



**SKR COLLEGE FOR WOMEN,  
RAJAMAHENDRAVARAM**



2021-2022

A STUDY ON  
GIRISH KARNAD'S TUGHLAQ

PROJECT WORK

SUBMITTED BY

T D RATNA REENA

REGD NO [9090622707

In

**DEPARTMENT OF ENGLISH**

LECTURER

INCHARGE OF THE DEPARTMENT

SPECIAL  
ENGLISH  
PROJECT

Presented by,  
T.D.RATNA REENĀ,  
III B.A.(EEP),  
NO: 905



# Tughlaq

Girish Karnad





## INTRODUCTION:

Tughlaq is a 1964 Indian Kannada language play written by Girish Karnad. The thirteen-scene play is set during the reign of Muhammad bin Tughlaq. It was first staged in Urdu in 1966, as a student production at National School of Drama. Most famously, it was staged at Purana Qila, Delhi in 1972. In 1970, it was enacted in English in Mumbai. Tughlaq, a 13-scene play been written by Girish Karnad focusing on the 14th century Turko-Indian ruler is both a historical play as well as a commentary on the contemporary politics of the 1960s. The Times of India comments: "In the play, the protagonist, Tughlaq, is portrayed as having great ideas and a grand vision, but his reign was an abject failure. He started his rule with great ideals of a unified India, but his degenerated into anarchy and his kingdom."

---

## CHARACTERS:

- Mohammad Bin Tughlaq - The Emperor
- His stepmother
- Aziz - A shrewd man who deceives Tughlaq with his disguise
- Aazam - A friend of Aziz and his partner
- Najib - An advisor and confidante of Tughlaq
- Sheikh-Imam-Uddin - A critic of Tughlaq's foolish acts
- Sihabuddin -Ain-ul-Mulk - An old friend of Tughlaq who, later, turned into an enemy
- Ratansingh - Adopted brother of Shihab-ud-din



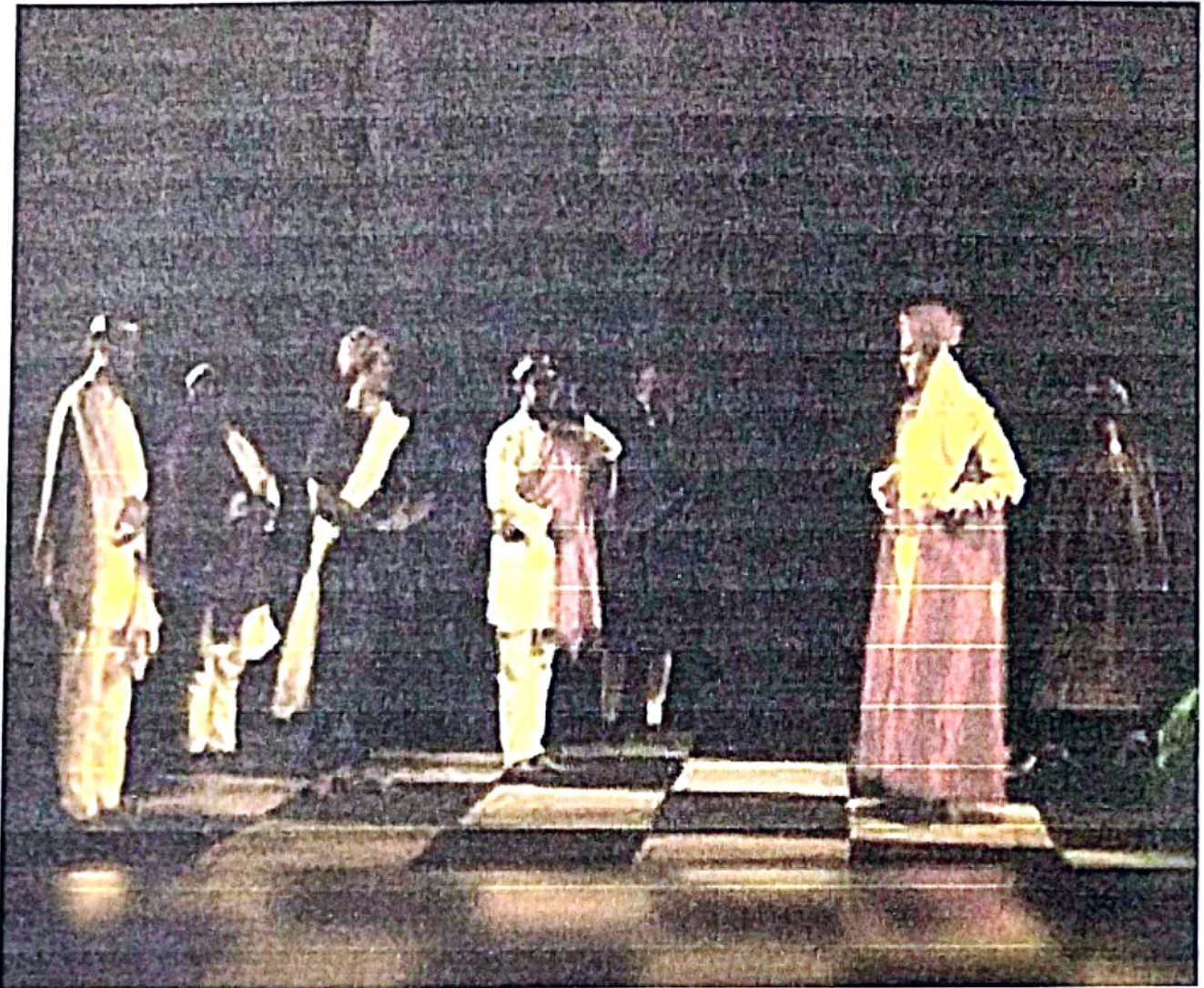
## **Scene 1:**

AD 1321- The Yard in front of the chief court of Delhi. A crowd of citizens-mostly Muslims, with a few Hindus here and there. The first scene of Tughlaq starts with a conversation between an Old Man, a Young Man, a Third Man and a Hindu man. They are talking about the rule of Muhammad Bin Tughlaq/Sultan. The old man says that Muhammad has ruined the country and is an insult to Islam. The young man defends Muhammad saying that he is a true Islamist and that he made a rule that people should pray five times a day. The announcer comes out of the court and announces that a Brahmin, Vishnu Prasad has filed a case against the Muhammad because the state officers had seized his land. The claims of the Brahmin was found to be just and in compensation, he would receive five hundred silver dinars and a post in the Civil Service.

The Muhammad comes out from the court. He announces to the crowd that he is shifting the capital from Delhi to Daulatabad as the capital city should be in the centre and not on the



border of the country. He says that it will show the bond between the Muslims and Hindu.

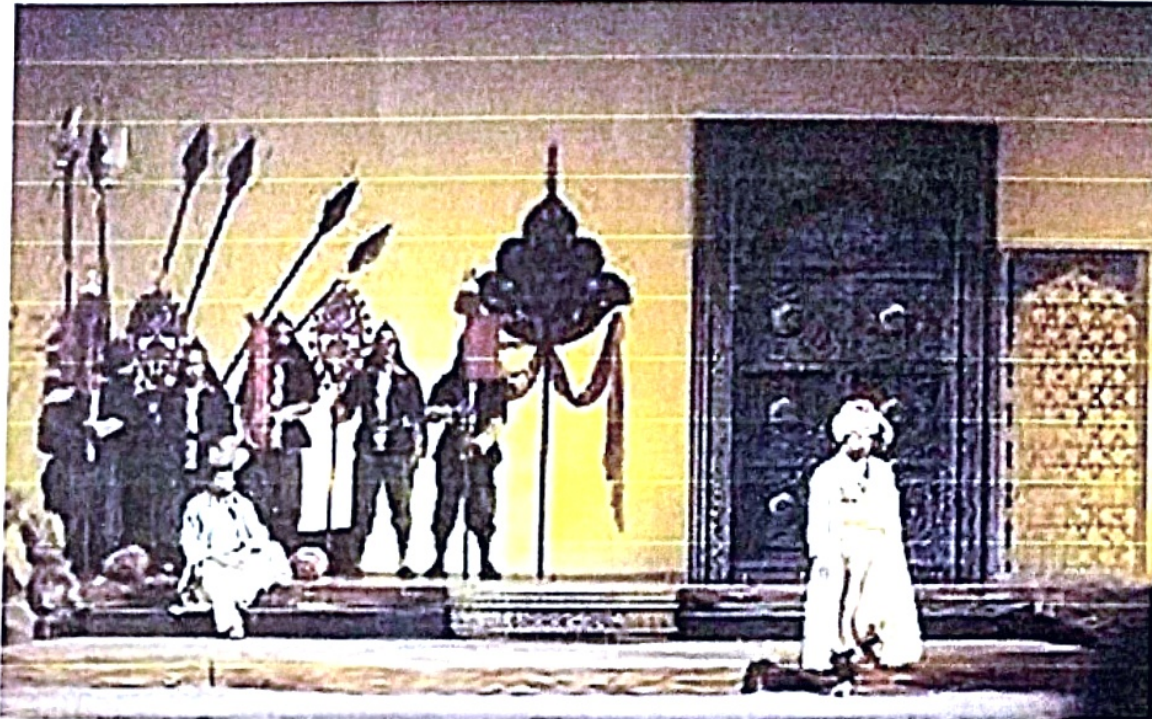


He says that people should accompany him. Again, the conversation between the old and the young man occurs. They do not like this plan. The Third man says that Sheikh Imam-uddin has claimed that the Muhammad is guilty of murdering his father and brother. The Guard comes out of the court and asks them to disperse.



## Scene 2:

A room in the Palace.



A conversation between the Muhammad and his stepmother takes place. Muhammad tells her of his sleepless nights. Muhammad asks his stepmother if she believes the gossip (that Muhammad murdered his father and brother) for which she denies to say a thing. She says she wants to forget it and not to talk about it. He also says that Ain-ul-Mulk with an army of thirty thousand soldiers is marching towards Delhi. The stepmother is shocked as they both are good friends. Then Najib (Politician) and Barani (Historian) – Muhammad's most trusted

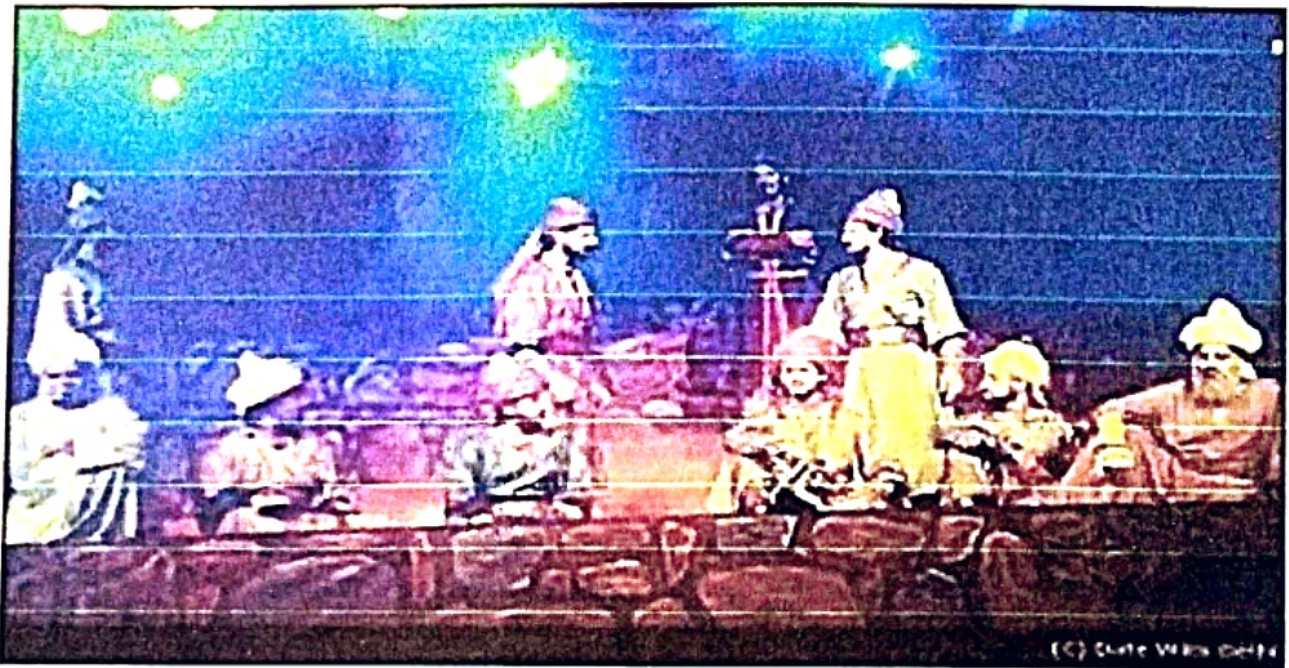


friends enter. Najib is worried that Sheik-Imam-ud-in id is in Delhi and that they should get rid of him.

Although Barani expresses that it is unnecessary. They talk about Ain-ul-Mulk and his sudden march towards Delhi. Najib says that he had refused the post as the Governor of Deccan as he already made friends with the Citizens of Avadh and didn't want to leave. It is also mentioned by Najib that the Sheik has a striking resemblance to the Muhammad. The Muhammad wants the army to be ready to March to Kanauj the day after. He assigns Najib and Shihab-ud-in to look after the administration when he is absent. Muhammad and Najib exit to see the commander-in-chief. The stepmother and Barani are having a conversation. The stepmother is worried about Muhammad and his friends who are a bad influence (Najib). Barani agrees with her. The stepmother asks him to never leave the Muhammad and says that she cannot tolerate Najib anymore. Barani is shocked about her remark though promises that he will always be with the Muhammad.



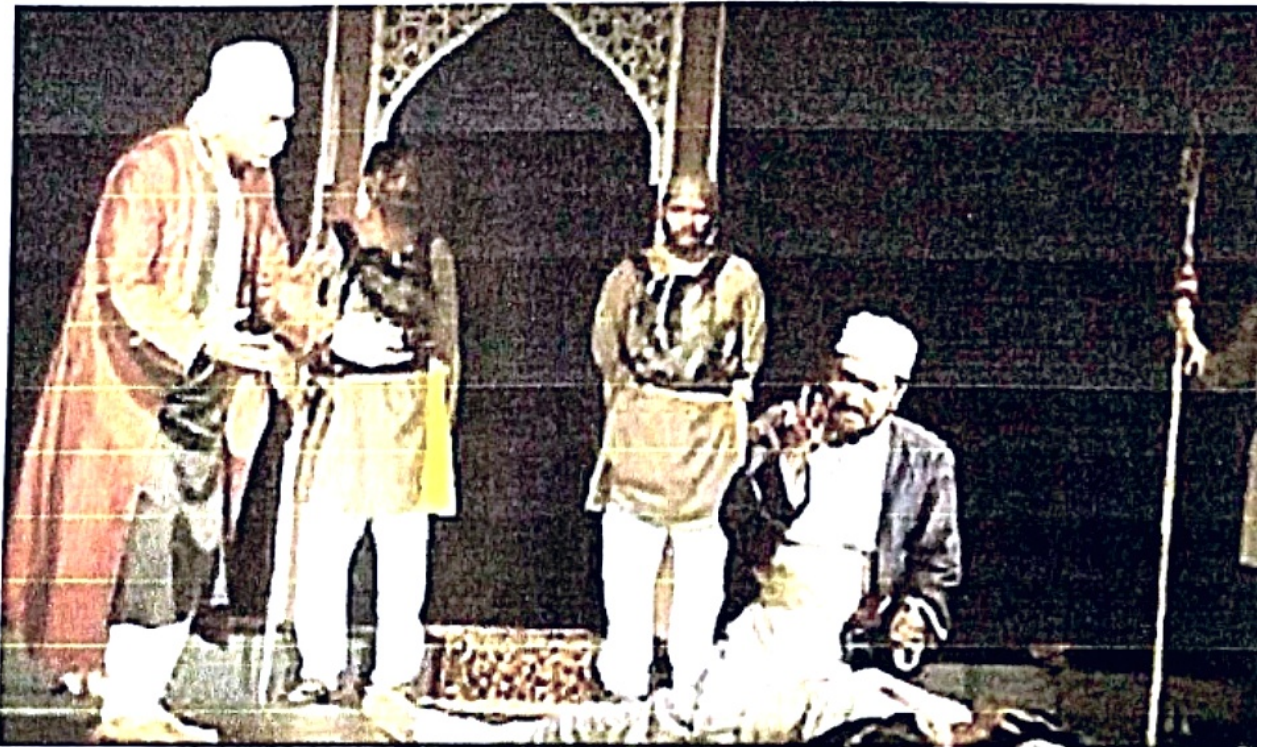
### Scene 3:



The Muhammad, Sheik-Imam-ud-in and a few servants are present. Nobody turns up to the meeting. The Muhammad had already sent servants to threaten the people that they should not come to the meeting. The Muhammad did this to make a fool out of Sheik-Immam-ud-din. The Muhammad says to Sheik that Ain-ul-Mulk is marching to Delhi and that he won't see any of Muhammad's envoys. He persuades the Sheik to go see him as Ain-ul-Mulk will only see him. The Muhammad says that there will be a war and that Muslims will die. The Sheik should go immediately to save the lives of Muslims. He is given royal robes and headdress. Now both of them look alike.



## Scene 4:



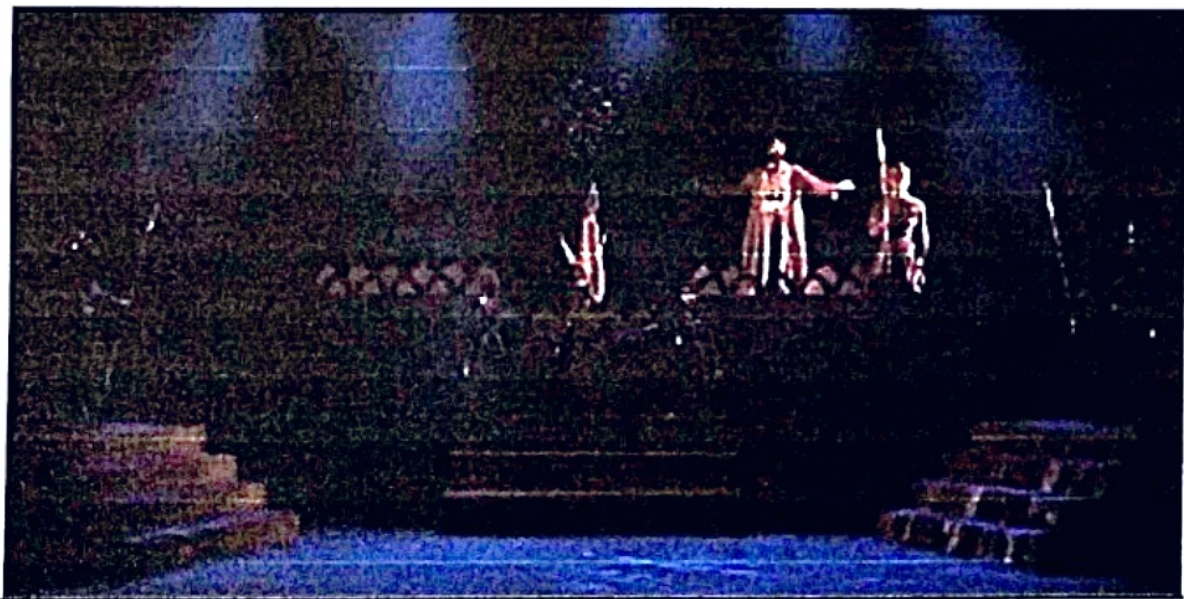
Shihab-ud-din and the stepmother are having a conversation. Sardar Ratansingh (Shihab's half brother) enters, announces that Sheikh Imam-ud-din was killed in the battle and that the Muhammad will be arriving soon. The Muhammad enters along with Barani and Najib. The Muhammad says that he forgave Ain-ul-Mulk because he had solved a chess game (that he took days to solve) in a few minutes and even spotted a flaw in his solution. He had asked him to stay in Avadh and look after the people. Barani is happy that the Muhammad is



capable of generosity. All except Shihab-ud-in and Ratansingh go. A brief Silence.

Ratansingh now tells Shihab the truth about Sheikh's death. Ratansingh had also gone along with the army. Muhammad was hiding behind the hills and laying a trap for the sheikh. When they went to propose peace, the soldiers of Muhammad started firing and when Ain-ul-Mulk's army fired back the Sheikh died. Ratansingh had escaped somehow. Shihab is confused about all the happenings. Ratansinghs says that there is a secret meeting among the nobles of the court and some citizens. Ratansingh asks Shihab also to join.

### **Scene 5:**





---

A house in Delhi. A collection of Amirs and Sayyids. Shihab and Ratansingh.

They are talking about the rule of Muhammad. The Amirs say that the capital city is being shifted to Daulatabad to weaken the Amirs. They have to pay taxes for everything they do. There is a man named Sheikh Shams-ud-in in the meeting, he says that the Sheikh Haidari is in prison and the Sheikh Hood in exile. He says there is a lot of politics going on. An example of Sheikh Imam-ud-din's life is also discussed. Also, the fact that Muhammad's soldiers went from door to door threatening the people to not attend the meeting of Sheikh Imam-ud-in. Muhammad faults are displayed in the meeting to convince Shihab to join them in their secret plan, as he is a trusted person of the Muhammad. So they plan that the following Tuesday the Amirs would be seeing the Muhammad for the Durbar-i-Khas, and at that time Muhammad and his soldiers would be unarmed. They plan to kill him during the prayer. Shihab is still confused but is convinced to be a part of the conspiracy by Ratansingh.



## Scene 6:

The Palace.



The Muhammad, Barani and Najib are present and the Amirs enter. The Muhammad tells them that Abbasid Ghiyas-ud-din Muhammad (a member of the Abbasid Khalifs) has accepted his invitation to visit the capital. He also announces that from the following year there will be copper currency along with silver dinars in his empire and that it will have the same value. It is the prayer time, Muhammad unbuckles his sword and settles. Half-way thought the prayer the Amirs draw out their Sword. Muhammad's soldiers surround the Amirs and drag them away, while Muhammad continues to pray. The Muhammad kills Shihab.



Then the Muhammad asks Najib to kill everyone who is involved in this conspiracy. He asks for an announcement to be made saying that Shihab defended and saved Muhammad's life. He says that everyone should move to Daulatabad immediately.

### **Scene 7:**

*A Camp in Delhi-Daulatabad route.*



Aziz is in disguise as Vishnu Prasad (Brahmin) and Aazam is with him. A Hindu woman is kneeling in front of Aziz, asking for a day leave as her daughter is unwell. Aziz asks her to bribe him to take a day off. But she has no



---

money and her daughter dies. Then a man, his wife and their six children. Aziz tells them that they were supposed to be there before the sunset. The man replies that he got delayed because he was burying the corpses on the way. The man says that he watches over the corpses of the men that Muhammad has killed. If their family wanted the dead bodies, they had to pay. Hearing the rumours of copper currency, Aziz tells Aazam that they should mint copper coins and become rich.

### Scene 8:

The Fort at Daulatabad.





There are two sentries, one young and the other past his middle age. They are standing near the fort and admire it. The old man says that he lost his father, son and his wife on the way. They talk about a python-like passage inside the fort that swallows people. The Muhammad enters and asks the old man to bring Barani. A conversation occurs between Muhammad and the young man. The Muhammad says that he supervised the building when he was twenty-one.

Barani enters. The Muhammad tells him that Fakr-ud-din and Bahal-ud-din in Deccan have risen against him in Bengal. He says that at this point he can only trust Ain-ul-Mulk and Shihab's father. The old man enters and announces that Najib has been found dead.

### **Scene 9:** A Hide-Out in the hills





Aziz and Aazam are stretched out on the floor. They are having a conversation reflecting the Muhammad's life. Aazam is fed up with life. Aziz tries to tell him that he must be able to rob and punish the man for being robbed. That is the real King. Karim brings a gagged man, thought to be a Turkish Merchant. The Man introduces himself as Ghiyas-ud-din Abbasid, a descendant of Khalif Abbasid and the Guest of Honour of Muhammad. He threatens Aziz for treating him like this. Aziz says that the Muhammad has killed many people since he came to Daulatabad. Aziz says that he killed a man, filled the body with straw and strung up in the market place because he pretended to be a descendant of a Prophet. Ghiyas-ud-din says that he has a letter and a ring that the Muhammad sent to him as recognition. Aziz kills Ghiyas-ud-din and plans to go see Muhammad in disguise.

### **Scene 10:**

The Muhammad and the Stepmother are having a conversation. The stepmother questions Muhammad about the copper currency situation and says that it is a foolish act. Then they talk about Najib's death. She confesses that she killed Najib. Muhammad thinks that she did this to gain control over Muhammad.



The Muhammad orders the soldiers to take her to prison and to stone her to death. He says that she is worse than an adulteress.



Barani enters. Muhammad says that he was about to pray against his own rules. Barani says that the Governor has sent a letter saying that they call all begin to pray. The announcer enters. He announces that Ghiyas-ud-din will be arriving there day after at noon and all the people should gather. The prayers would restart on the following Friday and that Muslims should pray five times a day.



## Scene 11:

A Plain outside the fort of Daulatabad.



Crowds of citizens have gathered to welcome Ghiyas-ud-din. The people say that they want food and not prayers. Aziz disguised as Ghiyas-ud-din enters and Muhammad embraces him. He falls on the feet of the holy man to wash away all his sins.

The Hindu woman recognizes Aziz. She comes out of the crowd and says that Aziz had killed her child. But nobody listens to her. Riot begins.



## Scene 12:



Aziz and Aazam are in the Palace. Aazam is afraid of standing with Aziz in doing all the wrong things. So decides to leave the palace. Aazam tells Aziz that he has bribed two servants to bring two horses and that they'll be ready in half an hour. Aazam says that the city is in chaos and that they have to escape through the secret passage. They talk about the coins heaped outside the palace. Aziz says that many of the coins were made by them. Aazam said that he saw the Muhammad dig his fingers into the coins, let them trickle out and stood there for half an hour. Aazam tries to convince Aziz to come along but Aziz refuses. Aazam leaves the palace.



### Scene 13:

Another part of the Palace.

The Muhammad and Barani are having a conversation. Barani wants to leave for his mother's funeral who died in the riots. He is unsure if he will return to the Muhammad. A soldier enters. He announces that Aazam Jahan has been murdered in the tunnels. The Muhammad asks the soldier to keep this a secret and sends for Ghiyas-ud-din.



Aziz (in Disguise) enters. Aziz then reveals his disguise as he is questioned by the Muhammad. He says that he is a dhobi from Shiknar. He says that he shouldn't be punished as he has followed every order and instruction with great attention. He says that he has been



welcomed publically and called a saviour by the Muhammad. The Muhammad has also fallen to his feet to get blessings. Then he also revealed that the Brahmin-Vishnu Prasad was him. Aziz had taken the silver dinar to Doab and brought some land for farming. He also admits that he had killed Ghiyas-ud-din. He asks Muhammad to make him an officer in the state to show him his loyalty. The Muhammad agrees to send him to Deccan as an officer. The Muhammad asks him to lead the prayer as if he were Ghiyas-ud-din. Aziz Exits .Barani cannot understand why the Muhammad has not punished Aziz. The Muhammad tells him that when he forgave Ain-ul-Mulk Barani was happy with the decision. Barani replies that he is a good friend and that Aziz is not the same. Ain-ul-Mulk has invited the Muhammad and people to stay at the capital. The Muhammad says that he must return to Delhi with his people. Barani is very upset. Barani asks permission to leave. He doesn't reply for a while. He says that he is sleepy after five years. He asks Barani to go and before that to pray.

**THE END**





SKR COLLEGE FOR WOMEN,  
RAJAMAHENDRAVARAM



2021-2022

A STUDY ON

THE *Structured...programming*

PROJECT WORK

SUBMITTED BY

M. Asritha

REGD.NO. 2009D7H02039

In

DEPARTMENT OF COMPUTER SCIENCE

K. Raju

LECTURER

K. Raju

INCHARGE OF THE DEPARTMENT



# Introduction structure of program :-

## Introduction :-

If a program contains thousands of instructions and an error occurs, it is difficult to locate that error through the program, however if our code is in a structured manner, we can easily detect the error and then go to that location to correct it to save a significant amount of time in programming the use of structured programming. Its major concepts, types and the advantages and disadvantages of structured programming.

