standards are upheld, timely project completion, and effective use of funds. There will be frequent progress reports given, and results will be shared via academic channels. I promise to make sure the study project is carried out successfully, and I am grateful for this opportunity.

Sincerely,

G. Steven Raju

Dr G Steven Raju