## Structured programming :-

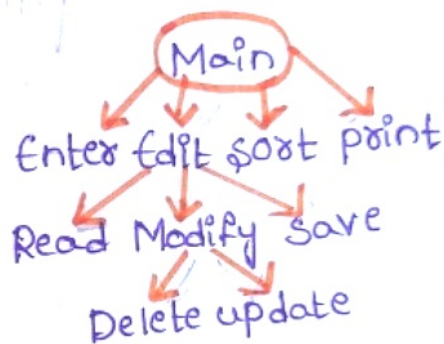
Ask user for text input

Receive user text input

process user input

Return result to user

## EXAMPLE :-



The size of the software grows as the lines of code multiply during the coding process, as well as know gradually, recalling the program's flow becomes nearly impossible sharing, debugging and modifying software become extremely difficult if one forgets how software and its underlying programmes, files and procedures are built. The solution to the problem is structured programming if possible. Programmers to use subroutines and loops rather than simple jumps in the code, which results in greater clarity and efficiency. It also aids programmers in reducing coding time and organising their code properly.



## Why do we use structured programming:-

We use structured programming to make it easier for the programmer to understand the program. If a program contains thousands of instructions and an error occurs, it is difficult to locate that error throughout the program, however in structured programming, we can easily detect the error and then go to that location to correct it. It saves a significant amount of time.

## Major concepts in structured programming:-

Structured programming uses three major concepts.

- ① Top-down Analysis
- ② Modular programming.
- ③ Structured coding.

### ① Top-down Analysis.

Software is always designed to perform some kind of analysis in the world of software. This type of analysis is referred to as a problem. As a result, we must comprehend how to address the issue. The problem is broken down into small pieces with some significance in top-down analysis. Each problem is solved individually and the steps to do clearly stated.

### ② Modular programming.

While programming the code is broken down into smaller groups of instructions, these groups are referred to as modules, subprograms, or subroutines. Modular programming is based on an understanding of top down analysis it discourages which are analogous to functions. A procedure can access and modify global data variables and store local.



## Coding structure:-

Structured coding in contrast to top-down analysis sub divides Modules into smaller units of code in the order of their Execution. The control structure is used in structured programming to control the flow of the program, whereas structured coding uses control structure to organise its instructions in definable patterns.

## Types of structured programming:-

structured programming can be divided into three categories.

### procedural programming:-

It is a programming paradigm that is based on the idea that programs are sequences of instructions that must be executed. They place a strong emphasis on dividing programs into named sets of instructions known as procedures, which are analogous to functions. Principles of procedural programming.

- ① Programs are made up of instruction sequences
- ② procedure which are logical blocks made up of groups of instructions, can be called from anywhere with the code.
- ③ A procedure can take arguments and returns results to the caller. functions can also access and modify variables in the global scope.
- ④ procedural languages use block-based control flow rather than go to commands and adhere to structured programming practices.



\* object-oriented programming loop

\* It defines a program as a collection of objects or resources to which commands are sent.

\* An object oriented language will create a data resource and pass it to processing commands.

\* For Example a procedural programmer may say "print (object)" whereas an object programmer may say "Tell object to print".

### Model-based programming:-

\* Database query languages are the most common example of this.

\* Units of in database programming are associated with steps in database access and are updated or run when those steps occur.

\* The structure of the code will be determined by the database and database access structure.

\* Reverse Polish Notation (RPN) a Math problem structure that lends itself to efficient solving of complex expressions is another example of a model based structure.

### Advantages and Disadvantages of structured programming

#### Advantages of structured programming:-

- ① Application programs are easier to read and comprehend.
- ② Application programs are less likely to contain Logic Errors.



③ Errors are more easily Identified.

④ It increases productivity during application program development.

⑤ The design of application programs has been improved

⑥ Application programs are more easily maintained

⑦ Machine-Independent Mostly.

### Disadvantages of Structured Programming:-

\* It is machine independent so converting it to machine code takes time.

\* The program is dependent on variables such as data types. As a result, it must be kept up to date with the changing needs.

\* The converted machine code differs from the assembly language code.

\* This approach is language dependent, so the development usually takes longer. In the case of assembly language development takes less time because it is pre-programmed for the machine.



S.K.R. College for Women, Rajamahendravaram			
Department of Sanskrit			
ODD & EVEN Semester -2019-20			
PROJECT WORK			
Sl.No	Class/Group	Topic	Name of the Student
1	Ist Degree Ist Sem	Abhignanam	D S S Vyshnavi
2		Vasistasrama gamanam	B Devi Niharika
3	Ist Degree IIInd Sem	Gangavataranam	SK Mahabunnisa
4		Gangavataranam	M Rohitha
		<i>Gangavatayanam</i>	<i>R. REVATHI</i>
5	II nd Degree IIIrd Sem	Dootavakyam	D S S Vyshnavi
6		Asaninirasam	T Pallavi



SANSKRIT

PROJECT

जाडावकरराम

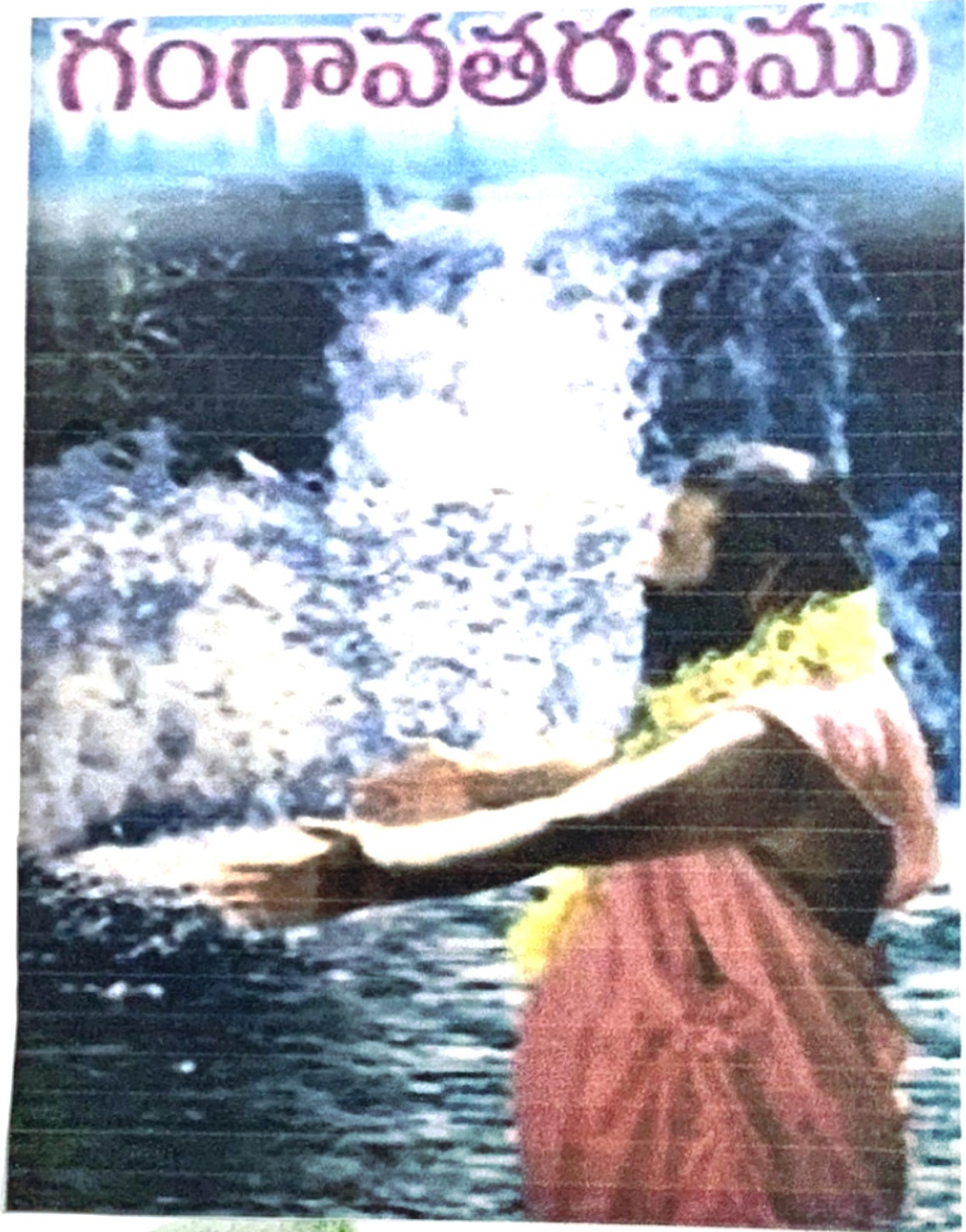
II Sem

NAME - R. Revathi

Group - 1<sup>st</sup> B.A (H.P.T)

Roll No - 1152







# గంగానది

భారతదేశంలోని, బంగ్లాదేశ్‌లోని రెండునదీన నదులలో ఒకటి. భారతదేశం లోతట్ల ప్రాంతం, యర్రా, సయ్యలీ గంగానదిలో అనూభావంగా ముడిపడి ఉన్నాయి. అందుకంటే అది గంగానదికి ఉన్న ప్రాంతాల్లో అత్యున్నతమైనది. "గంగమతి లోయ" అని, "వజ్ర గంగ" అని "గంగా భద్రాణి" అని ఈ నదిని అంటారు. "సింధు" అన్న పదానికి "సంస్కృతం" "గంగ" అన్న పదాన్ని అంటారు.

గంగానది మొత్తం పొడవు సుమారు 2,525 కి.మీ. గంగానది ఉపనదియైన యమున కలిసి అనూభావ మైదాన ప్రాంతాల్లో ప్రవహిస్తాయి. నారమలమైత ఈ 'గంగా-యమునా మైదానం' ఉంది.



భారతదేశం, బంగ్లాదేశ్‌లోని అత్యంత పెద్ద నది. మొత్తం అనూభావం 8.5% ప్రజలకు ఈ మైదానం అనూభావం.

ఈ కారణంగా ఈ ప్రాంతాల్లో అనేకమైన లోతట్ల, ప్రాంతాల్లో, నాంధ్రిక సమస్యలు ఉన్నాయి.



భృగ్గీర్తనా యామనాల్లయితే :-

ఉల్లూఖాండే రాష్ట్రం సరిధిలోని హాచులయ  
సర్పలాళి గణానిత అనే హాచునివడంబి భాగిరథి నది ఉద్భవించింది.  
సహ్యాద్రి పర్వతంబి దేవ, సురలక వద్ద అలకనందనది దానితో  
కలుస్తుంది. అక్కడినుండి దానిన గంగ అంటారు. కిరేతుంబు హాచులయలోని  
సహ్యాద్రియ నది హాచులయ వద్ద మైదాన ప్రాంతంబి  
సంవేసిస్తున్నది.

మైదానంబి సహ్యాద్రియ మాగ్గల గణానితంబి క్రోతి,  
గోమతి, నోణి వంటి నదీనదులు కలుస్తాయి. సురలక నదికేరకంబి  
గంగకు ఉపనదియైవగాన, సురలక నది గంగకు వేరే  
నదిగా అక్షిణిధిల సరిగవేసిస్తున్నది. గంగలవంటి సురలకకు పుణ్యం  
అంటుంటుంటి కులంబి నది. ఈ నది నదుల బిడ్డన ఉల్లూ  
భాగిరథిదేవంబి పెద్దనైన నదిగాన, భృగ్గీర్తనలు ఉన్నాయి. ధృగ్గీ, కామ్యూరు,  
అలకనందన, వాళివారి, వాళివారి, కలకంబి వంటి అలకనందన నదికి కిష్టి.

అలకనందన నదివారి ముఖ్య నదిలంబి కలసి  
గణానితి ముఖ్యమంబిగా మారుతుంది. పుణ్యంబి బెంగాలంబి ముఖ్య  
వద్ద ముఖ్యమంబిగా మారుతుంది. అక్కడినుండి నల్లని నది ప్రాంతంబిగాన.  
విశాఖమైన గణా- నల్లని దేవు బిడ్డలంబి ముఖ్యమంబిగా. కలకంబి  
నది నల్లని నది బిడ్డన ఉంది. ప్రధానమైన గణానితిని ముఖ్య  
నదివారి "సర్ప" నది అంటారు. సర్ప నది బిడ్డలంబి సహ్యాద్రియ  
నదివారి (బిడ్డలంబి) నది నది అయిన దేవుల నది సర్పలంబి కలుస్తుంది.  
బిడ్డలంబి మైదానంబి ఈ ముఖ్యమంబిగా అనేకంబిగా నది అక్కడి  
సహ్యాద్రియ వంటి దేవు గుణం సహ్యాద్రియ, నదివారి బిడ్డలంబిగాన  
సహ్యాద్రియ కలుస్తాయి.



సుందర ఎనాలు డెల్టా దట్టమైన వృక్షాలతో కూడిన అడవి.  
 సుర్భావరణి పరంగా నిశ్చలమైన చాలా వృక్ష, జింబు సెలవకు అనూంలం.  
 మట్టికొనే రాయల బహుళ పుల, గంగానది డెల్టా, బరామతి డెల్టా,  
మంచుగిట్ల వార్షిక చేప చిట్టెట్ల ఎక్కువైవని.

హోయూమలెయి గంగానది యొక్క ప్రాముఖ్యం :-

వావన గం :-

హోయూమలెయి అచారాల సకారం గంగానది చాలా  
 ముఖ్యమైంది. వావనం చేసింది. దిశ్యమయి గంగానదిని గానం చేస్తే  
 జిన్నే జిన్నేల వావనముని ఎముక్కు అభివృద్ధిని, చందవారిని ముందు  
 గతా జలం ఎగిరి స్పర్శనాకు న్నెరులమని ఎనుకం. చందవారిని  
 యేమ కుటుంబికుల  
 అస్థికలను గంగానదిని  
 నిమజ్జనం చేయడంకి  
 దూరదూరాల నుండి  
 వారణాసికి, గయకు,  
 మురుగతు, ఇతర  
 గంగానది తీర్థాలకు  
 వస్తారు. గంగానది  
 జలాన్ని డివై చున్న



వాతలని ఇడకలని దొరుకోవడం సుఖసౌఖ్యమని భావిస్తారు.

గంగానది తీరాన కుంభ మేళ, భరతపూజ వంటి  
 ఉత్సవాలు జరుగుతాయి. కుంభమేళ మొందడంకిని అతిసద్దా  
 జినసుమూహాలో ప్రాదుకొని ఉత్సవం. వారణాసి హోయూమలెయికు  
 పరమ ముఖ్య స్థానం.



## హేమాలయ గంగ

శ్రవణ గంధమైన బుద్ధిదము అని నదీస్థలే అని యోర్పునూడి నడమరవకు ఉన్న నదుల పేర్లు చెప్పబడ్డాయి. వాటిలో గంగానది పేరు వచ్చింది. బుద్ధిదము 3.58-56 అని ఇలా చెప్పారు - "విరులారా! యి నోనగ్రహం, యి పవిత్ర స్త్రీహం, యి సంపద అన్నీ బొప్పని బిడ్డైన ఉన్నాయి". ఇది గంగ గురించి కావచ్చును.

బుద్ధిదము 1. 116-18-19 అని బొప్పని గురించి, గంగానది అని డాక్టర్ల గురించి రెండు వరుస శ్లోకాలు ఉన్నాయి.

శ్రవణ అర్చ రుగంధి సింధు, సరస్వతీ నదులకు ఎక్కువ ప్రాధాన్యం ఉంది అనిపిస్తుంది. వేదాల కాలముండి గంగానది ప్రాధాన్యత పెరిగినట్లుంది.

## గంగావతరణ గాథ

గంగ గురించి, గంగావతరణం గురించి ఆసక్తికరమైన శ్రవణ గాథలు ఉన్నాయి. భాగవతంలోను, బృహత్పర్షి శ్రవణంలోను, దేవీ భాగవతంలోను గంగను గూర్చి పెక్కు గాథలున్నాయి.





జిగజ్జినని నిరాకారయైన గంగ (బుక్కడేవు)ని కలుపు  
 నుచుండెను. దీకమూలు నెంకరుడు రాగము లాలాపించినప్పుడు నారాయణుడు  
 దేవనిభవించెను. ఆ పురుషుని దేవమునకు బుక్కడేవుడు లేన  
 కనుండలప్పుడు లోకంబాగా నిరాకార గంగ జలమయమయ్యెను. (ఈ  
 మహావిష్ణువు వామనావతారమున (అవిడముడై పుణ్యకములను  
 కొక్కెనప్పుడు బుక్కడే లేన కనుండబులెని ఆ నీటిలోనె) విష్ణునామమును  
 కడిగెను. ఆ పాదమునుండి దేవదానంబయినదే విష్ణుగంగ.

అర్చనానికప్పు రాజైన సగరునకు కేసరి, సుమతి అను  
 ఇద్దరు భార్యలు. కేసరికి అసమంజసుడు కుమారుడు జన్మించెను.  
 సుమతికి 60 వేల మంది కుమారులు కలిగిరి. సగరుని అష్టాదశ యశాక్షి  
 భంగం చేయడానికి ఇంద్రుడు అరాగవేసువును వాణ్ణు అని వాండు.  
 ఆ అష్టాక్షి వారకడానికి వాళ్ళు సుమరుని 60 వేల మంది పుత్రులు  
 కుల మహామంది నెంజులను భగవంతుని పొందుదు. వారి కేంద్రమగలులు  
 లభించుండగా దురిజ గంగను వాణ్ణు అని అని అంది. సగరుడు,  
 అయి కొడుకు అసమంజసుడూ అపస్త్ర చేసినా నెంజుకొను  
 లేకపోయింది. అసమంజసుని కొడుకు అశుమరుడు. అశుమరుని  
 కొడుకు భగిరథుడు.

భగిరథుడు లేన అలలకు కేంద్రమ గురులు (వేళ్ళు) అని  
 గంకనీని అనుకు రచెనాడు. గంగ (వల్లెక్కె) "నేను భూమి మిదికి  
 దిగిరావడానికి సిద్ధంగా ఉన్నాను. కాని నా దుండు భగవంతుని వాళ్ళు ఉన్నాను?  
 అని అడిగింది. భగిరథుడు నిశ్చనకనీని అనుకు రచెనాడు. అనుగ్రహించిన  
 నిశ్చడు దిజ గంగను భువకి రాగాని లేన అలలమింప, జలంబులు అని  
 బుధించాడు. భగిరథుని వాళ్ళవల దీక పారును నేలకు వదలెడు.  
 భగిరథుని వెకు గంగ పరుగులు అయి నాగింది. దారిని  
 జిన్నముని అనినమాళ్ళి ముంకెళ్ళి "జొన్ను" అనినది.



లేపై నాగరాలి సువేసింక, వాలాశానికి -తేరి, సగం ప్రయోకు  
 ఉల్లెను గలెలను కలగజేసింది. బాపు వర్షకల్పాలి నిలాకల్పాలి అని  
 లెలు సినీమాలి కన్నుల సులుగుగా -తేరికలెలయింది.

స్వర్ణాలి "మండంకి" గా, భుంకాలి "గంగ" లేదా  
 "అలకనంద" గా, వాలాశాలి "భుగవతి" గా మూడు లోకాలి  
 సువేసింకనందున గంగను "లేరుధగ" అలారు.

గంగానది భుంకాలి అవతరింపడు :-

భుగవతుడు, గిరికర్ణకల్పాలిను -తేరి లెలును  
 -తేరించుగా, దులునియైన సువేసింకను లోకాలిండి సడే  
 దేవతలనదియైన గంగానదిని మెలుకుకు అంగిరింకలారు.



గంగానది లెన  
 కరటాల సుమారులలో  
 దిగలెగనాతిరాలను  
 ముంకలెసింది.  
 చుండుడు, నక్షత్రములు  
 లనదికి శంఖ  
 నక్షత్రాలైనాయి.

గంగానది కరటాలి  
 పడి నూర్కుకి

గురాలు దారియ్యాయి. సురుగులలో దిగలెగనాతిరాలను ముంకలె  
 వేసింది. చుండుడు, నక్షత్రములు లనదికి శంఖ నక్షత్రాలైనాయి.  
 గంగానది కరటాలిపడి నూర్కుకి గురాలు దారియ్యాయి.  
 సురుగులలో ఇండుకి వాహనమైన ఐరావతము కప్పబడగా



దానికి వెనకటంబని ఇంకొకటి నివేదించాడు. గంగా (మూవం నందం నీటివేనానాంబం నీటివేనాంబం వలన నుల్లుడు దొక్క తేలియక

గొప్ప గర్వం నీటివేనాంబం నీటివేనాంబం గంగానది, పాల్వతీవేనాంబం పరమేశ్వరిని జీవించిన జీవించినవలెనని సమీపానికి దూరం. పరమేశ్వరిని జీవించినవలెనని - అక్కడవారిని బయటకు వచ్చే పూర్ణం గంగానది, గడ్డిపరక - అవేనాంబం మంచుబండలలా (అకాశాన్ని) నింపని జీవించినవలెనని అ గంగానది కనిపించకపోవడం, భగవంతుడు అధియోక్తి వేనాంబం నీటివేనాంబం పరమేశ్వరిని ప్రార్థించాడు.

భగవంతుని ప్రార్థనలో పరమేశ్వరుడు గంగానదిని వదిలిపెట్టగా, అ గంగానది ఏడు పాదాలూ మూడు నోములయ్యాయి. పై భాగమందున్న బయట నీరు యిటు పడింది. ఏడు పాదాలలో మూడు తొమ్మిదికొనుకు రువహించగా, ఇంకొకటి మంచు పడినది దొక్కనుకు రువహించాయి. మిగిలిన పాదం పిల్లకొమ్మలంబం తేలియకు సిద్ధపడుచున్న భగవంతుని వెలు బయటపెరినది. అ తథా భగవంతుని వెలు బయటపెరిన గంగానది మూడుపాదాలని జీవించినవలెనని అకాశాన్ని మంచుబండలలా. దానిని కలిపించిన జీవించినవలెనని దానిని ప్రార్థనగా అకాశాన్ని, అటువలె నాకాశాన్ని, అన చూడగా గంగానదిని వదిలిపెట్టాడు. జీవించినవలెనని వదిలిపెట్టబడిన గంగా (మూవం) అన పిల్లలను స్వర్గానికి పంపి, సులభమైన భగవంతుడు అన నగరానికి వెళ్ళుకున్నాడు.



# గంగా న్ననం మరియు గంగా మహిమలు

భారతదేశంలో భోగ్యము అనునప్పుడు మిద ఉన్నప్పుడు భక్తిరంజు కొరికపై భోగ్యము గంగానది మహిమలు వర్ణించారు.

- \* గంగా, యమున, సర్వసేతులు కలిసిన గంగానది న్ననం చేసినట్లువలన కలుగు శ్రుత్యం గుర్తు అయినా దానాదులు చేసినదానికంటే అధికం.
- \* గంగాజలం కొంచెమైనా తాగినా నీటిని సకల వానములు వదిలించును. స్వయం లభించును.
- \* నీటిని ఎవరిక గంగానదియందు ఎన్ని సందర్భములు తోడునో అలాగే అన్ని సందర్భములు స్వర్గమున నుండినవి.
- \* గంగానదీనమాచరించిన వారు పరిశుద్ధులుగాయేగాక విడు లోరముల వారు పరిశుద్ధులుగుదురు.
- \* గంగాజలం తాగిన కలుగు ఫలం నూరు చంద్రులవలె అధికం చేసినదానికంటే అధికం.
- \* నీరగు, తేనెలందు గంగా పుష్కరికను తాసకుని న్ననమాచరించిన గరుడతలెనీ చూచి వానములు వానములనట్లు వానములు దూరమగును.
- \* అధికం తేనీ జనులకు గంగ అధికమును. తేనెలకు అధికముల వలె మునులకు గంగ అధికమునది.
- \* గంగానది తరంగముల నుండి వచ్చిన గాలి తేనెలనువకు నీటిని పరమానందము కలిగించుచూ వానములను నూరిం చేయును.
- \* మరణకాలమందు గంగను తలచినవారికి మోక్షం లభించును.
- \* గంగ మోక్షం లభికములందు ప్రమాణం లభికముల వృత్తిలం చేస్తుంది.



S.K.R. College for Women, Rajamahendravaram

Department of Sanskrit

ODD & EVEN Semester -2021-22

PROJECT WORK

Sl.No	Class/Group	Topic	Name of the Student
1	Ist Degree Ist Sem	Yakshaprasanna	M D Sharmila
2		Aryapadukabhishekam	T Harshitha
3		Swamy Vivekananda	K Kusuma Kumari
4	Ist Degree IInd Sem	Indumathi Swayamvaram	A Kavyasri
5		Buddhacharitam	G Amrutha
6	II nd Degree IIIrd Sem	Bhavabhooti (Kavi)	Ch Sowjanya
7		Shankaracharya	Y Bhuvaneswari
8		Chanukya	D Durga Bhavani



Sanskrit

Project work

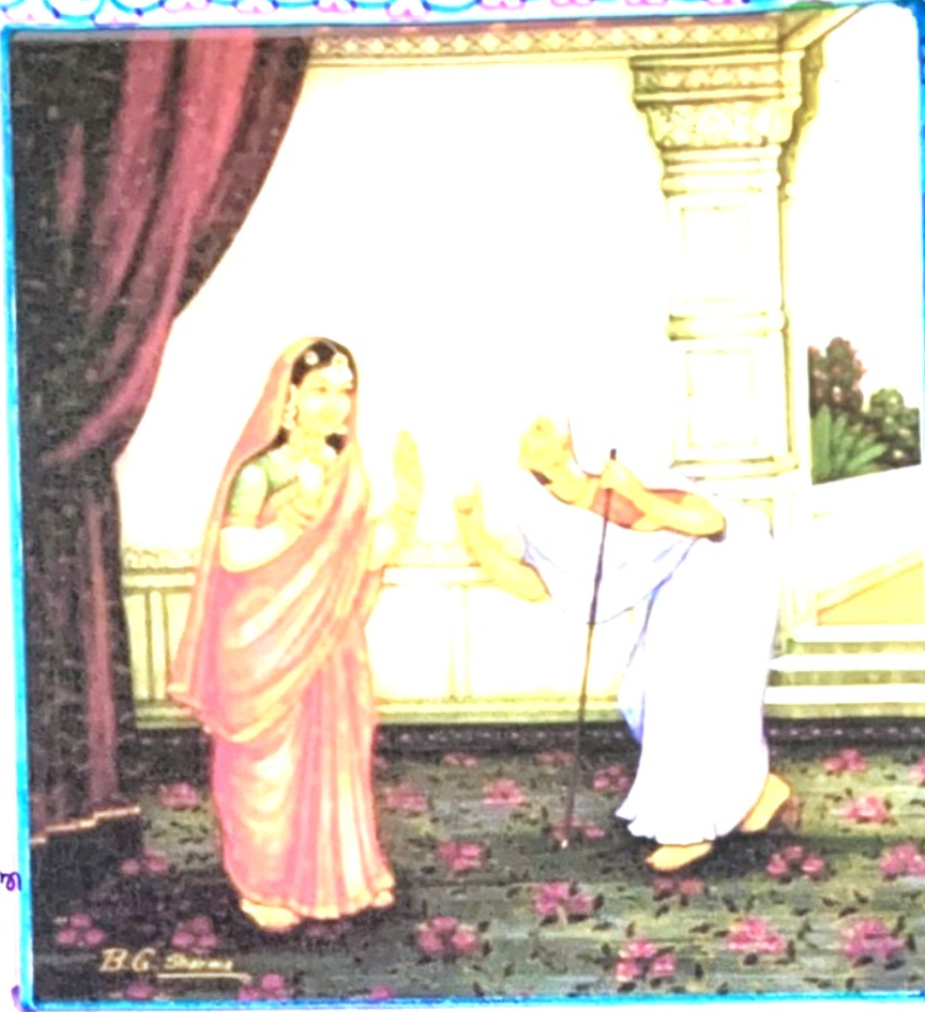
आर्या पादुकाभिषेकम्!

T. Harshitha  
I<sup>st</sup> Degree  
(H.S.C.S.)



కవి పరిచయము:-

‘ఆర్యపాఠ్శాలావిషయకః’ అనే పాఠ్యభాగము వాత్మిక మహర్షి రచించిన ప్రముఖమాయావివేకాన్ని అయోధ్యకాండ నుండి గ్రహించబడినది. ఇందు అయోధ్యకాండలాగాని 100వ సర్గ నుండి 115వ సర్గ వరకు గల శ్లోకములూ కొన్నింటిని విశ్లేషించి కుర్చుకున్నాము.



పాఠ్యభాగ పరిచయము:-

అది అర్జునుని మేరకు సోమలక్ష్మణ సమేతుడై వనవాసము చేయుచున్న రాముని వద్దకు భరతుడు వచ్చెను. అయోధ్యకు తిరిగి వచ్చి రాజ్యాభిషేకమును అంగీకరించునని రాముని ప్రార్థించెను. రాముడు అతడి అభ్యర్థనను తిరస్కరించి, సత్యము యొక్క మహిమను వివరించి, అది అర్జునుని అతీతమింపలేనని చెప్పెను.

రాముని యొక్క డుండే శాస్త్రములూ పవిత్రమైన భరతుడు రామ పాదుకలను శిరస్సుపై ఉంచి నందిగ్రామం చేర్చి వాటికి పట్టాభిషేకం చేసాడు. ఆ పాదుకల పేరు మేరు నంది గ్రామం నుండియే రాజ్యవాలన చేయసాగాడు. అందుకనే ఈ పాఠ్యభాగమున

“ ఆర్యపాఠ్శాలావిషయకః ” అను పేరు సార్థకముగుఱున్నది.



భరతుడు వసంతాసము  
చేయుచున్న రాముని  
వద్దకు వచ్చుట:-

బలాధారియై, నార  
వస్త్రములను ధరించి  
సొట్టొంగ నమస్కారము  
చేయుచున్న ప్రళయ  
కాలము నుడు భాస్కరుని  
వలె చూచుటకు శక్యము  
గాని భరతుని రాముని  
చూసెను.



दृढशी रामो दृढशी युगान्ते भास्करं यथा।

వివర్ణమైన ముఖము గల, కృశించిన భరతుని డైకి లేవనెత్తి,  
బడిలాగా కూర్చుంటుండెట్టుకొని బిట్లు ప్రశ్నించెను, "నాయనా!  
భరతా! నీవు అరణ్యమున కేల వచ్చితివి? తండ్రుగారు  
జీవించియుండుగా నీవు అరణ్యమునకు వచ్చుట తగదు కదా!  
ఒకవేళ భయన దుఃఖభారములూ మరచించలేదు కదా!"  
రాముని మాటలు యిని భరతుడిట్లు బదులు యలికెను. 'రామా!  
నీవు సోతాలక్ష్మణులసమేతుడవై అరణ్యమునకు వెళ్లగానే దశరథ  
మహారాజు భారములూ స్వర్గస్థుడయ్యెను. నీవు భయనకు  
తీలగాదకములను సమర్పించవలెను." తండ్రు మరణవార్తను యిని  
రాముడు నిశ్చేష్టుడయ్యెను.





మంత్రీయగు సుమత్రు  
డు శ్రీరాముని  
జయన సోదరులను  
బిచ్చార్చి యరిని  
మందాకిని నదీ  
తీరమునకు తోసుకొని  
వెళ్లెను. అచ్చట  
వారు తండ్రీ గారికి

తీలొదకములను సమర్పించిరి.

सिषुश्चुक्रुद्रकं राजे तत्रैतन्ने भवत्विति ।

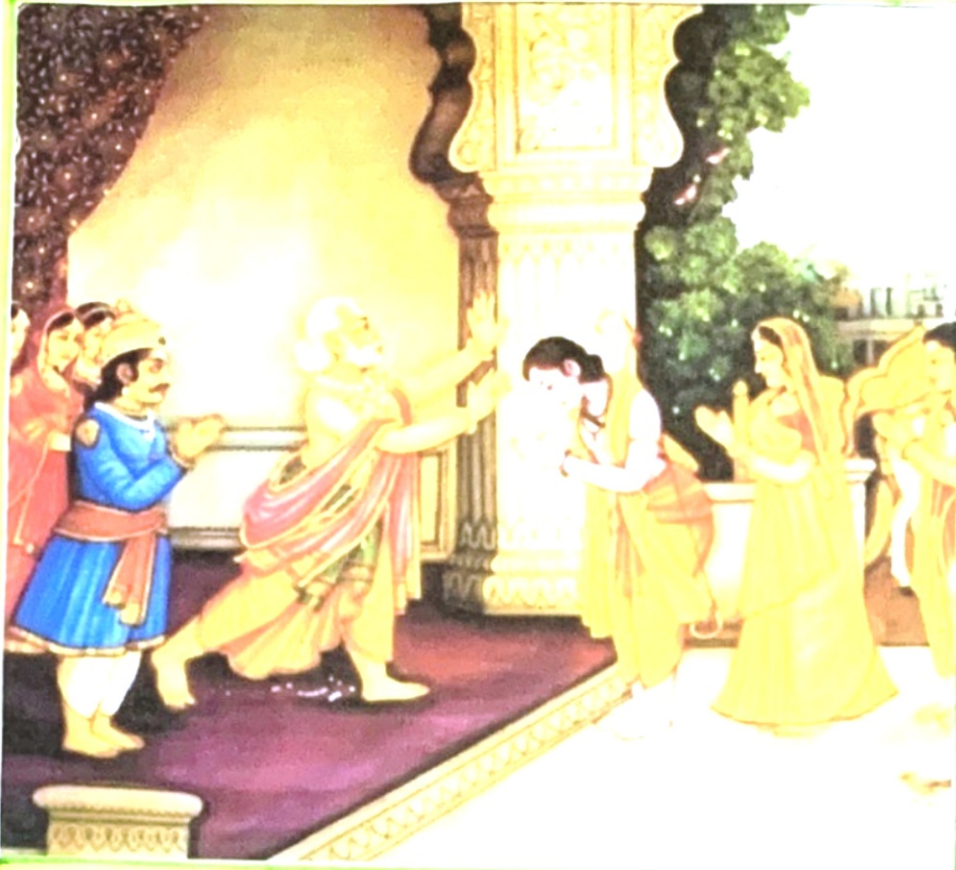
శ్రీ రాముడు ఈ నదీ తీరమున, రేగుపండ్లతో కలసిన  
తెలుగ పిండి ముద్దలను తయారుచేసి దర్బలపై నుంచెను. పప్పులు  
దుఃఖిండ్లున్న రాముడు తుండ్రునొద్దేసి, 'తండ్రీ! మేము నిత్యము  
భుజించు అహారమునే నీకు సమర్పించుచున్నాము దీనిని  
మీరు భుజించుడు' అని పలికెను.

రాజ్యము స్వీకరించుమని భరతుడు రాముని అర్థించుట:-

మరుసటి గ్రాజ బంధుమిత్రుల సమక్షమున భరతుడు రామునితో  
విట్లనెను. 'నోదరా! నా తల్లిని సంతృప్తిపరచుటకు నాకి రాజ్యము  
తీయబడినది. అట్టి ఈ రాజ్యమును నీకే సమర్పించుచున్నాను.'  
దీనిని స్వీకరించి సంపాదించుము.

तद्द्रुद्रामि तवैवाहं भुङ्क्ष्व राज्यमकण्टकम्





బి ఘరులోత్తమ  
 నోవు ఈ రాజ్యమును  
 స్వీకరించి మా తల్లికి  
 వచ్చిన కళంకమును  
 తొలగించి, తండ్రి  
 గారికి లాకనంద  
 నుండి విముక్తిని  
 కలిగించుము. నోవు  
 నా యందు,  
 సమస్తమైన బంధువు  
 లు ముందు దురు  
 చూపించుము.

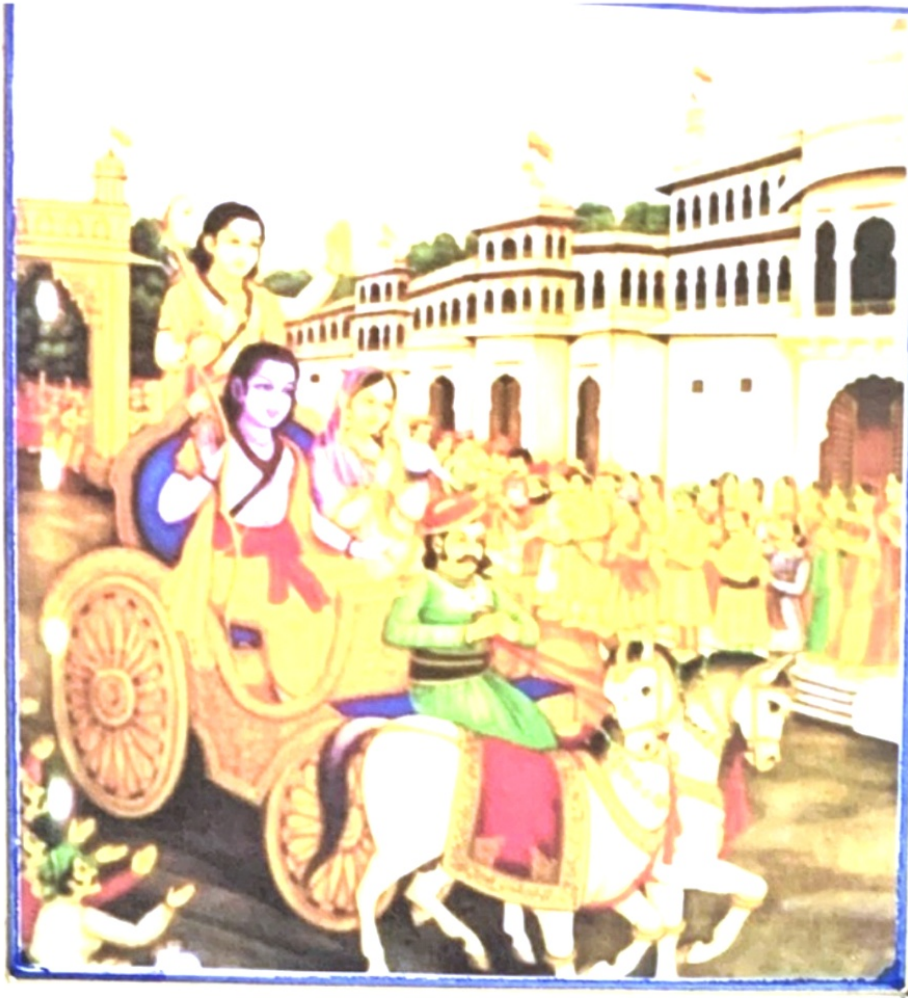
అది యని రాముడిట్లనెను, "నోదయ! మన తండ్రి నో తల్లిని  
 యివాహమాడు గుండర్భమును ఒక గొప్ప కాసుక బ్రచ్చెదననో మి  
 తాతగారికి మాట బ్రచ్చెను. మరియు దేవాసుర సంగ్రామము  
 నందు మి తల్లి చేసిన సేవలకు సంఘాషించిన దశరథ  
 మహారాజు లోమకు వరములనిచ్చెను. నో తల్లి, 'నోకు  
 పట్టాభిషేకము చేయుట, నన్ను అరణ్యమునకు పంపుట' అను  
 రెండు వరములనడుగగా మన తండ్రి అంగీకరించెను.  
 కనుక లోయన మాటలు నిలుపుటకు నేను అరణ్యమునకు  
 వచ్చితిని.

సత్యము యొక్క మహిమ:-

రాజధర్మము, రాజ్యము కూడా సత్య స్వరూపమై నవి. సత్యయోగియే



సత్యము  
స్వర్గమునకు  
తీర్థము  
దు



అక్షయమైన పరమపదమును పొందును. పరమ ధర్మమైన సత్యమే స్వర్గమునకు మూలము.

धर्मः सत्यं परो लोकं मूलं स्वर्गस्य चोच्यते ।

భాష్యము:- లోకము నందు సత్యమే భగవత్ స్వరూపము. సంపదలన్నియు సత్యము మీదనే ఆధారపడియున్నవి. ధానము, యజ్ఞము, హోమము, తపస్సు, వేదములు మొదలగునదన్నియు సత్యము పైననే ఆధారపడియున్నవి. కావున అందరూ సత్య మార్గమునే అనుసరించవలెను. సత్యమును పొందించెదనని ప్రమాణము చేసిన నేను తండ్రి ఆజ్ఞను ఎట్లు అతిక్రమించగలను? కనుక తండ్రి గారిని సత్యవాదిగా చేయుటకు నోవు పట్టాభిషేకమును అంగీకరించుము".



భరతుడు రామ పాదుకలను స్వీకరించుట:- అది విని సూర్యుని దీప్య తేజస్సు గల శ్రీరామునిఱా భరతుడిట్లనెను, " పూజ్యుడా! ఋగారముఱా అలంకరించబడిన ఈ పాదరక్షలను నివాక్కుఱి లొడిగి కొని నాకు అనుగ్రహించుము." వీడు శ్రీరాముడు ళి పాదరక్షలను ఒకఱి లొడిగి కొని ను భరతునకు బాహ్యువసెను. భరతుడు ళి పాదుకలను శిరస్సున డించుకొని నంది గ్రామమున చురెను. అచ్చట రామపాదుకలకు పట్టాభరణము చుసి, ఆనంతరము సర్వదా ఖరికి లాబడి, రాజకార్యములను నిర్వర్తించసరిగెను.

नदधीनस्तदा राज्यं कारयामास सर्वदा ।

ముగింపు:- ఈ విధముగా భరతుడు శ్రీ రాముని డుంక పాదుకలను పూజించుచు రాజ్యవలన సరించుట వలన

ఈ పాత్యభాగమునకు 'आर्षपादुकाभिषेकः' అను పేరు యికిఱి సమంజసమైనది.





# COMPUTER APPLICATIONS

VI- SEMESTER

## TALLY WITH GST

*A Project Report submitted in partial fulfillment of the requirements for  
the award of the Degree of*

**BACHELOR OF COMMERCE  
DEPARTMENT OF COMMERCE**

Submitted by  
**GANDREDDY TEJA SRI**  
(Regd.No:190908200012)



Under the Esteemed Guidance of

**Sri. V.SURI BABU**  
M.Com.,M.S.c(IT),PGDSM  
Senior Faculty Member, Dept. of Commerce

**S.K.R. COLLEGE FOR WOMEN**

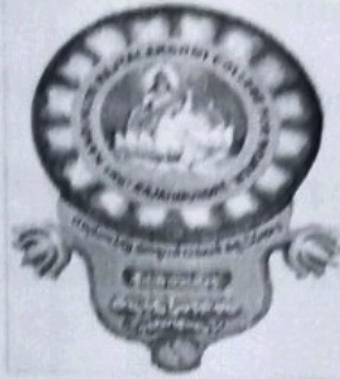
(Affiliated to Adikavi Nannaya University)  
Danavaipeta, Rajamahendravaram - 533103

(2021-2022)



# S.K.R. COLLEGE FOR WOMEN

## DEPARTMENT OF COMMERCE



### CERTIFICATE

This is to certify that the project entitled "**TALLY with GST**" is a bonafied work done by **Ms. G.TEJA SRI** the bearing **Regd.No:190908200012** during **2021-2022** in partial fulfillment of the requirements for the award of the Degree of the Bachelor of Commerce in the Department of Commerce S.K.R. College for Women Rajamahendravaram.

**Internal Guide**  
Sri. V.SURI BABU  
M.Com.,M.Sc (I.T),PGDSM

**External Guide**



## DECLARATION

I hereby declare that this project entitled "**TALLY with GST**" has been done by me and the contents have been submitted to **S.K.R. COLLEGE FOR WOMEN RAJAMAHENDRAVARAM** for the partial fulfillment of **BACHELOR OF COMMERCE DEGREE** and this work has not been submitted by me towards any other degree.

G. Teja Sri  
G.TEJA SRI

(Regd. No:190908200012)



## ACKNOWLEDGEMENTS

This acknowledgements transcends the reality of formality when I would have to express deep gratitude and respect to all those people behind the screen who guided, inspired and helped me for the completion of my project work.

I consider it as great privilege for having done this project. I consider myself lucky enough to get such a good project. This project would add as an asset to my academic profile.

My sincere thanks to **Dr. P. RAGAVA KUMARI, Principal** S.K.R. College for Women for being a source inspiration and constantly encouraging me throughout the course to pursue new goals and ideas.

It gives me an immense pleasure to place on records my deep sense of gratitude to **Sri V.SURI BABU, Senior Faculty Member** of the Department of Commerce for having kindly consented to be my **Project Work Mentor**. He has spent his valuable time and has evinced keen interest and meticulous care at every stage of my project work.

My sincere thanks to **Major. Dr. B. Kalyani In-Charge** of the Department of Commerce for her support and encouragement in successful completion of this project work.

I am thankful to my friends for their cooperation in my work and also remain indebted to my parents for giving me moral support in this work.

G. Teja Sri  
G. TEJA SRI

(Regd No:190908200012)



# GST

---

Goods & Services Tax



## NEED OF GST

- There are various taxes that have to pay at every stage and differently collected by State and Central Government and rates differ from one state to another. If we talk about GST, it will unified whole nation and taxes will be divided among Central and State Government, which will make easier to provide services and goods across country, as no more additional state taxes will be imposed.
- Imposing several taxes on goods and services can lead to high cost and inefficient tax structure which can subject to shirking and revenue disclosures. The need for GST in Indian Taxation System will add value at each stage and will set off the rates both at state and at central level. Introducing GST, will increase the efficiency of taxation, improves the economic growth and it will bring whole nation to one national market.
- Our present taxation system is very complex and very confusing, corruption chance is there, which leads to distrust of government, there are hidden tax for exports, whereas no charge applicable on Importing of Goods/Services from one state to another.



## SCOPE OF GST

1. **Easy compliance:** GST makes it easy for taxpayers to compliance with required rules and regulations timely. They can avail all services relating to GST via online portal such as registration, tax payment, return filling, response to notices, etc. It has accelerated the whole process.
2. **Removes cascading effect:** GST has eliminated the cascading effect of taxation on goods that existed in the previous tax system. Cascading effect means implying tax on tax which raises the cost of the product. Here the tax is not levied on the full value of the product but only on the net value added to it. Removal of cascading effect will make goods cheaper for consumers.
3. **Simplification of taxation:** This tax has simplified the whole taxation procedure by eliminating around 17 indirect taxes. GST has minimized the compliance cost for business and saved them from facing various problems that arise in indirect tax previously.
4. **Provides transparency:** The introduction of GST has provided better transparency in the collection of taxes to the government. Due to its robust IT structure, it is difficult to evade tax and make false claims by taxpayers. It has also reduced the collection cost of taxes by the government which ultimately raises its revenue.
5. **Bring uniformity in tax structure:** GST has unified the whole tax structure of the nation. It has introduced the same tax rates for products and services across the country.
6. **Improve profitability:** GST has reduced the transaction costs for business which facilitates them in doing operations efficiently. It has also brought down production cost by eliminating the cascading effect of tax which improves overall competitiveness for industry and trade.



## OBJECTIVE OF GST

- **To Eliminate the Cascading Effect:** Cascading effect means when is the tax on tax levied on a product at every step of the sale until it is sold to the final consumer. GST would be levied only to the net value added on the product, not to the whole value of the product.
- **Uniform Tax Structure:** *ONE NATION ONE TAX* Before the GST the tax rate is different for the different parts of the Country on different goods and services. Before GST People come to Delhi and used to buy electronics from Delhi because the tax rate on electronics in Delhi is less than in other states in India. Now, tax is the same in every state.
- **Ease Of Doing Business:** After GST, the problems in indirect tax have been reduced. Earlier firms faced many problems for registration of excise customs, VAT, dealing with tax authorities, etc. The benefits of GST has helped companies to carry out their business with ease.
- **Regulation Of Unorganized Sector:** In India, there is a lot of Sector which still Unorganized. The government tries to put those firms into the main streamline. This business can be a bakery in your locality or maybe a small factory. Now, these firms/factories/business also paying GST which increases the revenue of the Indian Government.
- **Increase In Revenue:** GST increases the revenues of the central government and state governments. Tax Evasion is very hard so every firm needs to pay taxes(GST). The false claim is very less due to it as this requires matching of invoices between the recipient and the suppliers.
- **Online Procedure:** The entire process under the GST regime starting from registration to return filling is online. Filling the GST is easier than the old Tax because we fill only one return under GST and before GST we need to fill return to every tax to tax departments.



- **Product Competitiveness:** GST is meeting the India Tax system with international tax standards. After GST the production cost will decrease as there is no more Cascading effect in the tax system. So, Indian product costs will be low and products can more competitive in the global market.



## **GOODS AND SERVICES TAX (INDIA)**

**Goods and Services Tax (GST)** is an indirect tax levied in India on the sale of goods and services. Goods and services are divided into five tax slabs for collection of tax - 0%, 5%, 12%, 18% and 28%. Petroleum products and alcoholic drinks are taxed separately by the individual state governments. There is a special rate of 0.25% on rough precious and semi-precious stones and 3% on gold. In addition, a cess of 22% or other rates on top of 28% GST applies on few items like aerated drinks, luxury cars and tobacco products.

The tax came into effect from July 1, 2017 through the implementation of One Hundred and First Amendment of the Constitution of India by the Modi government. The tax replaced existing multiple cascading taxes levied by the central and state governments. The tax rates, rules and regulations are governed by the Goods and Services Tax Council which comprises finance ministers of centre and all the states. GST simplified a slew of indirect taxes with a unified tax and is therefore expected to dramatically reshape the country's 2.4 trillion dollar economy.

### **HISTORY**

#### **Formation**

The reform process of India's indirect tax regime was started in 1986 by Vishwanath Pratap Singh, Finance Minister in Rajiv Gandhi's government, with the introduction of the Modified Value Added Tax (MODVAT). Subsequently, Prime Minister P V Narasimha Rao and his Finance Minister Manmohan Singh, initiated early discussions on a Value Added Tax (VAT) at the state level.



A single common "Goods and Services Tax (GST)" was proposed and given a go-ahead in 1999 during a meeting between the Prime Minister Atal Bihari Vajpayee and his economic advisory panel, which included three former RBI governors K. G. Patel, P. N. Lalit and C. Rangarajan. Vajpayee set up a committee headed by the Finance Minister of West Bengal, Arun Dasgupta to design a GST model.

The Arun Dasgupta committee was also tasked with putting in place the back-end technology and logistics (later came to be known as the GST Network, or GSTN, in 2017) for rolling out a uniform taxation regime in the country. In 2002, the Vajpayee government formed a task force under Vijay Kelkar to recommend tax reforms. In 2005, the Kelkar committee recommended rolling out GST as suggested by the 12th Finance Commission.

After the defeat of the BJP-led NDA government in the 2004 Lok Sabha election and the election of a Congress-led UPA government, the new Finance Minister P. Chidambaram in February 2006 continued work on the same and proposed a GST rollout by 1 April 2010. However, in 2010, with the Trinamool Congress routing CPI(M) out of power in West Bengal, Arun Dasgupta resigned as the head of the GST committee. Dasgupta admitted in an interview that 80% of the task had been done. In the 2014 Lok Sabha election, the Bharatiya Janata Party-led NDA government was elected into power, this time under the leadership of Narendra Modi.

With the consequential dissolution of the 15th Lok Sabha, the GST Bill – approved by the standing committee for reintroduction – lapsed. Seven months after the formation of the Modi government, the new Finance Minister Arun Jaitley introduced the GST Bill in the Lok Sabha, where the BJP had a majority.



In February 2015, Jaitley set another deadline of 1 April 2017 to implement GST. In May 2016, the Lok Sabha passed the Constitution Amendment Bill, paving way for GST. However, the Opposition, led by the Congress, demanded that the GST Bill be again sent back to the Select Committee of the Rajya Sabha due to disagreements on several statements in the Bill relating to taxation.

Finally in August 2016, the Amendment Bill was passed. Over the next 15 to 20 days, 18 states ratified the Constitution amendment Bill and the President Pranab Mukherjee gave his assent to it.

A 22-members selected committee was formed to look into the proposed GST laws.<sup>[8]</sup> After GST Council approved the Central Goods and Services Tax Bill 2017 (The CGST Bill), the Integrated Goods and Services Tax Bill 2017 (The IGST Bill), the Union Territory Goods and Services Tax Bill 2017 (The UTGST Bill), the Goods and Services Tax (Compensation to the States) Bill 2017 (The Compensation Bill), these Bills were passed by the Lok Sabha on 29th March, 2017. The Rajya Sabha passed these Bills on 6th April, 2017 and were then enacted as Acts on 12th April, 2017. Thereafter, State Legislatures of different States have passed respective State Goods and Services Tax Bills. After the enactment of various GST laws, Goods and Services Tax was launched all over India with effect from 01 July 2017.<sup>[9]</sup> the Jammu and Kashmir state legislature passed its GST act on 7 July 2017, thereby ensuring that the entire nation is brought under an unified indirect taxation system.

There was to be no GST on the sale and purchase of securities. That continues to be governed by Securities Transaction Tax (STT).



## LAUNCH

Play media The President Launching Goods and Services Tax (GST) on 1st July 2017. The Goods and Services Tax was launched at midnight on 1 July 2017 by the then President of India, Pranab Mukherjee, and the Prime Minister of India Narendra Modi. The launch was marked by a historic midnight (30 June – 1 July) session of both the houses of parliament convened at the Central Hall of the Parliament.

Though the session was attended by high-profile guests from the business and the entertainment industry including Ratan Tata, it was boycotted by the opposition due to the predicted problems that it was bound to lead to for the middle and lower class Indians. It is one of the few midnight sessions that have been held by the parliament - the others being the declaration of India's independence on 15 August 1947, and the silver and golden jubilees of that occasion. After its launch, the GST rates have been modified multiple times, the latest being on 18 January 2018, where a panel of federal and state finance ministers decided to revise GST rates on 29 goods and 53 services.

Members of the Congress boycotted the GST launch altogether. They were joined by members of the Trinamool Congress, Communist Parties of India and the DMK. The parties reported that they found virtually no difference between the GST and the existing taxation system, claiming that the government was trying to merely rebrand the current taxation system.

They also argued that the GST would increase existing rates on common daily goods while reducing rates on luxury items, and affect many Indians adversely, especially the middle, lower middle and poorer classes. The GST model of India has been modeled on the taxation system of France.



SKR COLLEGE FOR WOMEN

**RAJAMAHENDRAVARAM**

DEPARTMENT OF TELUGU

LIST OF PROJECT WORKS

2021-22

S.No	Class	Name of the Student	Name of the Project
		Y.Ramani	Jaanapada Sahithyam
		K.Satya Gayathri	Tholu Bommalaata
		K.Madhuri	Vaartha pathrikalu
		K.Anantha Lakshmi	Vaartha pathrikalu



SKR COLLEGE FOR WOMEN  
Rajahmundry

Department of Telugu

Project work

Year: 2020-21

Title: జానపద సాహిత్యం, ఆంధ్రప్రదేశ్  
కావ్య పితృకాండము.

S.No	Class	Name of the student
1.	III BA Team	Y. Raman
2.	II B.A	Satya Gayathri - అంబికావ్యం
3.	II B.A	K. Madhuri
4.	II B.A	K. Anantha Lakshmi



భౌతపద సాహిత్యం - కథలు

పెళ్ళి పాటలు

పెళ్ళిలో భాగంగా జరిగే రకరకాల సాంగ్లీలు - నలుగు పెట్టుడం, నాగవళి, పొన్ను సంబరాలు, పూల చొట్టెలు - ఈస్టి పెళ్ళి పాటలకు తగిన సందర్భాతే. ఇవే కాక కొత్త కడుతల ఇంట్లోకి ఆహ్వానించడానికి పాడే తలపు దగ్గరి పాటలు, మంగళ పాటల పాటలు కూడా ఉన్నాయి. ఈ పాటల్లోనూ ప్రధానంగానే కవిత్వం పూర్తిగా తుళ్ళింతుంది, సరసాలూ సరసాలే. వీరసైని వారి మళ్ళీ చూచుచేసుకునే సరసాల వివరాలు వాస్తవాల పెళ్ళి పాటల్లో ప్రధాన పాత్ర వహిస్తాయి. భౌతపద వాస్తవాలతో ఏలాంటి తీర్పు వారి ఈ సరసాల, వాస్తవాల దేవులూ, దేవులూగా ఉన్నట్లుగా దీనినూ భావనల దాని ఆపకొత్తగా భావించారు. పూర్వం ప్రతి తనావాలూ ఈ పాటలు వినబడేవి. ఇటు ఉన్నాయి పెద్దల ఈ పాటలు పాడేవారు. ఇప్పుడు నీటిల క్షయం పెట్టుతున్నారు.

అంజనాని సైతం - తన నీలయ, వస్త్రీ బాలసుబ్రహ్మణ్యం, శంషా  
ఉన్నట్లుగా వేవి కొన్ని పాటలు పాడారు.

1. ఏ వేసం నుండి వచ్చారండి ఈ దేశానికి
2. నలుగు పెట్టే వేదనకు.

\* వేదనకు పెగసరి:

వేదనకు పెగసరి - ఇదికూ ఇగుసరి  
బంగారు శుభ కృష్ణుల మా వేదన  
ఈ బంగారు శుభ కృష్ణుల మా వేదన "వేదనకు"



బుద్ధుల బాబను ఎట్టకేసే వాని నిద్రకు వెళ్ళేదాళ్లు  
 నాకు వెళ్ళేదాళ్లు నాటికే బాబకు నిద్రకు  
 వెళ్ళేదాళ్లు ..... ఉళుకలు  
 ఆయనకు బాబునూ, ఆకు చెట్లెల్ల ఆరి పోక బెనాలన  
 అదికొక కర్మ

**కస్తూరి రంగ :-**

కస్తూరి రంగ రంగా మాయనక కావేటి రంగ రంగా త్రురంగ  
 రంగ రంగా నినుబూసి నేసిట్లు యరచుదురా  
 కెనునీ సుయాంప సద్గురులు బిష్టువో  
 వ్రేష్టావలారమెత్తిన ప్రాణు ఆణవారము పురుసో,  
 ద్రవ్యయ దీనముడు జిసింఠెసు.  
 అలలోక జినన ముఱి, అనకు బహుయోసరాలు  
 వచ్చుననూడు ఎదురు కౌశ్యన బుట్టెను, వెలు గురు  
 దాదులను చంపెనప్రణు  
 నెత్తురులోకంఠియ యూల కౌశ్య కౌశ్యన వేడ్చెను  
 ఇకనైన ఎత్తుకొనవే నా అల్ల దీవకొ మందనాలు  
 వడలిల్ల మోసరాలులో ఈ తొటి సునాళు కన్న అయ్యె నిమ్మ  
 నా నెత్తుకొనా వి త్రోవ వొదవే చిన్న బాలా  
 నా ప్రత్యేమాయె కోట నావొక నియమేమిట అలరన్న  
 గంగనూ ప్రార్థిరాజేను జిం నిధుల గుగఠానుద్దెంగిను.



## కలుపు పాటలు

నాల్గు పాటల్లాంటి వా కలుపు పాటలు. బిలి బిలి మంట పెరుగుతున్న  
అల్లూర్ వాల్లూర్ పిరిగి కలుపు పెరుగిల్లి వికటస్వర్ణం క్రమము  
మరిచి వరదానో వాల్లూరు వాటలు. అత్రు వాడుతుంటే  
ఇతరులు ఏల్యుతుంటారు.

\* గిరి మగడా ! వల్లూరి మగడా

నా ఏలుపడె వాటునాట గిరి మగడా

గొట్లూరు సెరువు కింద గిరి మగడా

శైను వకిమాడి నాటబడ్డ గిరి మగడా

\* వకిమాడి నాటబడ్డ గిరి మగడా

శైను గెనుం వార మునూ పడితే గిరి మగడా

గెనుం వార మునుం పడితే గిరి మగడా

నసెంబ్రాయ తెలు గుట్ట గిరి మగడా " గిరి "

\* అంబ్రాయ తెలు గుట్ట గిరి మగడా

నాట బట్ట సర్దుబాసినాది గిరి మగడా

నాట కలవపింకి వట్టయ ర గిరి మగడా

నువ్వు రాతంక మెలుకార గిరి మగడా " గిరి "



కృష్ణుడు చెంచిత సంవాదము:-

**కృష్ణుడు:** పచ్చని నీలల పాడుటలుల సీరిపి వల్ల గుండ్రీ  
పాపా ఏవూరి దానవే చెంచితా ఏవూరిదానవే ముత్తెమా  
ఏవూరి దానవే పగడము ఏవూరి దానవే చెంచిత ఏవూరురైతే  
ఏమి కృష్ణుడు ఏ పల్లెరైతే ఏమి కృష్ణుడా ఆడవోళ్ళండట  
సాటాల్ నీకు మాట్రమంటాయి. కృష్ణుడా వోవోయి  
వోవోయి నల్లని బాబు పొద్దేడబోయేర నా సామి కృష్ణుడు .  
పిల్ల బాబు మేనత్త కుతుల మేలు కన్నుల దాన జారు పైట  
దానకంట్ల కాటుక దాన పండ్ల దాల్చిన దాన చెంచితా నీవేవూరి  
దానవే చెంచితా నీ ఆడుగు చూసి నేను చెంచిత ఆర్మిల్లు  
కాసుంటు చెంచితా చెంచితా చీచీ పోరా సిస్టరేనివాడా హీనాయి  
లేమూ కృష్ణుడా నీకు మనము లేమూ కృష్ణుడా నిన్ను సూత్ర  
నా భయమాళ కృష్ణుడా నువ్వు నల్లంగ వుండవు కృష్ణుడా  
నాకు భయమేమూ కృష్ణుడా మూఠంగ వుండార కృష్ణుడా  
కృష్ణుడా నేనెవరానుకున్నవే చెంచిత నీ రేపల్లె వాడల్లో  
చెంచిత నీ గోపెమ్మ కడుకునే చెంచితా నీ గోపాల కృష్ణుడా  
చెంచితనే మచ్చానా ఆరుగి చెంచితా నన్ను కృష్ణుడా  
చెంచితా నీ కుల ముద్దరింతను చెంచితా. చెంచిత చీ.



## చెక్కెన భజన వ్రాసం

రాయిలసీమల్ - మరీ ముఖ్యంగా కడుప, చిత్తూరు జిల్లాల్లో -  
చెక్కెన భజన పాటలు చాలా ప్రాచుర్యం పొందాయి. ఇందులో  
భజన చేయడానికి వాడే చెక్కెలు, పాదవుగా ఉండే  
పలకలను పాట ఉండడం వల్ల చెక్కె భజనే పలకల భజన  
అని కూడా అంటారు. చేతుల్లో మారడం పాదవుండే  
తాళపు చెక్కెలతో, కాళ్ళకు గజ్జలతో వలయాకారంలో  
తిరుగుతూ తాళపు చెక్కెలు వాయిస్తూ తాళానికి అనుగుణంగా  
పాటలు పాడుతూ నృత్యం చేస్తూ ఉంటారు. ఓకే చేతిలో  
రెండం చెక్కెలను అడిస్తూ వాయింబం చెక్కె భజనలోని  
సాళసు వలయాకారంలో తిరిగి కళాకారులు కాన్పు సార్లు  
ఉద్దయ - వలద్దయలుగా (జతజతలుగా) మారి యిరుదురుగా  
అడుగు మార్చి అడుగు వేస్తూ ఉద్ది మార్చి ఉద్ది ఓకే అడుగుల  
అ. ఓకే వైపు బయ్యో అడుగుల రెండవ వైపు తిరుగుతూ  
నృత్యం చేస్తారు. పెన్నుద్దికాడనూ సుదవు పాటలోని ఓకేకే  
చరణం అందిస్తే మిగిలిన వాళ్ళ అందూని పాడుతూ  
నృత్యం చేస్తారు. పలకల భజనలో జుదకోపు తప్పని సరిగా



దారి జూట్ వారి దలదేర్చుకున్న నా  
వ్పారు దిక్కు స్థాయి యేటకో ॥

### శ్రీకృష్ణుడు మేలుకొలుపు పాట

తెల్ల వారవచ్చి పల్లవాధరణాదు  
ల్రల్లము రుజిల్ల యేటకో  
గొల్లలు ఇంట్లో వెన్న లారగిణ  
వేళయే శ్రీకృష్ణ యేటకో  
తెల్లవారవచ్చెనూ ॥

ఘృతన పనుదాలు ప్రకీటగొనడాని  
యాలక మొరెబాల యేటకో  
ఘూతుక వానవుల సూతనప్ర చెన్నల  
శ్శాలేగదుసు మోడయేటకో  
తెల్లవారవచ్చెనూ ॥

రేపల్లివాడలో గోపకాయసులకు  
తూపములకొబాల యేటకో  
కూరియేలో కంసుని కొలవుకూటయన  
కూలదన్నవతి యేటకో

నా పాదపదలముల నరురకు చూపిం  
పరయ నుండించగ యేటకో ॥



:- బోలె పాటలు :-

రొక్క పిల్లలని నీతి ప్రబుద్ధుడనో వారి అల్లులు పాడే పాటల బోలెపాటలు మరియం ఏదీ పిల్లలని అలకస్తూ పాడే పాటలే అలా పాటలు.

బోలె అబ్బులనంద బోబో ముకుందా అలా పరమానంద రామ గోవిందా.. బోబో లోటం ప్రమాదంయ లోట్ట గోవిందా నాదగా వేదాల గోలసులమలందా బుద్ధైస ఫణిరాజ పానుసమలందా దిలు దోలకులొస బేర్తి అలలలో.. బోబో ముల్లొకమలనెల మొమ్మూర్తులారా అద్దెలలో నేడు బద్దలైనారా ఏ బిసల్లో నీమలె నోబనానో ఈ బిసల్లో నాకు బద్దలైనారా... బోబో

:- ఉళుఉళు :-

ఉళుఉళు హాయి ఆపడలు గాయి అన్నవొళ్లను గాయి త్రొవెంకటేనా... ఉళుఉళు బలకల్లు దెలరేగి బిడి కెజుకకు అబ్బాయి దెలరేగి మామ భుజిమెకుల మామ భుజిమెకే విమయ అయగు? పాల త్రాగు గిళ్లయగు పొదావు నయగు ... ఉళుఉళు ఆడితే పొడితే అప్పలకు ముద్దు చప్పట్లు అట్టతే అలలకు ముద్దు బిట్టి మెల్లమెల్ల పుట్ట నెల కలుపునా స్వారీవానల కులసె సుత్రాల మధు ... ఉళుఉళు అందరి మోమల్లు చందమామల్లు అబ్బాయి మోమల్లు రామలక్ష్మణులు బూదవారా అలా బుట్టల్లకొరా



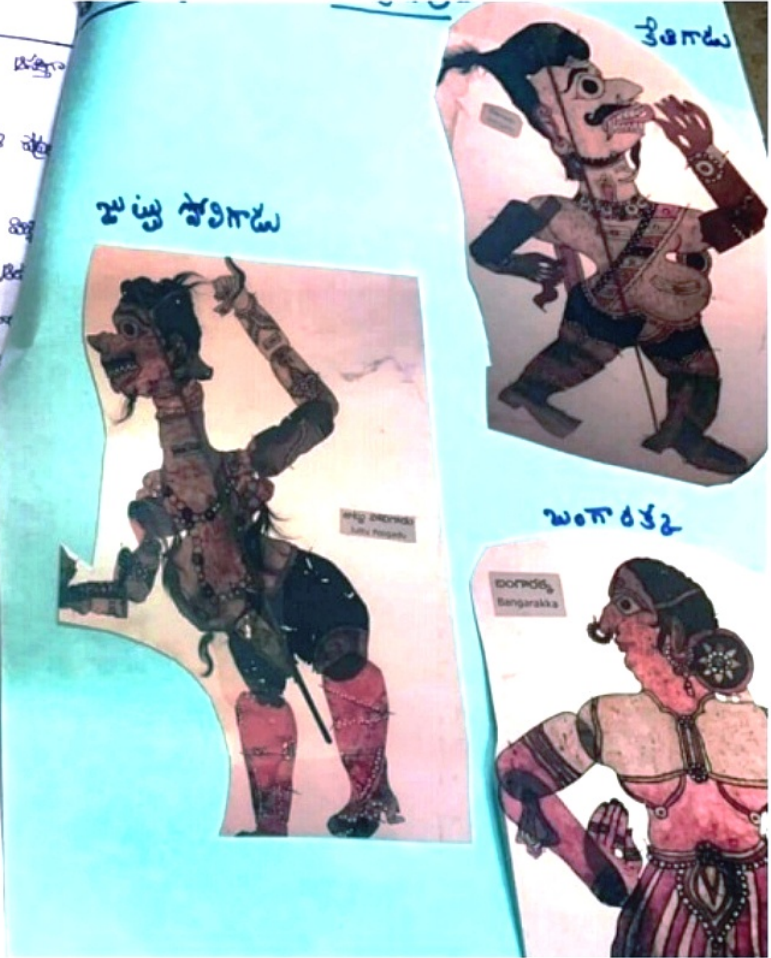








తిరుగుతుంటే ప్రక్షురాలు తిరుగుతుంటే ప్రక్షురాలు  
 చూడడానికి ఇతరులు ఇతరులు ప్రయత్నిస్తూ ఉన్న **సాక్షి** అంటారు.  
**సాక్షి** అంటే చూడటం. ఇతరుల ఘోషాలకు చూడటం వల్ల  
 ప్రయత్నించి ప్రక్షురాలు సాక్షి అంటారు. ఇతరులకు సాక్షి అంటారు.  
 తిరుగుతుంటే ఇతరులు తిరుగుతుంటే  
 వికారాలు చూడటం. తిరుగుతుంటే ఇతరులు ప్రయత్నించి  
 తిరుగుతుంటే ఇతరులు తిరుగుతుంటే ప్రయత్నించి  
 తిరుగుతుంటే ఇతరులు తిరుగుతుంటే ప్రయత్నించి

















## లోడు

వాస్తవ కథలకు లోడు ప్రాధాన్యం చూల ఎక్కువ ఉంటుంది. ఇది సర్కారు ఉంటూనూ లోడు ఎంతో ఎక్కువని భావించబడుతుంది. వాస్తవ కథలకునూ మొదటి వాక్యాన్ని లోడు కార్మికులను 'లోడు' ద్వారా ప్రయోగిస్తారు. ఇది భావనలకు లోకంలో ఎంతో ఎక్కువగా ఉన్నప్పుడు లోడును చూపుతూనూ కథలకునూ నడిపించు కార్మికులకు లోడు ఉంటుంది. లోడు చూపుతూనూ వాస్తవ కథలకు ప్రయోగించు కార్మికులకు లోడు ఉంటుంది.

లోడుల వారకు సంబంధించిన విషయం. వారిని ప్రయోగించు ఉంటుంది. లోడు కార్మికులకు ఉంటుంది ప్రయోగించు కార్మికులకు ఉంటుంది. ప్రయోగించు కార్మికులకు ఉంటుంది. ప్రయోగించు కార్మికులకు ఉంటుంది. ప్రయోగించు కార్మికులకు ఉంటుంది.

**నీ ఇష్టం వచ్చినట్లు చేస్తే**  
**ఇంటికెళ్తావ్**

• పంచాయతీ కార్యదర్శిపై  
 మంత్రి మోపిదేవి ఆగ్రహం

కనగాల(చెరుకుపల్లి గ్రామం), మ్యాన్ టుడే :  
 'సువ్య ఏం చేస్తున్నావో అన్నీ నాకు తెలుసు. తెదేపా వారితో కలిసి సువ్య చేస్తున్న వ్యవహారాలు వీడియో లతో సహా నా వద్ద ఉన్నాయి. అర్హత లేని వారికి పంచాయతీ కార్యదర్శి మంజూరు చేస్తున్నావు. ఉద్యోగం చేయాలని ఉంటే సక్రమంగా ఉండు. లేదంటే ఇంటికెళ్తావ్. ఉద్యోగం నుంచి తొలగించే యిస్తా' అంటూ మంత్రి మోపిదేవి వెంకటరమణారావు గుంటూరు జిల్లా కనగాల పంచాయతీ కార్యదర్శి సుబా నిని హెచ్చరించారు. గ్రామంలో మంగళవారం నిర్వహించిన మూడో విడత 'కంటి వెలుగు' కార్యక్రమంలో పాల్గొనేందుకు వచ్చిన మోపిదేవి పలు పిర్యాదుల మేరకు కార్యదర్శిని పిలిచి సైవిధంగా హెచ్చరించారు. తెదేపా వారికి, అర్హత లేనివారికి రేషను, పంచనను కనగాలలో ఒకరిద్దరు వాలంటీర్లు, కార్యదర్శి మంజూరు చేస్తున్నారని వ్యాఖ్యానించారు.





## Smt. KANDUKURI RAJYALAKSHMI COLLEGE FOR WOMEN

RE - ACCREDITED AT B<sup>+</sup> LEVEL BY NAAC

(Estd. 1968)

Affiliated to Adikavi Nannaya University, Rajamahendravaram (ANUR)

(Under the control of HITHAKARINI SAMAJAM, Endowments Dept., Govt. of Andhra Pradesh)



Opp. T.T.D. Kalyana Mandapam, Danavaipeta,  
**RAJAMAHENDRAVARAM - 533 103.**

East Godavari District, Andhra Pradesh,

☎ 0883 - 2467391, 90304 30758

e-mail : skrcollege@yahoo.com

website : www.skrcw.rjy.org


## Department of SOCIOLOGY

### CERTIFICATE

This is to certify that Mr/Mrs. V.S.S. Lakshmi Motupalli class III BA of SKR College for Women has completed her project under my guidance. She has taken proper care and shown utmost sincerity in completing the project.

I certify that this project is up to my expectation and as per the guidelines issued by the university. 2021-2022

Regd. No. 190 906208037

  
Signature of HOD





# SOCIOLOGY

PROF. 1002







## → ANGANWADI CENTRE

A typical Anganwadi center provides basic health care in a village. It is a part of the Indian public health care system. Basic health and supply, nutrition education and supplementation, as well as preschool activities. The centres may be used as depots for oral rehydration salts, basic medicines and depots for oral rehydration salts, basic medicines and contraceptives. As of 31 January 2013, as many as 13.3 lakh (a lakh is 100,000) Anganwadi and minianganwadi centres (AWCs/mini-AWCs) are operational out of 13.7 lakh sanctioned AWC/miniAWCs. These centres provide supplementary nutrition, non-formal pre-school education, nutrition, and health education, immunization, health check-up and referral services of which the last three are provided in convergence with public health systems.



# Anganawadi





All the children in the age group 6 months to 6 years, pregnant women and lactating mothers are eligible for services under Anganwadi services. Anganwadi services is a self selecting scheme and no targets are fixed for the beneficiaries of either Supplementary Nutrition or pre-school non-formal education. As on 31.03.2021, there are 675.07 lakh children and 156.73 lakh pregnant and lactating mothers receiving Supplementary Nutrition at Anganwadi centres.

From time to time Government has taken many steps for improving the conditions of Anganwadi centres across the country. These include provision of drinking water under Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) and provision of drinking water and sanitation facilities under Swachhta Action Plan (SAP)



## → Objectives :-

The Government of Andhra Pradesh is providing one full meal under Anna Annutha Hartham (AAH) for pregnant and lactating women in all Anganwadi Centres (AWCs). The aim of this programme is to reduce infant mortality rate (IMR), low birth weight, neonatal mortality rate (NMR) and anaemic condition among pregnant women.

Anganwadi Centres (under umbrella integrated child development services scheme) were launched in 1988 with the objectives.

- (i) Supplementary nutrition
- (ii) pre-school non-formal education
- (iii) nutrition & health education.
- (iv) immunization
- (v) health check-up
- (vi) referral services are provided to the targeted beneficiaries.

Est. all children below 6 year, pregnant women and lactating mother.



Handwritten text in a South Indian script, likely Kannada, located at the top of the page. The text is partially obscured by the image below.



Handwritten text in a South Indian script, likely Kannada, located at the bottom of the page. The text is partially obscured by the image above.



## → ANGANWADI BENEFITS:

Despite decades of impressive growth, India has an acute shortage of doctors. The doctor population ratio in 2019-20 was 1:1456; against the WHO recommended level of 1:1000. Through the Anganwadi System, the country is trying to meet its goal of providing affordable and accessible healthcare to local populations.

Anganwadi workers have the advantage over the physicians living in the same rural area, which gives them insight into the state of health in the locality and assists in identifying the cause of problems and in countering them. They also have better social skills and can therefore more easily interact with the local people. As locals, they know and are comfortable with the locals, they know and are comfortable with the local, they know and are language and ways, are acquainted with the people, and are trusted.



## → ADARSHA ANGANWADI-2

The Adarsha Anganwadi was located in Andhra Pradesh, East Godavari, Rajamundry in Rajendranagar. In this Anganwadi there are 3 rooms and good facilities were there like Nutrition food and proper light and Electric fans and any time children were called to their parents because there is telephone facilities were also there and in this Anganwadi there is storage facilities for food and storage facilities for equipment and in that Rajendranagar. Anganwadi separate space for cooking and free place for children and play area was also there in this Anganwadi. More indoor activity space was there and in this Anganwadi gives to children the nutrition food and good test will be there in that food. In Adarsha Anganwadi mid meals were also provided to children. In this Adarsha Anganwadi mothers and pregnant were also there.



S.K.R.COLLEGE FOR WOMEN, RAJAMAHANDRAVARAM

SURVEY QUESTIONNAIRE OF ANGANWADI CENTRE

1. State : Andhra Pradesh
2. District : East Godavari
3. Village /Town : Rajanundry
4. Name of the Anganwadi centre : Adarsha Anganwadi-2
5. Regd.No of the Anganawadi centre : 28545130514
  
6. Area : Rajanundry
7. Where is the AWC : I.B.M
8. Average distance of each AWC : |
9. Any differences between AWC and ICDS : |
  
10. Facilities in place at the AWC
  - A. Rooms : No. 3
  - B. Electricity—Lights : Yes/No  
No. ✓
  - C. Electric fan : Yes/No  
No. ✓
  - D. Telephone : Yes/No ✓
  - E. Clean, Safe drinking water on the premises : Yes/No ✓
  - F. Toilets : Yes/No  
No. ✓
  - G. Indoor activity space : Yes/No ✓
  - H. kitchen / Separate space for cooking : Yes/No ✓
  - I. Storage facilities for food : Yes/No ✓
  - J. Storage facilities for equipment : Yes/No ✓
11. What is the condition of the AWC : good facilities



12. Equipment details

- A. Medicine kit/ first aid box
- B. Baby weighting scale
- C. Adult weighting scale
- D. vessels for cooking
- E. Indoor play equipment
- F. vessels for storing drinking water

Positive  
Positive  
Positive  
Positive  
Positive  
Positive

13. Enrollement & Attendance

Categories

Enrol 158

= 515

SC/ST Others Total  
Others Total

OC/BC/SC/ST  
OC/BC/SC/ST

- 1. Infants[0-3 years]
- 2. Toddlers[3-6 years]
- 3. Mothers [Nursing and Pregnant]
- 4. Adolescent Girls

= 15  
= 10  
= 10  
= 11

14. Attendance 7 days According

- 1. Today
- 2. Yesterday
- 3. Two days ago
- 4. Three days ago
- 5. Four days ago
- 6. Five days ago
- 7. Six days ago

= 10 14  
= 10 14  
= 10 11  
= 10 12  
= 10 12  
= 10 13  
= 10 13



15. How many child are under weight	NILL
16. <u>Angana wadi worker details</u>	
17. Name	: A. Venkata Manga Sakyaabhi
18. Category Name & Qualification	: SC/Inter
1. worker-1, M. Dana Lakshmi	
2. worker-2, Y. Sakyaabhi	
3.	
4.	
19. Date of Joining	: 2005
20. Experience	: 17 years
22. Time of arrival	: 9:00 AM
23. Closing time	: 4:00 PM
24. Salary Rs.	: 10,000/-
25. Satisfied	: Yes/No
26. What problems are you faced	: Nill
27. What you are expected from the Government	: Nutrition food.



Handwritten text at the top of the page, possibly a title or subtitle, written in a non-Latin script.



Vertical handwritten text on the left side of the page, written in a non-Latin script.



## INTRODUCTION :-

Anganwadis are a type of rural child care centres in India. They were started by the Indian government in 1975 as part of the integrated child development services program to combat child hunger and malnutrition.

## Anganwadi :-

- Formation : 1975
- Founder : Government of India
- Type : Governmental organization
- Legal status : Governmental organization
- Purpose : combat hunger and Malnutrition
- Origin : India
- Affiliation : Government of India.

Anganwadis are a type of rural child care centres in India. They were started by the Indian government in 1975 as part of the integrated child development services program to combat child hunger and malnutrition.



## → What does Anganwadi Mean :-

The name anganwadi worker is derived from the Indian word. angan, which means the court yard (an central area in and around the house where most of the social activities of the household takes place). In rural settings, the angan is the place where people gather to talk, greet the guests, and socialize. Traditional rural households have a small hut or house with a boundary around the house which houses their charpays, cattle, feed, bicycle, etc. Sometimes food is also sleep outside in open air, under the sky, in their angans. The angan is also considered as the heart of this space, the public health worker who works in an angan, and also visits other people's angans, helping with their healthcare issue and concerns, is the Anganwadi worker.

The anganwadi worker and helper are the basic functionaries of the ICDS who run the anganwadi centre and implement the ICDS







Scheme in coordination with the functioning of the health, education, rural development and other departments. Their services also include the health and nutrition of pregnant women, nursing mothers, and adolescent girls.

Today in India, about 2 million anganwadi workers are reaching out to a population of 75 million women, children and sick people, helping them become and stay healthy. Anganwadi workers are the most important and oft-ignored essential link of Indian healthcare.

### → What do the Anganwadi Workers do:-

The Anganwadis are engaged to provide the following formal services to the areas under their cover:

- > immunisation of all children less than 6 years of age
- > immunisation against tetanus for all the expectant Mothers
- > Supplementary nutrition to children below 6 years of age
- > Supplementary nutrition to women who are pregnant and nursing, esp. from the low income group.



- > Nutrition, health education and health check-ups to all women in the age group of 15-45 years
- > Antenatal care of expectant mothers
- > postnatal care of expectant <sup>nursing</sup> mothers
- > caring for newborn babies
- > caring for all children under 6 years of age
- > Referral of serious cases of malnutrition or illness to hospitals, upgraded PHCs / Community Health Services or district
- > Non-formal preschool education to children of 3-5 years of age.

### → Role and responsibilities of ANWs

According to the the ministry of women and child Development - The Government of India, the following are the basic roles and responsibilities listed for the anganwadi worker:

- > To elicit community support and participation in running the programme.
- > To organise supplementary nutrition feeding for children and expectant and nursing mothers by planning the menu based on locally available food and local recipes.







- To maintain files and records as prescribed.
- To assist the PHC staff in the implementation of health component of the programme viz. Immunisation, health check-up, ante natal and post natal check etc.
- To share information collected under ICSS scheme with the ANM centres. ANM will not solely rely upon the information obtained from the records of PHC.

### → How does the Anganwadi system work?

The Anganwadi system in one village/area is managed by a single Anganwadi worker, who is chosen from the community, and has been trained for four months in areas such as health, Nutrition and childcare. Each Anganwadi worker covers a population of about 1000 people.

It is heartening to know that there are more than a million Anganwadi centres in India, employing more than 2 million workers, who are mostly female and inhibitive to the health needs of the region. For a country where there



child mortality, illiteracy and poverty as well, will  
exist as a reinforcing triangle:

### → How does the Anganwadi System help?

India is home to over 1 billion population, food shortage,  
poverty, unemployment, low literacy levels and more,  
with a target to make healthcare accessible and  
affordable for everyone. Given the urgency of healthcare  
issues, child mortality, malnutrition, etc, our country  
needs high numbers of, medical and healthcare  
professionals to cater to the population that is  
near running into billions. faced with acute shortage  
of skilled professionals to cater to the population  
that is near running into billions, faced with  
acute shortage of skilled professionals, the Govern-  
ment's ICDS scheme is using the local population  
to help meet its grand goals.

The Anganwadi worker hails from the village  
where she works and has her fingers on the  
pulse of the health of the village, its people and  
children.







Apart from the healthcare knowledge that she possesses and gained over a period of time, the Anganwadi worker is so entrenched in the general affairs of the household that she is in a better position to understand the real malady behind the healthcare issue. These latent problems of the household or community could range from relationship issues, duty burden, harassment, isolation, social, peer pressure, and much more. Given the definition of health - the physical, mental, social, spiritual well-being of an individual, the Anganwadi worker perhaps has the best insight into the people's health of her region.

### → Supervision :

A mukhya sevika supervises between 40 and 65 Anganwadi workers, providing them with on-the-job training. Mukhya sevikas' other duties include keeping track of people of lower economic status benefiting from the program, in particular the malnourished; guiding the Anganwadi workers in



measuring children's age and weight and plotting their weight; demonstrating effective methods of providing health and nutrition education to mothers; and maintaining statistics on Anganwadis and their workers to determine what can be improved. The mukhya seika report to the child development project.

### ⇒ Challenges and Solutions :-

public policy discussions have taken place over whether to make Anganwadis universally available to all eligible children and mothers who want their children there. This would require significant increase in budgetary allocation and a rise in the number of Anganwadis to over 16 lakh.

The officers and their helpers who staff Anganwadis are typically women from poor families. The workers do not have permanent jobs with comprehensive retirement benefits like other government staff. Worker protests and public debates on this topic are ongoing. There are



periodic reports of corruption and crimes against women in some Anganwadi centers. There are legal and societal issues when Anganwadi-serviced children fall sick or die.

In announcing the 2022 budget, then Indian finance Minister Nirmala Sitharaman stated that salaries would be increased for Anganwadi workers to ₹ 20,105 per month and for helpers to ₹ 10,000 per month. But with minuscule increments in the overall umbrella budget of just 0.7%. It has been allocated ₹ 20,263 crore for the next fiscal, as compared to last year's allocation of ₹ 20,105 crore. As compared to revised estimate of ₹ 19,999.55 crore there is a 1.3% increase.

In March 2008 there was a debate about whether packaged food should become part of the food served. Detractors, including Nobel prize winner Amartya Sen, argued against it, saying that it will become the only food consumed











by the children.

## ⇒ Problems faced by Anganwadis :-

1. Lack of Education and Training :- Most

anganwadi workers are not well-literate and their skill is limited. They find it is easier to keep track of a child's growth by weighing them rather than following other measurements.

MSM Nayak also suggested that these centres be provided with the required number of workers, whose skills should be upgraded through regular training.

2. Demotivating Service Conditions :- Lack of further career prospects and adequate service conditions of frontline workers in Anganwadi centres such as anganwadi workers, ASHAs, and ANMs. The officers and their helpers who staff Anganwadis are typically women from poor families. The workers do not have permanent jobs with comprehensive retirement benefits like other government staff.



3. Lack of basic facilities & Nearly a half of the operational AWCs lack drinking water facilities and 80 per cent do not have toilet in AWCs, the NITI Aayog recommended better sanitation and drinking water facilities, improved health supply and basic medicines for the AWCs.

4. Insufficient learning Environment & AWCs do not seem to provide the environment that encourage parents to leave children at these centres, only a limited number of AWCs have facilities like creche, and good quality recreational and learning facilities for pre-school education.

## Anganwadi



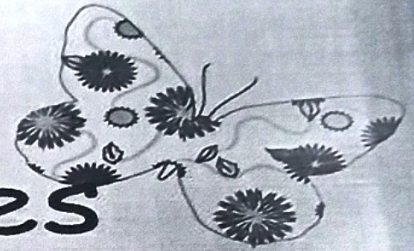


## → Remedies :-

1. to improve the nutritional and health status of children in the age-group 0-6 years
2. to lay the foundation for proper psychological, physical and social development of the child
3. To improve infrastructure of the anganwadi.
4. good facilities like chairs and tables
5. government facilities for the equipment and storage
6. Indoor play equipment
7. government que vessels for cooking.
8. arrange more facilities in anganwadi



# Child Marriages



By Callie Swinsick

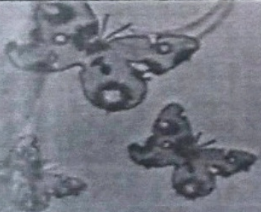
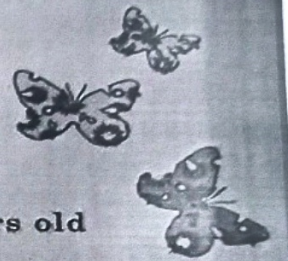


*K. Sakya Gayatri*





- Groom: 40 yrs old
- Bride: 11 yrs old
- Age difference: 29 yrs





- Bride: 13 yrs
- Baby: 18 months old





Age 6

Age 1



- Married at age 10
- Had 1<sup>st</sup> kid at age 12
- Husband died



# What is a child marriage

- Arranged marriages
- Young females married to men who are older than them
- Involves young males, usually young girls
- 100 million young girls, next decade

A child is defined as:

- Younger than 18 years of age







# Unjust???

- Too young to decide for themselves
- Violation of health rights
- Isolation
  - \* School
  - \* Friends/Family
  - \* Media
- Lack of free will



# History



- 1929, Child Marriage Restraint Act
  - 1948, Universal Declaration of Human Rights
  - 1979, Convention on the Elimination of all forms of Discrimination of Women
  - 1990, African Charter on the Rights and welfare of the Child
- 



## Why are they married off so young?

- Poor families, daughters economic burden
- Protection for their daughter
- Prevent pregnancy outside of marriage



## Why are they married off so young?

- Poor families, daughters economic burden
- Protection for their daughter
- Prevent pregnancy outside of marriage



# Issues

## Health

- STI's can form
- Cervical cancer
- Fistulas
- Infant mortality

## Psychological

- Pressure
- Emotional blackmail
- Too many responsibilities
- Violence and abuse

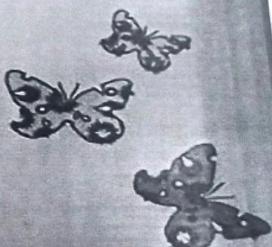


# Solutions


- Organizations
  - Educate
  - Raise awareness, leaders
- Raise the universal age to 18



# What can you do?



- **Donate money or a gift:**

- \* [my.care.org](http://my.care.org)
  - \* [vitalvoices.org](http://vitalvoices.org)
  - \* [unicef.org](http://unicef.org)
  - \* [amnesty.org](http://amnesty.org)
  - \* [crin.org](http://crin.org)
  - \* [humanrights.dk](http://humanrights.dk)
- 





# Botany

## project work





**WANDUKURI RAJYALAKSHMI COLLEGE FOR WOMEN**

**RAJAMAHENDRAVARAM**  
**DEPARTMENT OF BOTANY**

REGD NO. 190907110162

**CERTIFICATE**

Certified as a bonafide record of practical work in Botany done by

Kum. M. Mercy of II B.Sc. C.B.Z., at the end of

VI Semester during the academic year 2021 - 2022

Signature of the  
Head of the Department

Head of the Department  
BOTANY  
S.K.R. COLLEGE FOR WOMEN  
RAJAMAHENDRAVARAM

Signature of the  
In-Charge Lecturer  
Head of the Department  
BOTANY

Valued:

S.K.R. COLLEGE FOR WOMEN  
RAJAMAHENDRAVARAM

1)

2)

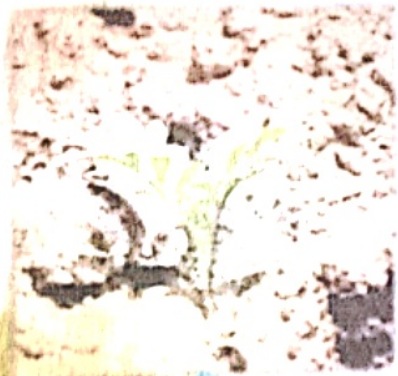
P. Sou. Devi  
9/8/22  
Signatures of the Examiners







# Marigold Cultivation Aspects & Pigment Extraction



Seedling To By products





## Importance.....

- & Loose flowers
- & Lutein – Pigment extraction
- & Bedding plant in a herbaceous border
- & French marigold - rockery, edging, hanging baskets and window boxes
- & Pot plants
- & Essential oil - perfume industry
- & Insect repellent
- & Used to control nematodes

## Varieties - African Marigold

### **Pusa Narangi Galinda**

- & Cracker Jack X Golden Jubilee
- & 80 – 85 cm tall
- & Big sized Orange flowers
- & 25 - 30 t/ha
- & Carotenoids - 329 mg/100 g petals  
(0.32 %)





### **Pusa Basanti Gaiinda**

- ⊗ Golden Yellow x Sun Giant
- ⊗ 60 – 65 cm tall
- ⊗ Medium sized lemon yellow flowers
- ⊗ 20 - 25 t/ha



### **Pusa Bahar**

- ⊗ Flowers in 90-100 days after sowing.
- ⊗ 75-85 cm tall.
- ⊗ Flowers are attractive and large in size (8-9 cm) of yellow colour.
- ⊗ Yield: 50-60 flowers per plant.
- ⊗ Suitable for bedding in gardens as well as other floral decorations.



### **Arka Bangara**

- ⊗ Flowers are of yellow gold colour with RHS colour chart No. 12-A in Yellow Group.
- ⊗ Flowers are medium in size with 5-6.5 cm in diameter. Yield potential of the variety is 18 tons/acre.
- ⊗ Distinct features of the variety is its petaloid sterile flowers



### **MDU 1**

- ⊗ Selection from germplasm
- ⊗ Medium tall plants with moderate branching
- ⊗ 20t/ha.
- ⊗ Light orange colour



### **Arka Alankara:**

- ⊗ Hybrid selection.
- ⊗ Large, yellow (9A) coloured petaloid-type male-sterile flowers with ligulate florets.
- ⊗ 128.9 flowers/plant.
- ⊗ Multiplied by stem cuttings.



### **Arka Agni :**

- ⊗ Hybrid selection
- ⊗ Large, orange (N25C) coloured petaloid-type male-sterile flowers with ligulate florets.
- ⊗ 118.9 flowers/plant
- ⊗ Multiplied by stem-cuttings



**Vanilla Improved Hybrid**

## **Other varieties**



**Moonsong Deep Orange**



**Inca II Gold**



# French Marigold

## **Pusa Arpita**

↳ Selection from heterozygous population

↳ 18-20 t/ha

↳ Produces medium sized, light orange flowers.



## Cultivation Aspects....

### Soil requirement

↳ **Fertile and sandy loam**

↳ A deep, fertile, friable soil having good water holding capacity,

↳ **well drained soil** is best suitable

↳ **pH 7.0 - 7.5** is most desirable.



# Climatic conditions

& Mild climate for luxuriant growth and flowering

& 14.5°-28.6°C - improves flowering

& 26.2°-36.4°C - affects flower production

& During **severe winter** plants and flowers are **killed and blackened**

**Season – can be grown three times a year**

Late rains	Mid June	Mid July
Winter	Mid September	Mid October
Summer	January-February	February-March



## Preparation of soil

- ⊗ Ploughing 2-3 times
- ⊗ Incorporate 12 tones of well decomposed farmyard manure per hectare
- ⊗ Ridges and furrows are made to facilitate irrigation and other cultural operations

## Planting Material and Propagation

### Seed propagation :

- ⊗ 18 to 30°C required for germination
- ⊗ Seed rate - 1.5 kg / hectare
- ⊗ F<sub>1</sub> hybrids – 200 g/ha
- ⊗ Treat the seeds with *Azospirillum* (200 g in 50 ml of rice gruel) before sowing
- ⊗ Nursery beds - 3 x 1 m size mixed with 10 kg of FYM / sq. m.





## By cuttings

- ↳ Mostly to maintain purity of varieties
- ↳ Presence of adventitious roots along the stem helps in the establishment of cuttings
- ↳ **10 cm long cuttings treated with IBA**
- ↳ Planted in the sand to strike roots easily



## Transplanting of seedlings

- ↳ Mid July, mid October and February-March are suitable time for transplanting
- ↳ Seedlings of 30 days old with 3-4 true leaves
- ↳ Transplant should be done early in the morning or late in the evening
- ↳ After transplanting, a light irrigation has to be given





**Spacing** : 45 x 35 cm

**Irrigation :**

- ⊗ Irrigation is done once in a week or as and when necessary
- ⊗ Water logging should be avoided

**Manuring :**

- ⊗ During last ploughing, incorporate 25/ha of FYM.
- ⊗ 45:90:75 kg NPK/ha as basal and 45 kg N/ha as top dressing 45 days after planting.

**After cultivation :**

In India, 3-4 manual weeding are required for entire period. Chemical weed control is also recommended

**Nipping/tipping :**

**Thirty days** after planting terminal portion should be tipped / removed to encourage the branching





## Flowering

⊗ Summer : flowering from May upto rainy season.

Peak in June

⊗ Rainy : middle of September continue till December

⊗ Winter : middle of January and continue till March

⊗ Crop duration - 130 - 150 days

### Harvest :

⊗ Once in 3 days beginning from 60 days after planting

⊗ Harvest when flowers at full size

⊗ Harvesting either in the **morning or evening**.

⊗ Field should be **irrigated** before harvesting so that, flowers keep well for **longer period** after plucking.

⊗ Packaging – mostly in gunny bags

⊗ Productivity of plants increases considerably by regular plucking of flowers.

**Yield - Average of 18 t/ha**





## Post harvest

- ⊗ Soaking of flowers in 0.1 %  $\text{Al}_2(\text{SO}_4)_3$  for 2 hours
- ⊗ Flowers can be stored at 8 – 12 °C for 3 days



## Plant protection - pest

### Mealy bug

#### Damage symptom :

- ⊗ Mealy bugs are crowdly present in young shoots, stem and leaves.
- ⊗ **Flattening and crinkled** with dark green leaves
- ⊗ It's segregate honey like substances because of that leaves are converted into black **sooty mould**
- ⊗ Apical parts of the shoots show **retarded growth**

#### Control measures :

- ⊗ Spray prophenophos or dimethoate @ 2ml/litre.
- ⊗ Spray Fish oil rosin soap @ 25g/litre



### **Thrips - *Thrips tabaci***

#### **Damage symptom**

- ↳ **Discoloured or distorted plant tissue**
- ↳ Damaged leaves become **papery and distorted**. Infested terminals may discolour, rolled and drop leaves prematurely.
- ↳ Petals may exhibit "**colour break**," which is pale tissue that was killed by thrips feeding before buds opened.

#### **Control measures**

- ↳ Set up **yellow sticky trap** 20 per acre
- ↳ Released *Amphelictes cucumeris* spider **parasitoid**.
- ↳ Fipronil 1.5ml/litre or spiromesifen 0.75m/litre or azadiractin 3m/litre



### **Spider :**

It can be controlled by spraying Kelthane 1 ml/lit of water

### **Bud worm :**

It severely affects growing **buds and flowers** and can be controlled by spraying endosulfan 2 ml / per litre of water.





## Diseases

### Leaf spot

Leaf spot can be controlled by spraying Bavistin 1 g / lit of water



### Root rot

Drench 1 g/lit of Bavistin to control root rot



## Precision system of cultivation

### ↳ Techniques followed:

#### ↳ Protray nursery

↳ **Protrays** (54 x 27 cm with 98 cells) - placed on the raised beds

↳ Filled with a media (Sterilized cocopeat (500 kg) + neem cake (10 kg) + *Azospirillum* and Phosphobacteria (each @ 2 kg)).

↳ **Seed treatment** - *Azospirillum* @ 20 g/kg - shade dried (½ hour)

↳ **Drenching** with 0.2 % of 19:19:19 fertilizer, 0.5 %  $\text{FeSO}_4$ , 0.5 %  $\text{ZnSO}_4$  - 15 days after sowing.





‡ **Basal Application:**

75 % RDF of phosphorus, *i.e.* 450 kg of single super phosphate / ha.

‡ **Layout of drip irrigation system**

Two laterals placed at the center of each bed + emitters with a discharge rate of 4 lph at a spacing of 30cm.

‡ **Seedling treatment:**

0.5 % solution of *Pseudomonas fluorescens*

‡ **Planting:**

90 x 22.5 cm - 44,400 plants / ha





## Fertigation schedule – once in 5 days

Growth Stage	Days after transplanting	Fertilizer (kg/ha)	Total fertilizer (kg/ha)	Fertilizer (kg/ha)		
				N	P	K
Transplanting to establishment	20	19-19-19	8.85	1.68	1.68	1.68
		13-0-45	8.77	1.12	0	3.97
		Urea	8.55	3.93	0	0
<b>Subtotal</b>				<b>6.75</b>	<b>1.68</b>	<b>5.62</b>
Vegetative Phase	55	19-19-19	38.47	6.75	6.75	6.75
		13-0-45	34.95	4.5	0	15.75
		Urea	34.23	15.75	0	0
<b>Subtotal</b>				<b>27.0</b>	<b>6.75</b>	<b>22.5</b>
Flowering to harvest	40	19-19-19	44.4	8.43	8.43	8.43
		13-0-45	43.72	5.63	0	19.68
		Urea	42.75	19.69	0	0
<b>Subtotal</b>				<b>33.75</b>	<b>8.43</b>	<b>28.12</b>
<b>Total</b>				<b>67.5</b>	<b>16.87</b>	<b>56.25</b>
<b>Grand Total</b>				<b>68.00</b>	<b>17.00</b>	<b>56.00</b>

### Application of micronutrients

0.5% of  $\text{FeSO}_4$  and  $\text{MnSO}_4$  - 30 and 45 DAT – Foliar spray

### Weeding:

Pre-emergence herbicide - Pendimethalin @ 1 kg a.i/ha

### Pinching - 25 to 30 days after transplanting



Fourth node



& Disbudding - 30 days after transplanting

& Application of biostimulants

Humic acid @ 0.20% + seaweed extract @ 0.25% - 30 and 45 DAT

& Application of biocontrol agents

*Pseudomonas fluorescens* and *Bacillus subtilis* @ 0.5 % - five times at fortnightly intervals.



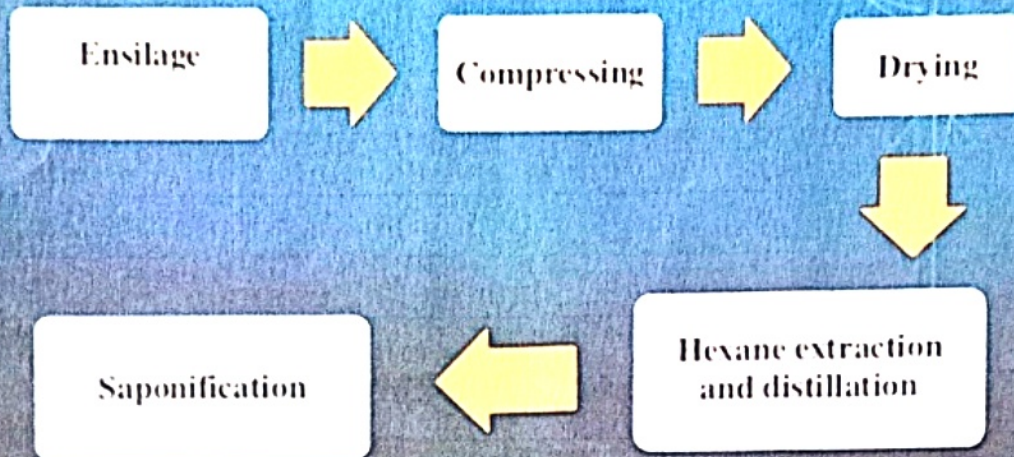
## Yield

Planting Date	Planting Date	Planting Date
25.12	35.74	42.27
1.13	1.99	39.16





## Pigment extraction



## Ensilaging

& Controlled **anaerobic conditions** - to fix and enrich the carotenoids present in the petals.

& Three methods:

- & bag method,
- & open method
- & pit/lagoon method.



& **Pit method** - very efficient and cost effective without much loss of xanthophyll.



‡ The silage is ready after **15 to 21 days**.

‡ The silaging is monitored **for complete fermentation** over a period of two to three weeks.

‡ Silaged flowers - collected from the pits - subjected to **dehydration process** in dehydration plant

## **Compressing and Shredding**

‡ Silaged flowers – **pressed** in industrial screw press in two stages.

‡ **Squeezed** to remove water- Reduction of 60 % moisture.

‡ Squeezed flowers - Subjected to **shredding**



## Drying

- ‡ Shredded flowers - **dried** in drier using hot air.
- ‡ Inlet temperature 85 - 90°C
- ‡ Outlet temperature 35 - 45°C for 30 minutes
- ‡ **Reduction of 30 per cent moisture.**

### Advantage:

Reduction in the formation of degenerative oxidative products

## Pelleting and storing

- ‡ Dried marigold - **Pulverised** in industrial grinder - powder form / meal.
- ‡ Marigold meal is **pelletized** to 6 mm to 10 mm size pellets - in industrial pelletizer with aid of steam/hot water as binder.

### Advantage:

- ‡ Avoids xanthophyll loss during storage, transport and handling.
- ‡ Stored for longer period.

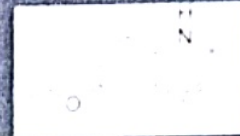


## Solvent extraction

⊗ Pellets packed in a column - **eluted with hexane** (FR) under mild conditions (30°C, for 15 min).

⊗ The extract - distilled until the desired quantity is achieved.

⊗ **0.1 to 0.3 % ethoxyquin** (<45°C) - mixed with final product for preventing the degradation of xanthophyll



⊗ Extracted pellets are used as fire wood or manure.

⊗ **Surendranath et al., (2016)** has reported that hexane, acetone, xylene, THF, chloroform was found to be suitable for extraction which was further confirmed by TLC tests.

## Saponification

⊗ Carotenoids - **stable under alkaline treatments**

⊗ Use of **methanolic solutions of potassium hydroxide** - saponification - **de-esterifies** the pigment to free xanthophyll (room temperature or by heating)

⊗ Saponification - **40 % methanolic KOH** for 20 minutes at 56°C

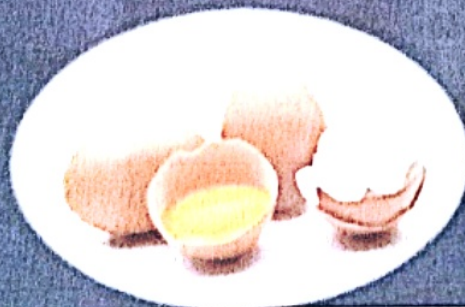
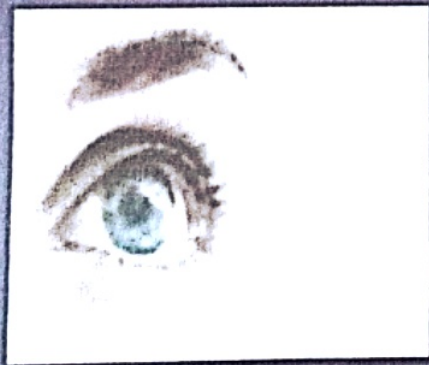
⊗ Degree of saponification - ensured by **TLC or HPLC**



## By Product



Leaf extract is a good remedy for ear ache. Flowers extract is considered as blood purifier, a cure for bleeding piles and is also a good remedy for eye disease and ulcers.





## USES....

- ✓ The consumption of **lutein and Xanthophyll** reduces **40 % of the age related macular degeneration.**
- ✓ Used in human foods, as a food colorant
- ✓ Good Nutrient supplement

⊗ Dhanankit Herbal Works & Comm., Jalgaon,  
Maharashtra, India

⊗ Farmakon Nutrivet, Dahisar – East, Mumbai,  
Maharashtra, India.

⊗ Synthite Industrial chemicals Ltd, Kolenchery,  
Kerala.

⊗ **AVT Natural Products Ltd (AVT NPL)**

## Companies in India



# Marigold Jelly



 Being a farmer means shaking hands with nature





**S.K.R. COLLEGE FOR WOMEN,  
RAJAMAHENDRAVARAM  
(Re-Accredited by NAAC “ B+ GRADE**

**PROJECT WORK  
ON  
MGNREGA  
(Mahatma Gandhi National Rural Employment  
Guarantee Act – 2005)**

**By  
A. NIKHITHA SIVA SAI PAVANI  
ROLL NO - 863**

**Under the Esteemed Guidance of**

**D.V.K.S. LAKSHMI  
Lecturer in Economics  
Department of Economics**



**DEPARTMENT OF ECONOMICS  
S.K.R. COLLEGE FOR WOMEN  
RE - ACCREDITED AT B+ LEVEL BY NAAC  
*Affiliated to Adikavi Nannaya University , Rajamahendravaram*  
RAJAHMAHENDRAVARAM**



# INDEX

Sl No	Title Name	Page No
1,	Objectives of the study	
2,	Introduction	1-2
3,	Types of procedure	3-8
4,	Workdays Under MGNREGS	10
5,	state was able to utilize MGNREGA	11-12
6,	state and local Government	13
7,	work list	14-15
8,	Wages	
9,	Amendments in NREGA	16
10,	Budget Allocations For MGNREGA	20-21
11,	Covid -19	22-26
12,	Active Workers	27
13,	Household Benefited	28
14,	persondays generated	29
15,	A critical Analysis	30-32
16,	objective of NREGA	33-35
17,	problems of NREGA	36
18,	References	37





**Smt. KANDUKURI RAJYALAKSHMI COLLEGE FOR WOMEN**  
(Estd. 1988)

RE - ACCREDITED AT B LEVEL BY NAAC  
Affiliated to Adikavi Nannaya University, Rajamahendravaram (A.P.)  
(Under the control of HITHAKARINI SAMAJAM, Endowments Dept., Govt. of Andhra Pradesh)



Opp. T.T.O. Kalyana Manthapam, Garudalapeta  
**RAJAMAHENDRAVARAM - 515 103**  
East Godavari District, Andhra Pradesh  
☎ 0883 - 2487391, 90304 30758  
e-mail: skrc@rajee@yahooinc.com  
website: www.skrcw.org

## Department of ECONOMICS

### CERTIFICATE

This is to certify that Mr/Mrs. A. Nikhitha Siva Sai Pavana class 3<sup>rd</sup> B.A (H.E.P) of SKR College for Women has completed her project under my guidance. She has taken proper care and shown utmost sincerity in completing the project. 2021-22

I certify that this project is up to my expectation and as per the guidelines issued by the university.

  
Signature of the Principal

PRINCIPAL  
S.K.R. Government Degree College (Women)  
RAJAMAHENDRAVARAM,  
East Godavari Dist., Andhra Pradesh

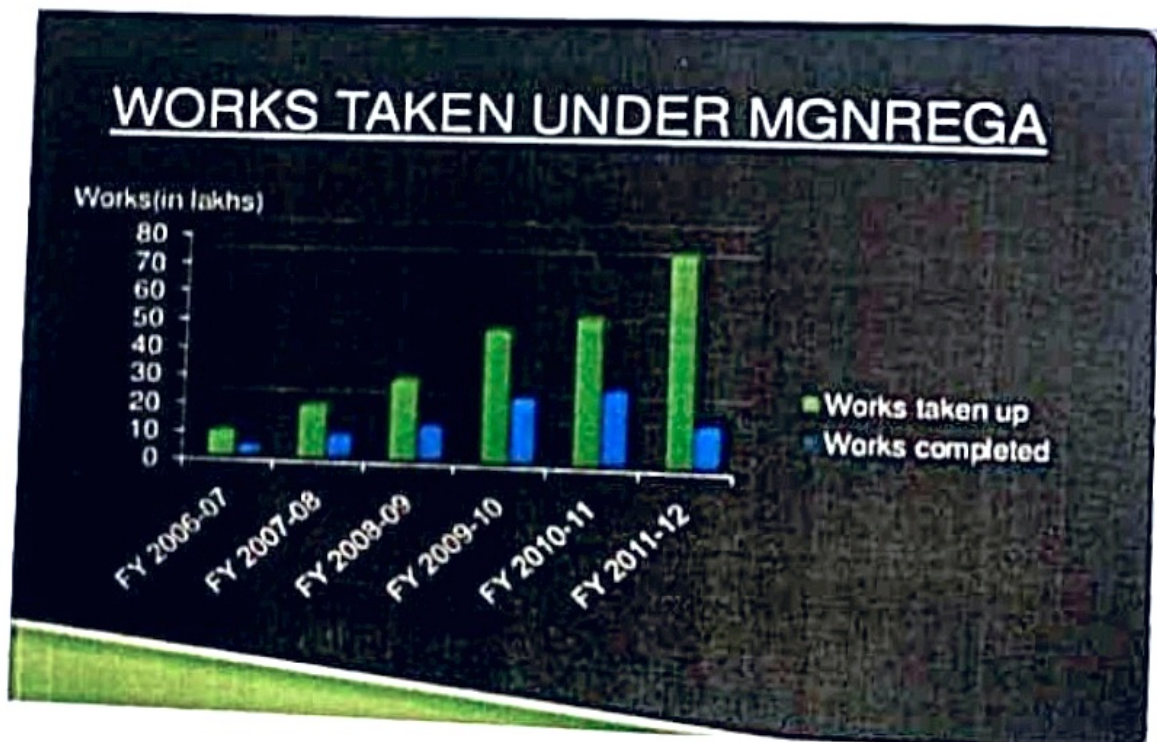
  
Signature of HOD



15(b) Construction of play fields:



16. Any other work which may be notified by the central Government in consultation with the state Government.





## 7. Flood Control and protection works

including drainage in water logged areas, deepening and repairing of flood channels, chaur renovation, construction of storm water drains for coastal protection;



## 8. Rural connectivity

To provide all weather access, including culverts and roads within a village, wherever necessary;

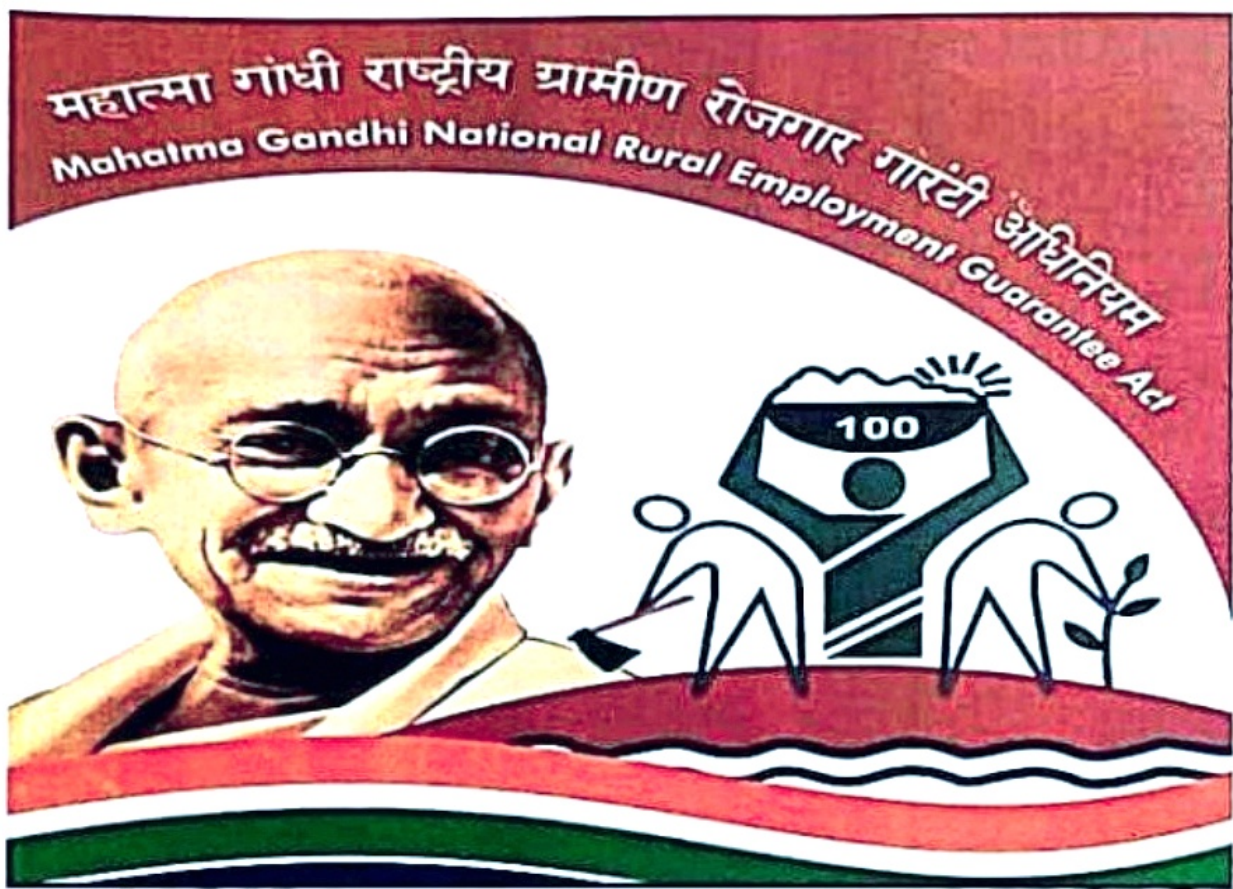
## 9. Construction of Bharat Nirman Rajiv Gandhi sewa Kendra

As knowledge Resource Centre at the Block level and as Gram panchayat bhawan at the Gram panchayat level;





# Mahatma Gandhi National Rural Employment Guarantee Act - 2005





#### 4. Provision of Irrigation Facility,

Dug out farm pond, horticulture, plantation, farm bunding and land development;

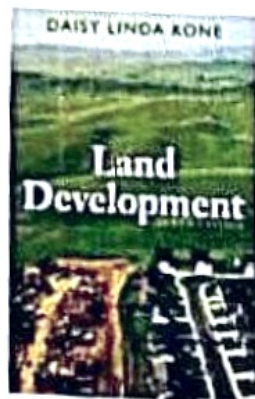


#### 5. Renovation of traditional water bodies

including desilting of tanks;

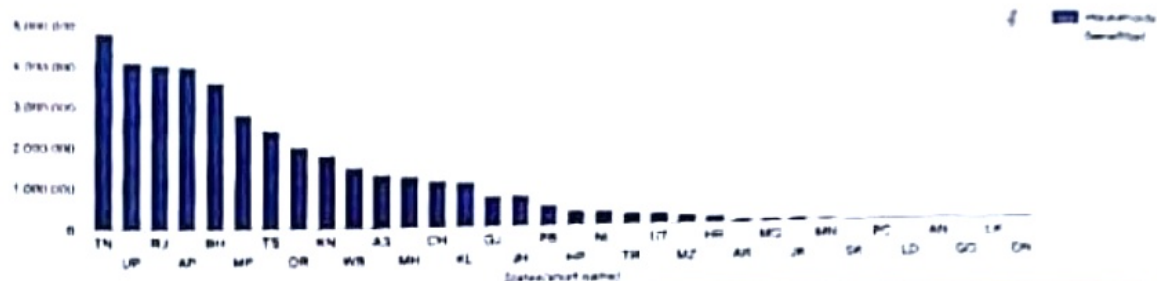


#### 6. Land Development:





### Households Benefitted 2022-23



Excel View

S.No.	State/UT	Households Benefitted
1	ANDAMAN AND NICOBAR	1.591
2	ANDHRA PRADESH	39.31.110
3	ARUNACHAL PRADESH	71.810
4	ASSAM	13.10.608
5	BIHAR	35.85.993
6	CHHATTISGARH	11.29.334
7	CH HAVELI AND DD	0
8	GOA	1.496
9	GUJARAT	7.50.138
10	HARYANA	1.63.619
11	HIMACHAL PRADESH	3.37.749
12	JAMMU AND KASHMIR	62.123
13	JHARKHAND	7.50.137
14	KARNATAKA	17.91.874
15	KERALA	10.90.189
16	LADAKH	11.166
17	LAKSHADWEEP	12
18	MADHYA PRADESH	28.05.543
19	MAHARASHTRA	12.67.364
20	MANIPUR	37.763
21	MEGHALAYA	65.906
22	MIZORAM	2.09.405
23	NAGALAND	3.36.021
24	ODISHA	20.03.818
25	PUDUCHERRY	83.241
26	PUNJAB	4.94.245
27	RAJASTHAN	40.45.816
28	SIKKIM	28.217
29	TAMIL NADU	48.33.623
30	TELANGANA	24.09.095
31	TRIPURA	2.83.917
32	UTTAR PRADESH	41.09.849
33	UTTARAKHAND	2.47.574
34	WEST BENGAL	14.80.610
	<b>Total</b>	<b>3,97,61,976</b>



Madhya Pradesh and Rajasthan, it has generated lower person days than these states.

"The dual muster system also contributed to increase in the expenditure," explains Mr.Buddha.

A total of 4.4 lakh (4,46,571) new jobs cards issued in the financial year 2020-2021 and a total of 7.3 lakh (7,29,121) workers were added. This accounts for 3.44% of all job cards issued since the inception of the scheme in the state.

The highest number of new job cards were issued in Anantapur district (53,844) and Visakhapatnam district (52,062) and the last in Nellore district (15,689).

#### **EMPLOYMENT GENERATION :**

This year,26.04 crore persondays were generated, highest in the last three years, and a 30% increase from 20.08 crore in 2019-20." Interestingly,75% of the total persondays were generated in the first four months of the financial year 2021-21,"says Mr.Buddha.

Contrary to the act, which mandates release of payment to the workers within 15 days of their work, the centre seldom release the funds on time and even after payments are processed, many of the transactions get stuck at the bank level either due to problems related to Aadhaar linking to the job card,or account-related issues.

Vizianagaram recorded the lowest percentage of worst performing gram panchayts while Guntur has the highest. "There is scope to further improve the implementation of this scheme, which gives the most deserving sections their right to livelihood," says Mr.Buddha





- Payment of wages within 15 days of completion of work, failing which worker is entitled to delay compensation of 0.05% / day of wages earned
- Minimum one-third of the workers should be women
- Wages to be paid according to the Minimum Wages Act 1948 for agriculture labours in the state.
- Social Audit to be done by Gram Sabha\

#### **Recent Developments:**

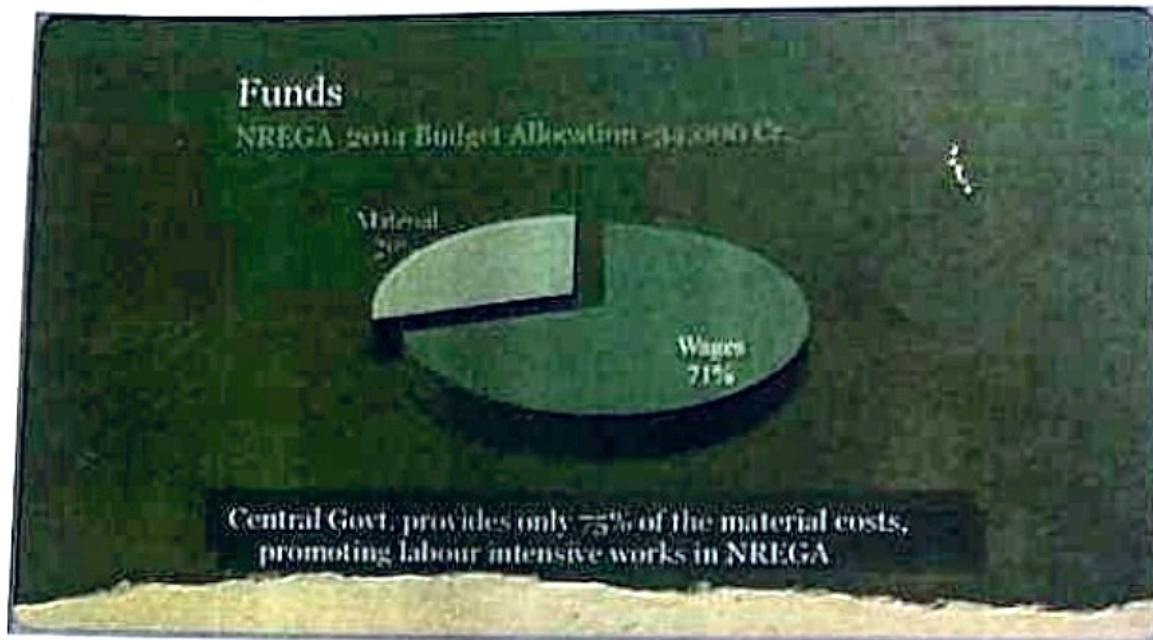
- Direct Benefit Transfer : Wages are electronically transferred to worker's bank/post office accounts through National Electronic Fund Management system (NeFMS)
- GeoMGNREGA : Geo-tagging all assets created under MGNREGA

#### **Achievements :**

- MGNREGA has been a powerful instrument for empowerment of poor women through its effect on livelihood security and social protection. In FY 2015-16 out of the total employment through MGNREGA, 56% was generated for women.
- Reduced distressed rural to urban migration and also seasonal migration by providing closer to home and decent working conditions.
- He helped the upliftment of SCs and STs through creation of livelihood opportunities. The percentage of scheduled caste workers has consistently been about 20% and scheduled Tribe workers has been about 17%.







districts of India from 1 April 2008. The statute was praised by the government as "the largest and most ambitious social security and public works programme in the world". In 2009 the World Bank had chided the act along with others for hurting development through policy restrictions on internal movement. However in its World Development Report 2014, the World Bank termed it as a "stellar example of rural development". MGNREGA is to be implemented mainly by gram panchayats (GPs). The law stated it provides many safeguards to promote its effective management and implementation. The act explicitly mentions the principles and agencies for implementation, list of allowed works, financing pattern, monitoring and evaluation, and detailed measures to ensure transparency and accountability.



S. No	Works	Master Category	NRM/Non NRM	NRM subcategories	Agri & Allied	Water Related	Water Sub categories
241	Construction of Continuous Contour Trench for Community	A	NRM	SWC		water	SWC
242	Construction of Water Absorption Trench for Community	A	NRM	SWC		water	SWC
243	Construction of Infrastructure for Azola cultivation for Individual	B	Non NRM		Agri / Allied		
244	Construction of Infrastructure for Azola cultivation for Community	B	Non-NRM		Agri / Allied		
245	Repair and Maintenance of Infrastructure for Azola cultivation for Community	D	Non NRM		Agri / Allied		
246	Construction of Infrastructure for Liquid Biomanure for Individuals	B	Non-NRM		Agri / Allied		
247	Construction of Infrastructure for Liquid Biomanure for Groups	C	Non-NRM		Agri / Allied		
248	Construction of Infrastructure for Liquid Biomanure for Community	B	Non-NRM		Agri / Allied		
249	Repair and Maintenance of Infrastructure for Liquid Biomanure for Community	D	Non NRM		Agri / Allied		
250	Construction of Underground Dykes for Community	A	NRM	GWR		Water	GWR
251	Construction of Embankment for community	D	Non NRM				
252	Construction of Village/Rural Haat for community	D	Non-NRM				
253	Repair and Maintenance of Village/Rural Haat for community	D	Non NRM				
254	Construction of Cyclone shelter for Community	D	Non-NRM				
255	Repair and Maintenance of Cyclone shelter for Community	D	Non NRM				
256	Construction of Play field for Community	D	Non-NRM				
257	Repair and Maintenance of Play field for Community	D	Non NRM				
258	Construction of Compound wall for government schools for Community	D	Non-NRM				
259	Repair and Maintenance of Compound wall for government run schools for Community	D	Non-NRM				
260	Production of building material for Community	D	Non-NRM				

NRM Natural Resource Management  
 Irr- Irrigation related Works  
 Drainage- Drainage and other works  
 Soil Health- Works for enhancing soil health  
 LR- Land related works

GWR- Groundwater Recharge related works  
 SWC- Soil & Water Conservation Works  
 PLNT- Plantation and Related works  
 Agri / Allied- Agriculture and Allied works

Ministry of Rural Development  
 Government of India



## OBJECTIVES OF THE STUDY

1. To improve the Knowledge of the Topic on which the students are doing project.
2. To give a shape to the learning in the classroom.
3. To increase the motivation of the study.
4. The evolution of the students learning process.
5. Learning in efficientiate between view somefacts.
6. To improve the critical thinking.
7. To prevent Data/information in our allogative way.
8. To learn to take initiative.
9. To express Criticism.



## TYPES OF PROCEDURE:

### 1. Water Conservation And Water Harvesting

Including contour trenches, contour bunds, boulder checks , gabion structures, underground dykes, earthen dams, stop dams and springshed development:



### 2. Drought Proofing

Including plantation and afforestation



### 3. Irrigation Canals

Including micro and minor irrigation works;





## INTRODUCTION

### National Rural Employment Guarantee Act, 2005

National Rural Employment Guarantee Act 2005 or NREGA, later renamed as the Mahatma Gandhi National Rural Employment Guarantee Act or MGNREGA in 2009, is an Indian labour law and social security measure that aims to guarantee the 'right to work'. This act was passed in 23 August 2005 under the UPA government of Prime Minister Manmohan Singh following tabling of the bill in parliament by the Minister for Rural Development Raghuvansh Prasad Singh.

It aims to enhance livelihood security in rural areas by providing at least 100 days of wage employment in a financial year to at least one member of every household whose adult members volunteer to do unskilled manual work. Women are guaranteed one third of the jobs made available under the MGNREGA. Another aim of MGNREGA is to create durable assets (such as roads, canals, ponds and wells). Employment is to be provided within 5 km of an applicant's residence, and minimum wages are to be paid. If work is not provided within 15 days of applying, applicants are entitled to an unemployment allowance. That is, if the government fails to provide employment, it has to provide certain unemployment allowances to those people. Thus, employment under MGNREGA is a legal entitlement. Apart from providing economic security and creating rural assets, other things said to promote NREGA are that it can help in protecting the environment, empowering rural women, reducing rural-urban migration and fostering social equity, among others.

The act was first proposed in 1991 by P.V. Narasimha Rao. It was finally accepted in the parliament and commenced implementation in 625 districts of India. Based on this pilot experience, NREGA was scoped up to cover all the





## Amendments in NREGA

➤ (7<sup>th</sup> Jan, 2010)

NREGA was renamed to MGNREGA

➤ (14<sup>th</sup> May, 2010)



OLD LOGO



NEW LOGO



## **STATE AND LOCAL GOVERNMENT**

### **State Rural Employment Guarantee Scheme (REGS)**

- 25 per cent of the cost of material and wages for semi- skilled/ skilled workers
- Unemployment allowance if the state is unable to provide employment within 15 days
- Administrative expenses of the State Employment Guarantee Council

## **REFERENCES**

- The Hindu article
- Internet
- College Library
- Yojana



#### 10. Agriculture related works

Such as, NADEP composting, vermin-composting, liquid biomanures;



#### 11. Livestock related works:

Such as, poultry shelter, goat shelter, construction of pucca floor, urine tank and fodder trough for cattle, azolla as cattle-feed supplement;

#### 12. Fisheries related works,

Such as, fisheries in seasonal water bodies on public land;



#### 13. Works in coastal areas:

Such as, fish drying yards belt vegetation;





## A CRITICAL ANALYSIS OF MGNREGA IN INDIA.

### What is MGNREGA?

- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is an employment guarantee act
- It was introduced in 2005 through the National Rural Employment Guarantee Act, 2005.
- In 2010, NREGA was renamed as MGNREGA

### Aim:

- To enhance livelihood security of households in rural areas of India.
- Objectives:
  - To provide guaranteed 100 days of wage employment per year to each rural household
  - Creation of durable rural assets
  - Social inclusion of women, SCs and STs
  - Strengthen the Panchayati Raj Institutions

### Coverage and Key features

- The Act currently covers all districts with the exception of those that have a 100% urban population.
- Demand driven scheme : Worker to be hired when he demands and not when the Government wants it.
- Gram Panchayat is mandated to provide employment within 15 days of work application, failing which worker is entitled to unemployment allowance





## **WORK DAYS UNDER MGNREGS 96.24 % PAYMENTS GENERATED WITHIN 15 DAYS IN FY 2020-21**

In the current FY 2021-22, 99.47% of households are offered employment against their demand for work under Mahatma Gandhi NREGS

The Ministry along with the States/UTs has been making concerted efforts for improving the timely payment of wages. States/UTs have been advised to generate pay orders in time. This has resulted in considerable improvement in the status of timely generation of pay order and leading to improvement in the actual time taken to credit wages in the workers accounts. Status of the percentage of payment generated within 15 days:

State-wise details of total rejected transactions and transactions pending for regeneration under Mahatma Gandhi NREGS in the financial year 2018-19, 2019-20 and 2020-21 are given at **Annexure**. Regeneration of rejected transactions is the responsibility of the State Governments, for which they have been reminded earlier on multiple occasions.

Mahatma Gandhi National Rural Employment Guarantee Scheme (Mahatma Gandhi NREGS) is a demand driven wage employment programme which provide for the enhancement of livelihood security of the households in rural areas of the country by providing at least one hundred days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work. In the current FY 2021-22 (as on 08.03.2022), 99.47% of households are offered employment against their demand for work under Mahatma Gandhi NREGS.

Mahatma Gandhi NREG Act is to provide at least 100 days of guaranteed wage employment in a financial year to each household in rural areas of the country whose adult members volunteers to do unskilled manual work. In addition to this, there is a provision for upto additional 50 days of unskilled wage employment in a financial year in drought/natural calamity notified rural areas. As per Section 3 (4) of the Mahatma Gandhi NREG Act, 2005, the State Governments may make provision for providing additional days beyond the period guaranteed under the Act from their own funds.





## A CRITICAL ANALYSIS OF MGNREGA IN INDIA.

### What is MGNREGA?

- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a employment guarantee act
- It was introduced in 2005 through the National Rural Employment Guarantee Act,2005.
- In 2010,NREGA renamed as MGNREGA

### Aim:

- To enhance livelihood security of household in rural ares of india.
- Objectives:
- To provide guaranteed 100 days of wage employment per year to each rural household
- Creation of durable rural assests
- Social inclusion of women,SCs and STs
- Strengthen the Panchayati Raj Institutions

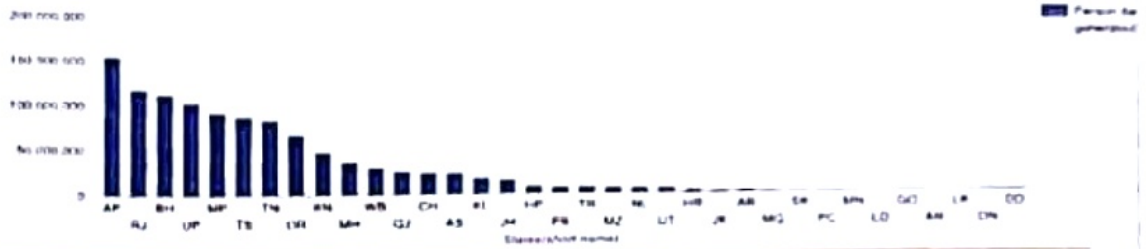
### Coverage and Key features

- The Act currently covers all districts with the exception of those that have a 100% urban population.
- Demand driven scheme : Worker to be hired when he demands and not when the Government wants it.
- Gram Panchayat is mandated to provide employment with 15 days of work application, failing which worker is entitled to unemployment allowance





Person days generated 2022-23



S. No.	State/UT	Person days generated
1	ANDAMAN AND NICOBAR	27,772
2	ANDHRA PRADESH	15,45,50,698
3	ARUNACHAL PRADESH	17,15,126
4	ASSAM	2,30,45,058
5	BIHAR	11,21,12,657
6	CHHATTISGARH	2,37,88,675
7	DAMAN & DIU	0
8	DIU HAVELI AND DD	0
9	GOA	28,190
10	GUJARAT	2,62,84,226
11	HARYANA	26,66,626
12	HIMACHAL PRADESH	84,26,500
13	JAMMU AND KASHMIR	13,81,721
14	JHARKHAND	1,58,95,962
15	KARNATAKA	4,74,10,307
16	KERALA	1,78,93,444
17	LADAKH	1,45,998
18	LAKSHADWEEP	667
19	MADHYA PRADESH	9,19,16,157
20	MAHARASHTRA	3,66,96,561
21	MANIPUR	2,04,660
22	MEGHALAYA	10,36,992
23	MIZORAM	62,61,311
24	NAGALAND	60,24,177
25	ODISHA	8,70,58,564
26	PUDUCHERRY	2,50,018
27	PUNJAB	78,48,897
28	RAJASTHAN	11,81,96,872
29	SIKKIM	6,13,381
30	TAMIL NADU	8,12,84,400
31	TELANGANA	8,79,05,743
32	TRIPURA	71,43,567
33	UTTAR PRADESH	10,29,59,545
34	UTTARAKHAND	56,62,538
35	WEST BENGAL	2,94,72,051
	<b>Total</b>	<b>1,08,77,95,229</b>





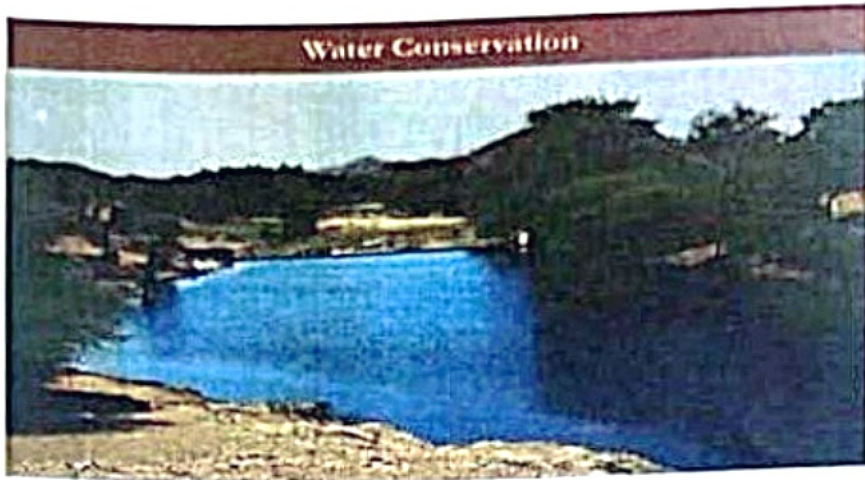


### TYPES OF WORK UNDER THE SCHEME:



Flood control and protection works including drainage in water logged areas







#### 14. Rural drinking water related works:

Such as, soak pits, recharge pits;



#### 15. Rural sanitation related works:

Such as, individual household latrines, school toilet units, anganwadi toilets, solid and liquid waste management;

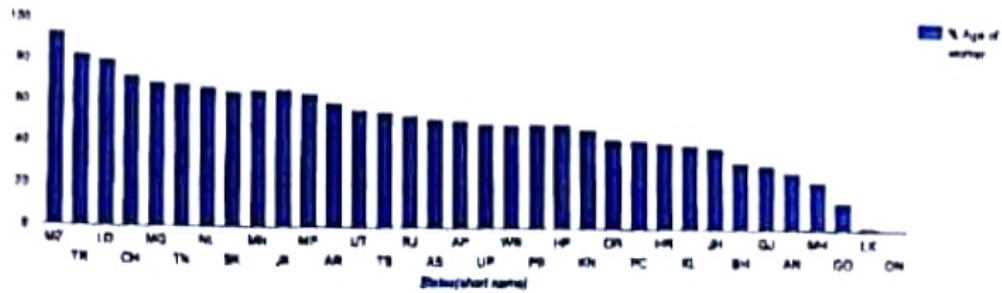


#### 15(a) Construction of Anganwadi Centres :





Active Workers 2022-23



S.No.	State/UT	Active Workers	Total Workers	%
1	ANDAMAN AND NICOBAR	13,981	50,691	27.58
2	ANDHRA PRADESH	1,00,80,392	1,97,17,350	51.12
3	ARUNACHAL PRADESH	2,99,796	5,02,052	59.71
4	ASSAM	58,00,459	1,11,49,977	51.93
5	BIHAR	1,07,44,799	3,34,16,998	32.16
6	CHHATTISGARH	73,03,679	1,00,77,733	72.47
7	DN HAVELI AND DC	0	32,870	0.00
8	GOA	6,533	49,766	13.13
9	GUJARAT	30,58,946	99,85,075	30.64
10	HARYANA	8,91,853	21,70,748	41.27
11	KARNATAKA	13,88,503	27,79,660	49.95
12	JAMMU AND KASHMIR	15,43,392	23,44,811	65.83
13	JHARKHAND	44,12,050	1,13,04,445	39.04
14	KARNATAKA	86,32,034	1,81,17,090	47.66
15	KERALA	25,75,160	64,21,379	40.10
16	LADAKH	44,464	55,440	80.20
17	LAKSHADWEEP	194	16,174	1.20
18	MADHYA PRADESH	1,12,88,553	1,75,40,372	64.38
19	MAHARASHTRA	62,12,246	2,72,84,656	22.78
20	MANIPUR	8,80,466	10,34,568	85.77
21	MEGHALAYA	8,71,268	12,59,416	69.18
22	MIZORAM	2,10,575	2,25,656	93.32
23	NAGALAND	5,04,715	7,45,800	67.67
24	ODISHA	77,59,842	1,82,09,003	42.62
25	PUDUCHERRY	66,064	1,56,645	42.17
26	PUNJAB	16,35,863	32,89,668	49.73
27	RAJASTHAN	1,42,36,664	2,65,95,282	53.53
28	SIKKIM	92,856	1,42,547	65.14
29	TAMIL NADU	92,25,552	1,34,24,872	68.72
30	TELANGANA	66,88,364	1,21,30,514	55.14
31	TRIPURA	9,97,136	12,01,295	83.01
32	UTTAR PRADESH	1,67,93,544	3,35,82,525	50.01
33	UTTARAKHAND	12,07,985	21,44,339	56.28
34	WEST BENGAL	1,67,71,356	3,41,67,106	49.09
	<b>Total</b>	<b>18,26,44,374</b>	<b>32,13,44,971</b>	



## PROBLEMS OF NREGA

A decade after coming into force, the Mahatma Gandhi National Rural Employment Guarantee Act is suffering from a decline in employment, budget caps, delays in wage payments and rampant violations of workers' entitlements. An examination of the case of Jharkhand points to reasons for this crisis, including the absence of a strong grievance redressal system, weak financial institutions, acute shortage of functionaries and indiscriminate use of technology. However, some initiatives taken by the state government and civil society in the recent past open up new possibilities for improving the programme.

### WAGES

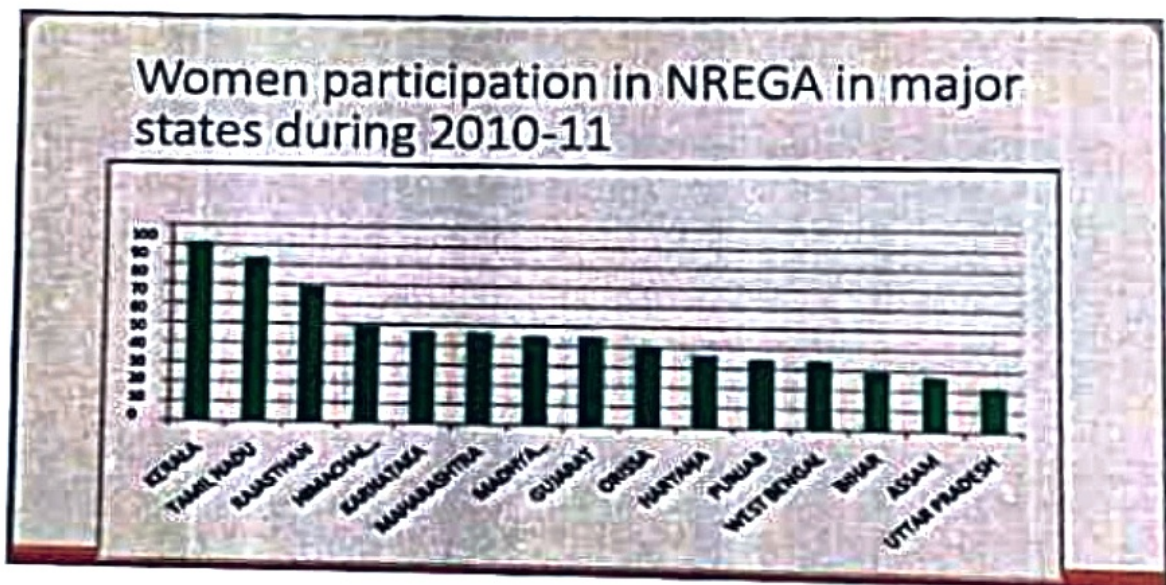
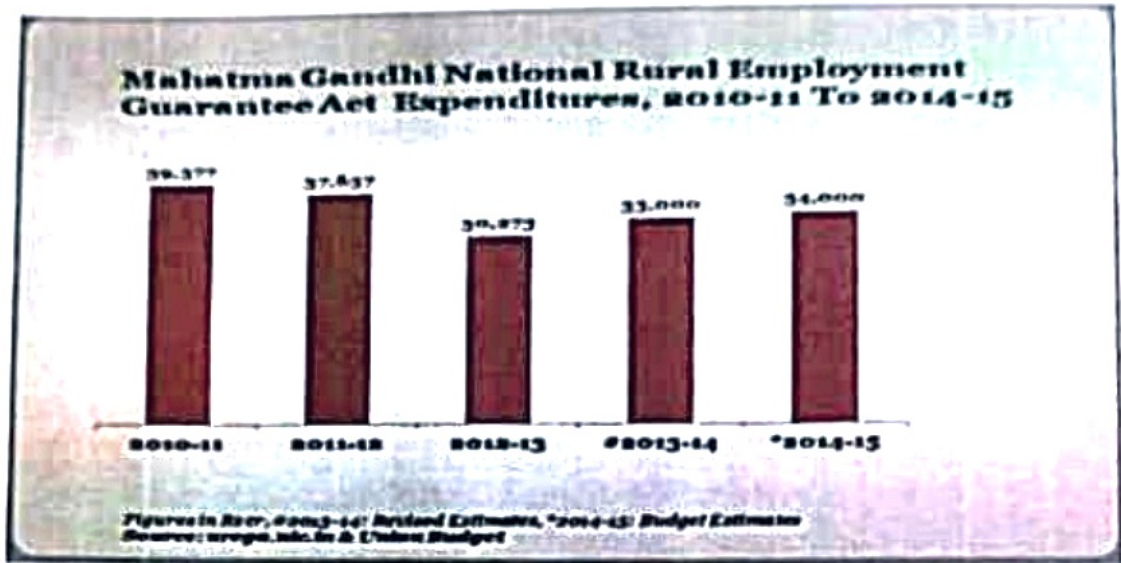
State	Per day wages (in Rs.)			State	Per day wages (in Rs.)		
	2022	2010	2012		2022	2010	2012
Andhra Pradesh	257	205	137	Manipur	251	209	133
Arunachal Pradesh	216	177	124	Meghalaya	230	181	120
Assam	229	189	136	Mizoram	233	194	136
Bihar	210	168	122	Nagaland	216	177	124
Chhattisgarh	204	174	132	Odisha	222	182	126
Goa	315	254	158	Punjab	281	240	166
Gujarat	239	194	134	Rajasthan	231	192	133
Haryana	331	281	191	Sikkim	222	177	124
Himachal Pradesh	266	184	157	Tamil Nadu	281	224	132
Jharkhand	210	168	122	Telangana	257	205	—
Karnataka	309	249	155	Tripura	212	177	124
Kerala	311	271	164	Uttar Pradesh	213	175	125
Madhya Pradesh	204	174	132	Uttarakhand	213	175	125
Maharashtra	256	203	145	West Bengal	223	191	136

One day is considered as 9 hours of work with one hour of rest. Difference between states due to difference in state-wise inflation rates.  
2022 Highest – 331 (US\$4.30) Lowest – 204 (US\$2.70) per day wages.



S. No.	Works	Master Category	NRM/Non NRM	NRM subcategories	Agri & Allied	Water Related	Water Sub-categories
24	Construction of Earthen peripheral/farm/field Bund for Community	A	NRM	SWC	Agri / Allied		
25	Construction of Pebble peripheral/farm/field Bund for Community	A	NRM	SWC	Agri / Allied		
26	Construction of Stone peripheral/farm/field Bund for Community	A	NRM	SWC	Agri / Allied		
27	Construction of Earthen contour Bund for Community	A	NRM	SWC			
28	Construction of Pebble contour Bund for Community	A	NRM	SWC			
29	Construction of Stone contour Bund for Community	A	NRM	SWC			
30	Construction of Earthen graded Bund for Community	A	NRM	SWC			
31	Construction of Pebble graded Bund for Community	A	NRM	SWC			
32	Construction of Stone graded Bund for Community	A	NRM	SWC			
33	Repair and Maintenance of Earthen graded Bund for Community	D	NRM	SWC			
34	Repair and Maintenance of Pebble graded Bund for Community	D	NRM	SWC			
35	Repair and Maintenance of Stone graded Bund for Community	D	NRM	SWC			
36	Construction of Feeder Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
37	Construction of distributory Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
38	Construction of minor Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
39	Construction of sub-minor Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
40	Construction of water courses for Community	B	NRM	Irr	Agri / Allied	Water	Irr
41	Lining of Feeder Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
42	Lining of distributory Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
43	Lining of minor Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
44	Lining of sub-minor Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
45	Lining of water courses Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
46	Renovation of Feeder Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
47	Renovation of distributory Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
48	Renovation of minor Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
49	Renovation of sub-minor Canal for Community	A	NRM	Irr	Agri / Allied	Water	Irr
50	Repair and Maintenance of feeder Canal for Community	D	NRM	Irr	Agri / Allied	Water	Irr







Smt. KANDUKURI RAJYALAKSHMI COLLEGE FOR WOMEN

Re-Accredited at B+ by NAAC

RAJAHMUNDRY - 533 103



Regd. no.

190907101029

Certificate

Cluster - A<sub>3</sub>

Certified as a bonafide Record of Practical Work done by

Kum. Sai Brundhan S.V.P. K. Konda

in B.S.C (M.P.C) of Chemistry course

during the year 2021 - 2022

No. of Experiments done: 9

No. of Graphs:

1. D. V. Valli

2. V.B.T. Sund

External's signature

DR. M. SUNITHA  
M.Sc., M.Phil., Ph.D.  
Department of Chemistry  
Smt. Kandukuri Rajyalakshmi College for Women  
Rajahmundry

Head of the department

V.B.T. Sund  
Lecturer in Chemistry



# Index

Sr. No.	Name of the Experiment	Page No.	Date of Experiment	Date of Submission	Remarks
01	Phenyl	01	14/7/22		
02	Soap	02-04	14/7/22		
03	Lip Balm	05	14/7/22		
04	Detergent powder	06	16/7/22		
05	Cleaning powder	07	16/7/22		
06	Vaseline	08	16/7/22		
07	Pain Balm	09	22/2/22		
08	Liquid Blue	11	22/2/22		
09	Soap oil.	12	22/2/22		



## 01. Phenyl (20 litres)

### Requirements :-

Cutting oil - 1 Kg  
Pine oil - 1 Kg  
Soap oil - 1 Kg  
Citronella - 50 gms  
Scent (Kewda Brand + Kobera Brand) = 1 bottle

### Procedure :-

Take cutting oil and pine oil in a tube. Stir thoroughly until the 2 liquids mix for about 15 minutes. Add soap oil and then stir well for half an hour. Add 15 litres of water (must be tap water), scent and fixer.



## 02. Soap

### Introduction :-

Soap is a traditional washing compound made from oil fats and caustic alkali. It is an item of daily necessity as cleaning agents. There are few varieties of soaps washing soaps, medicated soaps, toilet soaps and baby soaps. With increasing awareness of hygiene standards the market of soap is growing at a higher rate.

A good soap is biodegradable.

- ) It gets dissolved easily and remove stains from the clothes, human skin.
- ) It gives a clear and sparkling kind of cleanliness.
- ) It gives a pleasant smell.
- ) It disinfects and kill germs.
- ) It doesnot damage the fibers of textiles.

### Different types of soap preparation methods.

1. Semi boiling.
2. Full boiling.
3. Cold processed.

Here we follow full boiling method.



## Ingredients :-

1. Glycerine soap base : It is clear, colourless base.
2. Goat milk soap base : It is white coloured base
3. Coconut oil / Almond oil : Anti bacterial, anti fungal and moisturizing agent.
4. Turmeric / Beetroot : Anti inflammation, colouring agents.
5. Rice flour :- for exfoliating and anti-aging, repairs skin.
6. Flavour.

## Quantities required / Preparation method

Take glycerine soap base 15 gms and start melting it in a container, stir well. After that add 20 gms of goat milk soap base into it and stir it continuously till it melt properly. Add 3 gms of coconut oil / almond oil into it. 7 gms of rice flour and



3 gms of turmeric powder. Add them and mix properly and then mix it the melt and flavour. Pour this into the mould and stand for 24 hours.

~~111~~



### 03. Lip Balm

Lip balm primarily designed to moisturised your lips. Some lip balms are tinted, tinted balms have sheer colour and typically fade a quality, but they are comfortable to wear.

Benefits of using lip balm:- The primary purpose of lip balm is to provide an occlusive layer on the lip surface to seal moisture in lip and protect them for external exposure.

#### Ingredients :-

1. Bees wax / butter - Protection against irritants.
2. Coconut oil - moisturizing agent and antifungal.
3. Beetroot - vitamin C, fair complexion.
4. Flavour - Essential oils, required flavours.

#### Quantities required for preparation :-

Take a container keep 10gms of Shea butter melt it. Then add 2.5 gms of coconut oil into it, let this mixture melt. Then add beetroot juice into it. finally flavour of your wish, stir. pour this into a container and ~~let it to dry.~~



## 04. Detergent Powder

Requirements :- Washing soda = 10 Kg  
Trisodium phosphate = 1 Kg  
Sodium tripolyphosphate = 1 Kg  
Sodium sulphate (SS) = 2 Kg  
Sodium lauryl sulphate = 30 gms  
Acid slurry (AS) = 2 Kg  
Table salt (inferior quality) = 10 Kg  
Oil blue = 30 gms  
Carboxy methyl cellulose =  $\frac{1}{4}$  Kg  
scent = 30 gms  
fixer = 1 Kg

### Procedure :-

Except scent and acid slurry, the rest of the components are powders. First of all mix all the ingredients except scent, acid slurry and fixer thoroughly. Smash the crystals, then add acid slurry. Mix thoroughly. Filter it and finally add scent and fixer and store.



## 05. Cleaning Powder

### Requirements:-

Dolomite powder = 10 kgs.  
Soda ash = 125 gms  
Acid slurry = 350 gms  
Trisodium phosphate (Tsp) = 125 gms

### Procedure:-

Mix soda ash and acid slurry thoroughly. Add dolomite powder and Tsp, then mix thoroughly. filter all the contents and store.



## 06. Vaseline

Requirements :- Vaseline = 1 Kg  
Coconut oil = 50 gms  
white wash = 50 gms.  
Colour red or green = 1 pinch.

Scent :- fancy bite  
K.B Bucket  
Phirodous.

### Procedure :-

Take vaseline in container and warm it in low heat. After thoroughly dissolving, add required quantity of colour, stir it, add powdered wax, coconut oil, keep the vessel away from the stove and allow it to cool.

Add scent, when the mixture starts to solidify, fill in bottles. Keep the lids after complete cooling.



## 07. Pain Balm

Requirements :-

Vaseline	=	150 gms
Menthol	=	20 gms
Wax	=	1 Rs
Vamupuvvu	=	20 gms
Gultheria	=	2 ounces
Jam oil	=	2 ounces
Empty bottles	=	20 gms
Camphor	=	20 gms

Procedure :- Clean the empty bottles with dry smooth cloth and keep them on the wooden platform. Take gultheria, menthol, camphor, vamupuvvu and jam oil in a container and stir with a rod continuously and thoroughly until all the ingredients dissolve, keep it aside.

Take the vaseline in a separate bowl, warm it in a low temperature until it completely liquifies, then add wax, also allow the wax to dissolve in vaseline. Switch off the burner, to this vaseline, wax mixture, add the above solution of menthol, camphor, jam oil, add the above solution of menthol, camphor, jam oil, vamupuvvu and gultheria. filter with thin muslin cloth and pour this material in bottles leaving a little space.



~~How it to cool, then place the  
lids tightly and store them in cool  
temperature.~~

~~10~~



## 08. Liquid Blue

Requirements :- Violet blue crystals = 100 gms  
Glycerine = 20 gms  
A oil (acetic acid) = 20 ml (or) 20 gms  
Water = 5 litres  
Tinopal = 20 gms.

### Procedure :-

Grind the violet blue crystals into powder and add 300 ml of water, allow the powder to dissolve in water completely and then filter the coloured solution to keep it aside.

Take 5 litre of water, boil it thoroughly and then add violet blue, water, glycerine, A oil, Tinopal. Allow it to cool. fill it in bottles and keep the lids tightly closed.



## 09. Soap oil

Requirements :- Urea =  $\frac{1}{2}$  Kg  
Acid slurry =  $\frac{1}{2}$  Kg.  
Caustic soda = 150 gms  
Water = 6 litres.

Procedure :- Take 6 lit of water in a plastic bucket (or) plastic tub. Add urea, acid slurry, caustic soda in a required quantity and stir it upto half an hour until the mixture is completely dissolved. Now pour it in a plastic bottle and keep it safe.

Soap oil is one of the process used in phenol, it is also used in preparation of phenol. It is used in cleaning of Bathroom tiles, Bed sheets etc.



<b>S.K.R.Government Degree College(W),Rajamahendravaram</b>			
<b>Department of Hindi</b>			
<b>ODD &amp; Even Semester 2021-22</b>			
<b>Project Work</b>			
<b>Sl.No</b>	<b>Class/Group</b>	<b>Topic</b>	<b>Name of the Student</b>
1	Ist Degree Ist Sem	Premchand	Shk Sufiya
2		Kahani ka udbhav-vikas	J Mamta
3		Jayasankar Prasad	Md Alia
4	II nd Degree IIIrd Sem	Krishna kavi Surdas	B Devi
5		Bhakti kaal Swarna Yug	D Lakshmana
6	I Degree II Sem	Ekanki ka udbhav- vikas	K.Nandini
7		Natakkar Mohan Rakesh	Swarna Noble
8		Lekhakar ke rup me Dinakar	Seetha Gajanan





SKR COLLEGE FOR WOMEN; RAJAMAHENDRAVARAM  
Reaccredited NAAC B+Grade



## DEPARTMENT OF ZOOLOGY

**2021-2022**

### **VI SEMESTER PROJECT STUDENTS LIST**

#### **PROJECT :- PRAWN CULTURE**

S.NO	REGD.NO	NAME OF THE STUDENT
1	190907110123	CH.AMBIKA
2	190907110124	CH.GANGA BHAVANI
3	190907110127	B.SOWJANYA
4	190907110129	G.SRIMALLI
5	190907110133	G.VENIKA
6	190907110135	J.DEVI PRASANNA
7	190907110141	K.SRIDEVI
8	190907110143	K.R.S.P.KUMARI
9	190907110144	K.SATYA SRAVANTHI
10	190907110147	K.VENKATAMANI
11	190907110148	K.LAVANYA
12	190907110149	K.RAMALAKSHMI
13	190907110151	K.MOUNIKA
14	190907110153	K.YUVA DEEPTHI
15	190907110154	K.SAMEERA
16	190907110161	M.S.S.CHANDINI
17	190907110164	M.JYOTHI
18	190907110166	M.VARALAKSHMI
19	190907110170	P.VEERA LAKSHMI
20	190907110178	S.Y.N. CHANDINI
21	190907110179	S.PAVANI
22	190907110181	S.SUBHA SRI
23	190907110186	S.B.SONIA SHANKAR
24	190907110190	S.LOVA LAKSHMI
25	190907110197	V.VARSHINI
26	190907110198	V.LIJI
27	190907110199	Y.PRASASTHA
28	190907110200	Y.VINEESHA
29	190907110137	K.ASWINI









SKR COLLEGE FOR WOMEN; RAJAMAHENDRAVARAM  
Reaccredited NAAC B+Grade



## DEPARTMENT OF ZOOLOGY

**2021-2022**

### **VI SEMESTER PROJECT STUDENTS LIST**

#### **PROJECT :- PRAWN CULTURE**

S.NO	REGD.NO	NAME OF THE STUDENT	GRADE
1	190907110123	CH.AMBIKA	
2	190907110124	CH.GANGA BHAVANI	
3	190907110127	B.SOWJANYA	
4	190907110129	G.SRIMALLI	
5	190907110133	G.VENIKA	
6	190907110135	J.DEVI PRASANNA	
7	190907110141	K.SRIDEVI	
8	190907110143	K.R.S.P.KUMARI	
9	190907110144	K.SATYA SRAVANTHI	
10	190907110147	K.VENKATAMANI	
11	190907110148	K.LAVANYA	
12	190907110149	K.RAMALAKSHMI	
13	190907110151	K.MOUNIKA	
14	190907110153	K.YUVA DEEPTHI	
15	190907110154	K.SAMEERA	
16	190907110161	M.S.S.CHANDINI	
17	190907110164	M.JYOTHI	
18	190907110166	M.VARALAKSHMI	
19	190907110170	P.VEERA LAKSHMI	



# **FISHERY CULTURE**

A Dissertation submitted to



**S.K.R. COLLEGE FOR WOMEN**

Rajahmahendravaram

Affiliated To Adikavi Nannayya University

For Partial Fulfillment of the Degree of

**BACHELOR OF SCIENCE (B.Z.C)**

For Cluster Elective Aquaculture

Practical Paper VIII-B (3)

By

**Y. PRASASTHA**

REG.NO: 190907110199

UNDER THE GUIDANCE OF

**Dr. P. RAGHAVA KUMARI MADAM**

Project Work Carried Out By  
Visit to Fresh Water Fish Farm,

**ICAR-CENTRAL INSTITUTE OF FISHERIES**

Balabhadrapuram, Kakinada.





**KANDUKURI RAJYALAKSHMI COLLEGE FOR WOMEN**

**RAJAMAHENDRAVARAM**  
**DEPARTMENT OF ZOOLOGY**

REGD NO. 190907110199

**CERTIFICATE**

Certified as a bonafide record of practical work in Zoology done by

Y. prasastha of III B.Sc. C.B.Z., at the end of

VI Semester during the academic year 2021- 2022

A. Himad S.D.

Signature of the  
Head of the Department

H.O.D. OF ZOOLOGY  
S.K.R.COLLEGE FOR WOMEN  
RAJAMAHENDRAVARAM

P. N. S.

Signature of the  
In-Charge Lecturer

Valued:

1)

2)

Signatures of the Examiners



# ZOOLOGY PROJECT





# INDEX

<b>S.NO.</b>	<b>CONTENTS</b>	<b>PAGE. NO.</b>
1.	INRODUCTION	1-2
2.	STATUS OF FISHERIES	3-4
3.	SIRE SELECTION	5-7
4.	MATURATION IN FISH	8-11
5.	SPAWNING IN FISH	
5.1.	BUNDH BREEDING	12-14
5.2.	INDUCED BREEDING	15-21
6.	RESULT AND DISCUSSION	22
7.	CONCLUSION	23







# CULTURE OF FRESH WATER FISHES

## INTRODUCTION:

Aquaculture is the growing of aquatic organisms under controlled conditions. The aquatic crops are fish, prawns, mollusks etc, feed on microscopic plankton. Aquatic the low cost protein rich food.

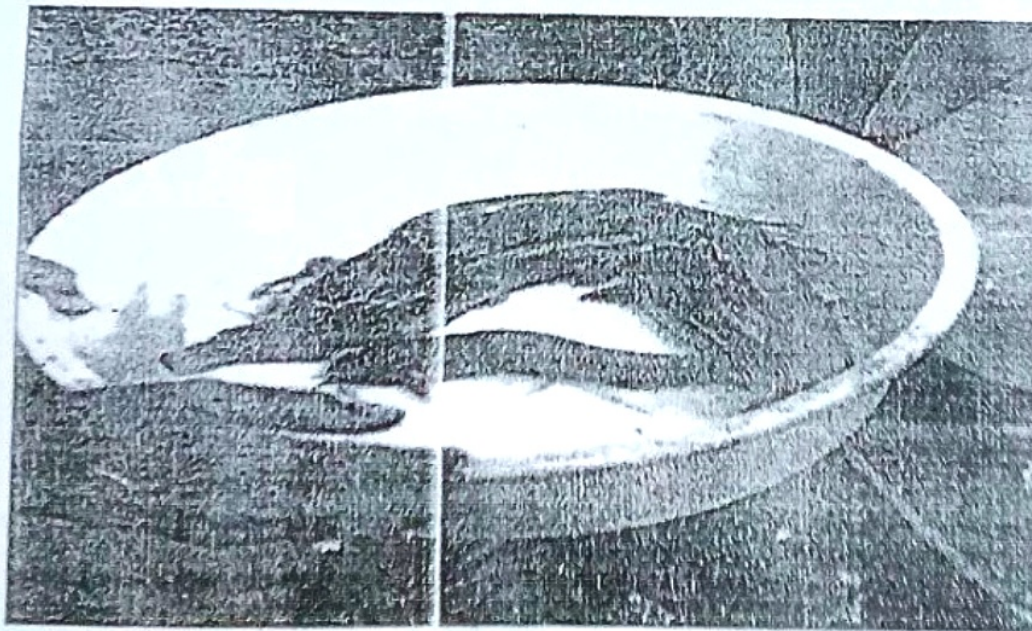
The earliest records come from china where artificial hatching of fish was being practiced in **2000 B.C.** a Chinese scientist produced the first treatise on the culture of common carp in **475 B.C.** fish culture has grown parallel to silkworm culture which clatter back to **2698 B.C.** so, there is little doubt as to the extreme antiquity of fish culture.

Fish culture is improved in number of ways.

- There is no record of fish culture in Europe except that small ponds known as “**STEWES**”. There. fishes are sent for later consumption. In the medical terms the stored fish in state is very valuable and stealing fish leads to the punishment at hot than a death. There were records of pile, barbs, dace, roach and I am preys being stocked in stems, but record of carps and maintenance of by medical people.



- Holding the fish in natural or artificial ponds and culture. In china young fish from rivers captured and stocked in ponds for peering to marketable size.
- Sometimes fish may get trapped in the river of bows lagoons during floods.
- Fish which remained in the spring and summer and so there could have the practice of breeding of fish in ponds, the practice of breeding of fish in ponds, instead of catching them for storage small breeding and rearing pond might have be hooded for the fry that was available i.e., the stews. In modern sense, fish culture established in England about 1400-1500 using carps. This brief historical account shows that fish culture in an ancient branch at Animal Husbandry as it in.







# CATLA - CATLA





## STATUS OF FISHERIES

Global production of food fish from captures and culture fishery is estimated to be about **101 million Mt** in **2002** as per the estimates of the food and agriculture organization. This accounts for a per capita supply of **16.2 Kg** globally aquaculture mainly contributed for the growth. i.e.; per capita supply since **2000** fish producer **209**, of the total animal protein consumption of food by **2.6** billion people all over the world. The share of fish proteins to the total animal protein supply and estimated to be around **15.9%** in **2001**. Much of this production of fish was possible through the development of aquaculture technology over the years. The role of aquaculture is filling the gap between the global fish protein needs and production from **1998-2003** is per-secured. Global fish production from aquaculture contented to grow and reached **51.4 million** in **2002**.

Global fish landings from the capture fisheries remained relatively stable between **1999 – 2002**. There has been a noticeable decline in the world marine capture fisheries production. Slightly around **6.7 Million Tons** turn over between the years **2000** and **2002**. Studies show that there has been an increase in the over exploited and developed stocks at commercially important species of marine fish from about **10%** in mid **1970's** **25%** in early **2000**.

For the global production fish contribution from the developing countries increased from **76.6%** in **1984** was **27.4%** which decreased to **10%** in **1998**. The utilization of fish from human consumption increased from **93.6** million tons in **1998**, **103.0** million tons in **2003** and per capita fish supply to the production from **15.8 – 16.3** during the same period. Global fish production from



Aquaculture continued to increase and reached **51.4** tons in **2002**. Aquaculture production on the developing countries maintained an average growth rate of **12.8** between **1994-1998**. Asia is one of the largest contributors of fish to the global production aquacultures. Its contribution to global aquaculture production accounts for **90.8%** in **CHINA** stands **1<sup>st</sup>** in the world with total aquaculture production **27.1%** million tones of the total production. **INDIA** stands **2<sup>nd</sup>** in aquaculture production **2.19** million MT of fish production.

Among the top **10** fish producing countries globally and is next to china with annual average growth rate at **6.2** in **2002**. The top **10** countries as per the estimates of **2002**. In aquaculture production globally are **CHINA, INDIA, INDONESIA, JAPAN, BANGLADESH, THAILAND, NORWAY** and of aquaculture for **10** species, group production of crops and other cyprinids accounts for **41.9%** of total aquaculture production with **1.6** million HT.

Followed by Oysters, miscellaneous marine Mollusca, Calmer, Salmon, Tilapia, Muscle Shrimp Prawns and Scallops is in order of production through the culture by the **20** species in culture (**FAO, 2003**) of this aquaculture of carps account for **67.84%** while shrimps contribute to **5.95%**.

Total world trade of fish and fishery production is estimated for the US dollars in **2002**. Global market is about **6.500** Crores (**MPEDA 2004**). Globally the fisheries and aquaculture sector provides income for about **38** million people who are dependent on the sector either directly/ indirectly in aquaculture and fisheries related vocations. In **INDIA** **14** million people are dependent on the fishery sector for the live hood.



# SITE SELECTION

For maintaining a good aquaculture, the selection of suitable site for the location of the fish farm is the important criteria. The suitable for a particular site, for the construction of fish culture pond depends on the type of culture system to be planned.

## • LAND BASED AQUACULTURE:

In this, the most commonly established once are pond forms and hatchery establishment. The quantity and quality of the land slope than 2% are texture latter suited for pond formation for culture.

## • OPEN WATER AQUACULTURE:

In open water culture availability of water in appropriate quantities is important. In flowing canals flow through culture systems are operated in cages.

♠ Selection of site for land based culture farm required the following parameters:

### A. PHYSICAL PARAMETERS:

Physical parameters are:

❖ Nature of the soil and supply of water.



- ❖ Soil nature composition.
- ❖ Water source.
- ❖ Availability of power for supply to the farm.

**TOPOGRAPHY:** The area selected for the construction of fish should be near to a dependable water source, porous soils should not be selected.

**SOIL COMPOSITION:** Clay and sand soils, loamy soils are suitable for the construction of farm.

**ELEVATION OF THE SITE:** The site should have a gentle slope to drain pond water into low lying areas.

**CHEMICAL NATURE OF SOILS:** Soils with acidic or alkaline nature are not suitable. The soil pH should be near to natural condition.

**WATER SOURCE:** Fish farm needs a perennial supply of water throughout the year. Dissolved oxygen in water should be between 7.0ppm and 9.0ppm.

## **B. METEOROLOGICAL PARAMETERS:**

- Rainfall quantity and season.
- Intensity of light.
- Temperature of air and water.



Meteorological parameters are the area selected should not be drowned during high floods and also not drought prone. Tolerable levels of air, temperature is between 26-30 °C.

### **C. BIOLOGICAL PARAMETERS:**

- ✓ Availability of brood fish of the species planned for breeding.
- ✓ Availability of raw materials for feed and non – prevalence of diseases.

Biological parameters are collection of brood fish for production of spawn is an essential input for the operation of the hatcheries and healthy brood fish is important.

### **D. SOCIAL ATTRIBUTES:**

- Geographical location and the structure available and human settlements.

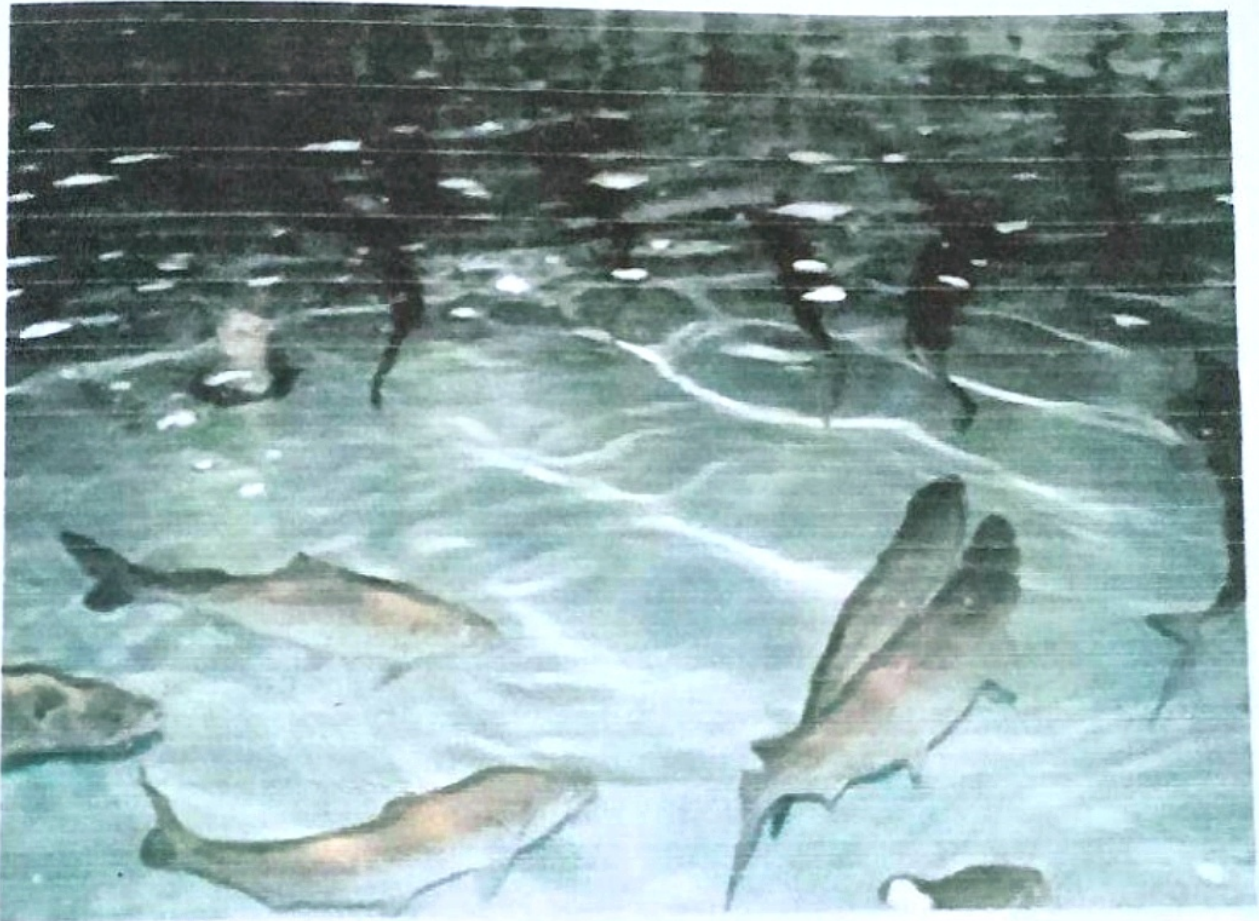
Social attributes are the site selected for aqua farming should have availability of human labor for carrying out culture operations. Good infra structural facilities such as roads common function systems and power are important.

### **E. AVAILABILITY OF RAW MATERIAL:**

Availability of raw material for the feed is the advantage for the source of farming.



# MATURATION SECTION





## MATURATION IN FISH

Both male and female gonads undergo marked cyclic morphological and histological changes before reaching full maturity and becoming ripe. This is called maturation of gonads.

- Most of the fishes exhibit seasonal cycle in the production of gametes. The explosion of gametes from the body into surrounding water is called "SPAWNING" Resulting in fertilization.
- The entire period during which gonads attain full maturity and spawning takes place in the population is called breeding season of species.
- After spawning gonad resumed sense may occur in the same breeding season (**multiple breeding**) twice or thrice depending upon the availability of certain crucial environmental factors such as temperature and photoperiod i.e., increased day length.
- Fish spawns during a specific period of the year which concedes that are available during the stated period only.



## **MATURATION STAGE IN THE FEMALE FISH**

On the basis of shape, size, color of the ovary and other Histo-morphological features at least six maturity stages can be recognized.

- ❖ RESTING PHASE (IMMATURE)
- ❖ EARLY MATURING PHASE
- ❖ ADVANCED MATURING PHASE
- ❖ MATURE OR PRESPAWNING PHASE
- ❖ SPAWNING PHASE
- ❖ SPENT PHASE

### **1. RESTING PHASE (IMMATURE):**

The ovaries are small, thin thread like translucent, pale or dirty white in colour with inconspicuous vascularization. The ovaries occupy only a small part of the body cavity and ova are not visible to the naked eye. Histologically, the ovary shows ovigenous lamella, having nests of oogonia and immature oocytes in the stage I and II visible under microscope.



## **2. EARLY MATURING PHASE:**

Ovaries become slightly larger, thicker opaque and light yellowish in colour. There is an increase in the weight of the ovary and they occupy nearly half of the body. Histologically, Oocytes in stage III and IV are present in large number.

## **3. ADVANCED MATURING PHASE:**

There is further increase in the weight and volumes of the ovaries, which have a deep yellow color and occupy 2/3 to 1/2 of the body cavity.

- ⊕ Vascular supply increases and the blood capillaries become conspicuous.
- ⊕ Immature oocytes are reduced in number while stage IV and V oocytes are present in large number. A few stage VI oocytes may also be seen.

## **4. MATURITY OF PRESPAWNING PHASE:**

The ovaries are further enlarged occupying almost the entire body cavity. They are turgid, deep yellow in colour and a large number of spherical ova are visible to the naked eye through the thin ovarian wall. The blood supply increases considerably.

Both translucent and opaque ova are present and ovaries attain their maximum weight. The fish becomes gravid due to ripe ova tucked inside, and the abdomen round. The ova are not discharged till the environmental conditions become favorable. Histologically, a large number of ova in stage VII and eggs are seen in the ovary.



## 5. SPAWNING PHASE:

Ovaries are very much enlarged, occupying the entire body cavity. They are turgid and yellow in color with a large number of translucent eggs. Ovarian wall is very thin, almost transparent. Eggs are present in the oviduct also, and the fish spawns a number of times during this period. The ovary is now said to be in running phase the beginning of this phase, ova are extruded by apply a gentle pressure on the abdomen.

## 6. SPENT PHASE:

The ovaries are flaccid, shrunked and sac like reduced in volume and have a dull color. The vascular supply is reduced. Some unspawned large ova and a large number of small ova are present. Histo-logically, the ovary shows atretic and discharged follicles along with stage I and II oocytes. Seasonal changes in the ovaries of teleosts have been studied by several investigators. The spawning season can be predicted by studying the occurrence of mature fish as well as by measuring the ova diameter.

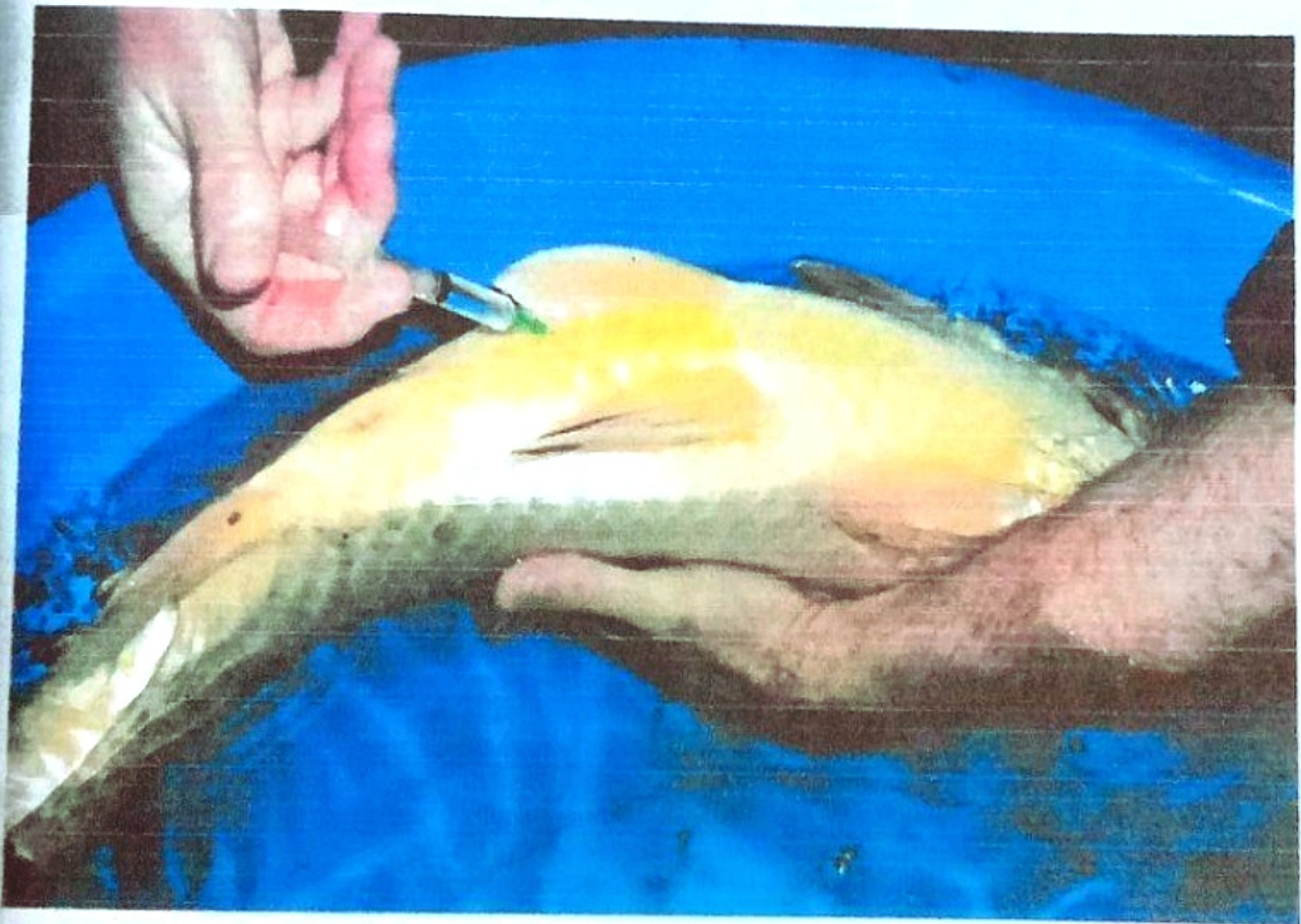
- Gonado somatic index of the species has also been widely used to indicate the maturity and periodicity of spawning and predicting.

The breeding season of the fish, and can be calculated by the following formula:

$$\text{GSI} = \frac{\text{Weight of the gonads}}{\text{Weight of the fish (without gut)}} \times 100$$



# SPAWNING SECTION





# SPAWNING IN FISH

## **BUNDH BREEDING:**

Bundh's are special type of perennial and seasonal tanks of impoundments where revenue conditions are created during monsoon month. Majority of bundh type tanks where major carps are known to breed are situated in M.P. and W.B. the bundh after a heavy shower, receive quantities of rain water with washings from their extensive catchment and fishes bundhs in detail have been described MOOKHERJEE (1944).

## **TYPES OF BUNDH'S:**

The bundhs are three types:

- a) Wet bundhs of perennial bundhs.
- b) Dry bundhs of seasonal bundhs.
- c) Modern bundhs.



## **1. WET BUNDHS OR PERENNIAL BUNDHS:**

Wet bundh is a perennial pond specially constructed for fish breeding having water throughout the year. An inlet is formed at the higher level of bundh for the entrance of water. While a small outlet is constructed in low laying area for the exit of the water from the bundh. The flow of water from the outlet is controlled with the help of bamboo. The major portion of bundh gets submerged with water. The shallow area of the bundh, where fishes actually spawn are called "MOANS".

## **2. DRY BUNDH OR SEASONAL BUNDHS:**

A dry bundh is a seasonal shallow pond enclosed by an earthen wall on three sides. Water rushes from the vast catchment areas and accumulates in the pond. Breeders from nearby ponds are introduced in the shallow ponds. Breeding takes place after it has been noticed that the carps migrate to shallow water. While, after a little sexual play they spawn. The eggs are collected by means of a mosquito net and transfer to cloth hapa of the size of 4x3 for hatching. After 3-5 days fries are transferred to nurseries. When the monsoon is over dry bundhs get dry up after a month or so. Dry bundhs are also situated in U.P. and W.B.



### 3. MODERN BUNDHS:

After successful breeding of carps in the dry bundhs in sonarpelliya in M.P, various dry bundhs of improved design were constructed called modern bundhs are puccabundhs. The sluice gate at the lower most level of this bundh is the characteristic factors. The total exit of water each spawning bundh is cleaved of watered.

The selection of the type of bundh for spawning is done on the basis of the breeding nature of the different fishes. Spawning in above bundh occurs after continuous heavy shower, when large quantities fo rain water rushes into the bundh.

Alkunchi referred that rohu and mrigal start breeding in the morning hours while catla swapn from noon to evening. Mrigal and rohu spawn in marginal shallow areas.



## **INDUCED BREEDING:**

The artificial process by means of which the extract of the pituitary is introduced inside the body of the both the matured male and female fishes, then the carps after being excited lay eggs in the pond water and subsequently fertilization takes place and the process is called **INDUCED BREEDING IN THE FISHES**. This process of breeding is also known as **HYPOPHYSATION**.

## **± INDUCED BREEDING IN NATURAL ENVIRONMENT:**

Fishes breed naturally in the rivers, streams and waterfalls during favorable conditions. Spawn obtained from natural breeding centers is not meeting the increasing demand for seed because of establishment of artificial culture ponds. Fish spawn when environment conditions ensure maximum fertilization and larval survival. However, the gonads often mature under a different set of conditions and this makes manipulating the environment to control the entire process is a challenge. Collection and transport of seed is tedious and risky. Stimulating conditions are nursery for breeding.



## ○ **METHODS AND TERMINOLOGY:**

Sexual methods can be used in aquaculture:

- ✓ **NATURAL SPAWNING:** This takes place in a pond with little or no outside intervention.
- ✓ **INDUCED SPAWNING:** This includes without hormonal treatment by stimulating natural spawning condition in the pond or tanks.
- ✓ **NATURAL SPAWNING:** This includes spawning with hormones, final maturation of reproductive products is brought about by injection of hormones. After which the fish spawn naturally in ponds or tanks.
- ✓ **ARTIFICIAL SPAWNING:** This includes spawning with or without hormonal treatment one obtains sexually matured brood stock either. Through hormonal treatment or not, one extracts the eggs and sperm manually and the eggs are incubated.
- ✓ **SURVIVAL RATE:** The survival rate of the fish seed is less due to wild breeding method by fish in natural environs. Hence high speed productivity can be activated by separating the mature breeder and induced breeding in them through the following methods.





**CIRRHINUS MRIGALA**





## **HORMONAL REGULATION:**

HORMONAL REGULATION of hormone release involves a hormone binding to its receptor on an endocrine cell to regulate hormonal secretion. A hormone that regulates hormone secretion is called **TROPIC HORMONE**. Tropic hormones may also stimulate proliferation of **ENDOCRINE** cells.

### **○ PROCESS OF HYPOPHYSATION:**

The technique of breeding the fish by administering pituitary gland extract injection is called **INDUCED BREEDING** or **HYPOPHYSATION**. The pituitary gland secret several hormones of which Gonadotropin are the most important for fishes.

### **‡ COLLECTION OF PITUITARY GLAND:**

Pituitary gland is attached to the ventral side of diencephalon region of the brain. This gland is also known as hypothalamus or hypothesis gonadotropins like **FHS** and **LH** regulates the maturity of gonads spawning in mature breeders.



Pituitary gland is collected from freshly collected mature fish. Skull is broken to lift the ventral side of diencephalon and lying in the myodome cavity is carefully cut and collected with the help of saline solution. Adult fishes from which the glands are collected called donors such glands can also be collected from fish preserved in ice for 5-6 days.

❖ Breeders into which the pituitary injections are given are called **RECIPIENTS.**

❖ Pituitary glands thus collected can be used immediately or can be preserved for 5-6 years in 2 ways.

❖ In the **FIRST METHOD**, the glands are preserved in **100% ETHYL ALCOHOL (ETHANOL).**

❖ **SECOND METHOD** of preservation is to preserve the glands in **100% ACETONE.** Acetone may be changed 4-5- times on the first day followed by replacing.

❖ Acetone once or twice in two days for 4-5 days. Then the glands are removed and dried by pressing them in blotting paper.

❖ Such dried glands are stored in sterilized air tight glass vials or desiccators containing **CaCl<sub>2</sub> (CALICIUM CHLORIDE).**

❖ By using pituitary extracts, fishes can be induced to breed. Even during unfavorable conditions.



❖ Fresh gland extracts or extracts of glands preserved in glycerin possesses same functional activity.

❖ Glands procured from either males or females do not differ in their functional activity.

### ✦ **PREPARATION OF PITUITARY EXTRACT:**

- Freshly collected glands are dried by pressing in filter paper.
- Then they are transferred to a porcelain bowl.
- Distilled water of **0.3%** salt solution of cholesterol of sesames seed oil is added and ground well with the help of a pestle.
- This mixture is diluted till the extract is at **1-4mg** of gland **0.1ml**.
- Thus prepared is solution is centrifuged for **5min**, at **1000rpm**.
- The clear supernatant liquid can be used for Hypo-physation.
- Instead of preparing the extract, whenever it is needed, it can be prepared in bulk quantities at a time and it is stored in glycerin at **1:2 ratio**.
- This can be preserved for **60 days** to **2 years**.



## ↓ **DOSAGE AND INJECTION:**

- Dose to be given is to be decided basing on the weight and the age of the breeding functional activity of the gland and depends up on the time of injection and sexual maturity of the individuals.
- In **HOMO PLASTIC METHOD**, the donors and recipients belong to the same species, while in **HETERO PLATIC METHOD**, the donors belong to different family are closely molested species.
- Generally **0.5 – 2.0 ml** of extract is needed for a fish weighing **1-10kg's**.
- First or stimulatory or initial dose generally is at **2-3 mg/kg's** of breeders while the second or resolving of functional does is at **5-8 mg/kg**.
- Females are given **2** dosages while males require only **1** dose with **6** hours gap is maintained between the two dosages in female. Pituitary dose to male is administered at the time of giving; second dose of female.
- Number **2,42,219** syringes are used depending upon the age and weight of the breeders.
- Breeders are caught with the help of a handset and kept on spongy base.
- Specified dose is injected, with the help of a hypodermis syringe into the muscle near the base of pectoral fins, axis of pelvic fins, dorsal or lateral sides of caudal peduncle of sub-dermal tissues.



- Then the injected area is slowly massaged for making the extract disperse on all sides.

#### ✦ **SPAWNING IN NATURAL CONDITION:**

- ✓ The reproduction of a species has to ensure the survival of the species.
- ✓ The development of the oocytes is a long process that occur over a relatively long period of time, and spawning occur when the moment is for the survival of the fry abundant food, shelter etc.,
- ✓ Reproduction is controlled by **INTRINSIC** and **EXTRINSIC** methods.
- ✓ When the fish is about to breed proper environmental conditions are not enough for spawning process. There is a need for the female to encounter a male in the place suited for laying eggs often the behavior male and female of the some species come close to assure fertilization of eggs by the males milt.
- ✓ After spawning occurs the eggs may be left or abundant of these may be some degree of potential case provided for by the male and female.

Injecting the dose which contains pituitary hormone to the breeders, fishes can be made to release germ cells by holding on their ventral side and massaging them gently over the abdomen. Eggs from females and milt from the males are collected into a bowl of water where the eggs kept in haps or hatching tanks can develop into fish fry.



26 25

## 6. RESULT :

14.8 MILLION TONS OF FRY'S WERE PRUDUCED BY AQACULTURE PER ANNUM THROUGH AQUACULTURE.

## 7. DISCUSSION:

After the maturation of fishes they can produce eggs. The eggs converted into fry's and then developing into fingerlings. The development and feeding is maintained under the hygienic conditions. After the maturation of fishes they are introduced through aquaculture per annum.

As far as aquaculture and fish production is concerned at time of culture period if we could maintain good condition, then we get more yield but now could not get more than 60% due to cause of stress during transportation.

Avoid stress during transportation and during the culture period we get above 60% of yield.



## 8. CONCLUSION:

AS THE PART OF 6<sup>TH</sup> SEMISTER WE HAD LEARNT SO MANY THINGS ABOUT AQUACULTURE UNDER THE GUIDANCE OF CULTURE TEACHIANS.

WATER MANAGEMENT IS THE IMPORTANT ASPECT IN AQUACULTURE FARM.

FEED MANAGEMENT, POND MANAGEMENT, QUALITY OF SEED ARE ALSO EQUALLY IMPORTANT IN THE AQUACULTURE FARM.

ALL THESE PARAMETERS ARE TAKEN INTO CONSIDERATION FOR THE BETTER YIELD OF AQUACULTURE.

NOW A DAYS AQUACULTURE IS BEING A DWINDLE STAGE BECAUSE OF THE REASONS LIKE:

- DISEASES
- USING OF ANTIBIOTICS.
- LACK OF AWARENESS OF THE PRESENT SITUATIONS OF THE AQUACULTURE.

IF WE CAN PREVENT ABOVE THREE CONDITIONS AS WELL AS WE PROVIDE REQUIRED PHYSICAL, CHEMICAL, BIOLOGICAL PARAMETERS. THE AQUA CAN RETURN THEIR GOLDEN STAGE.



## **INDUCED BREEDING:**

The artificial process by means of which the extract of the pituitary is introduced inside the body of the both the matured male and female fishes; then the carps after being excited lay eggs in the pond water and subsequently fertilization takes place and the process is called **INDUCED BREEDING IN THE FISHES**. This process of breeding is also known as **HYPOPHYSATION**.

## **✦ INDUCED BREEDING IN NATURAL ENVIRONMENT:**

Fishes breed naturally in the rivers, streams and waterfalls during favorable conditions. Spawn obtained from natural breeding centers is not meeting the increasing demand for seed because of establishment of artificial culture ponds. Fish spawn when environment conditions ensure maximum fertilization and larval survival. However, the gonads often mature under a different set of conditions and this makes manipulating the environment to control the entire process is a challenge. Collection and transport of seed is tedious and risky. Stimulating conditions are nursery for breeding.



## ○ **METHODS AND TERMINOLOGY:**

Sexual methods can be used in aquaculture:

- ✓ **NATURAL SPAWNING:** This takes place in a pond with little or no outside intervention.
- ✓ **INDUCED SPAWNING:** This includes without hormonal treatment by stimulating natural spawning condition in the pond or tanks.
- ✓ **NATURAL SPAWNING:** This includes spawning with hormones, final maturation of reproductive products is brought about by injection of hormones. After which the fish spawn naturally in ponds or tanks.
- ✓ **ARTIFICIAL SPAWNING:** This includes spawning with or without hormonal treatment one obtains sexually matured brood stock either. Through hormonal treatment or not, one extracts the eggs and sperm manually and the eggs are incubated.
- ✓ **SURVIVAL RATE:** The survival rate of the fish seed is less due to wild breeding method by fish in natural environs. Hence high speed productivity can be activated by separating the mature breeder and induced breeding in them through the following methods.



## ↓ **HORMONAL REGULATION:**

**HORMONAL REGULATION** of hormone release involves a hormone binding to its receptor on an endocrine cell to regulate hormonal secretion. A hormone that regulates hormone secretion is called **TROPIC HORMONE**. Tropic hormones may also stimulate proliferation of **ENDOCRINE** cells.

### ○ **PROCESS OF HYPOPHYSATION:**

The technique of breeding the fish by administering pituitary gland extract injection is called **INDUCED BREEDING** or **HYPOPHYSATION**. The pituitary gland secret several hormones of which Gonadotropin are the most important for fishes.

## ↓ **COLLECTION OF PITUITARY GLAND:**

Pituitary gland is attached to the ventral side of diencephalon region of the brain. This gland is also known as hypothalamus or hypothesis gonadotropins like **FHS** and **LH** regulates the maturity of gonads spawning in mature breeders.



Pituitary gland is collected from freshly collected mature fish. Skull is broken to lift the ventral side of diencephalon and lying in the myodome cavity is carefully cut and collected with the help of saline solution. Adult fishes from which the glands are collected called donors such glands can also be collected from fish preserved in ice for 5-6 days.

- ❖ Breeders into which the pituitary injections are given are called **RECIPIENTS.**
- ❖ Pituitary glands thus collected can be used immediately or can be preserved for 5-6 years in 2 ways.
- ❖ In the **FIRST METHOD**, the glands are preserved in **100% ETHYL ALCOHOL (ETHANOL).**
- ❖ **SECOND METHOD** of preservation is to preserve the glands in **100% ACETONE.** Acetone may be changed **4-5- times** on the first day followed by replacing.
- ❖ Acetone once or twice in two days for **4-5 days.** Then the glands are removed and dried by pressing them in blotting paper.
- ❖ Such dried glands are stored in sterilized air tight glass vials or desiccators containing **CaCl<sub>2</sub> (CALICIUM CHLORIDE).**
- ❖ By using pituitary extracts, fishes can be induced to breed. Even during unfavorable conditions.



- ◆ Fresh gland extracts or extracts of glands preserved in glycerin possesses same functional activity.
- ◆ Glands procured from either males or females do not differ in their functional activity.

### ◆ **PREPARATION OF PITUITARY EXTRACT:**

- Freshly collected glands are dried by pressing in filter paper.
- Then they are transferred to a porcelain bowl.
- Distilled water of 0.3% salt solution of cholesterol of sesames seed oil is added and ground well with the help of a pestle.
- This mixture is diluted till the extract is at 1-4mg of gland 0.1ml
- Thus prepared is solution is centrifuged for 5min, at 1000rpm.
- The clear supernatant liquid can be used for Hypo-physation.
- Instead of preparing the extract, whenever it is needed, it can be prepared in bulk quantities at a time and it is stored in glycerin at 1:2 ratio.
- This can be preserved for 60 days to 2 years.



## **\* DOSAGE AND INJECTION:**

- Dose to be given is to be decided basing on the weight and the age of the breeding functional activity of the gland and depends up on the time of injection and sexual maturity of the individuals.
- In **HOMO PLASTIC METHOD**, the donors and recipients belong to the same species, while in **HETERO PLATIC METHOD**, the donors belong to different family are closely molested species.
- Generally 0.5 – 2.0 ml of extract is needed for a fish weighing 1-10kg's.
- First or stimulatory or initial dose generally is at 2-3 mg/kg's of breeders while the second or resolving of functional does is at 5-8 mg/kg.
- Females are given 2 dosages while males require only 1 dose with 6 hours gap is maintained between the two dosages in female. Pituitary dose to male is administered at the time of giving second dose of female.
- Number 2,42,219 syringes are used depending upon the age and weight of the breeders.
- Breeders are caught with the help of a handset and kept on spongy base.
- Specified dose is injected, with the help of a hypodermis syringe into the muscle near the base of pectoral fins, axis of pelvic fins, dorsal or lateral sides of caudal peduncle of sub-dermal tissues.



- Then the injected area is slowly massaged for making the extract disperse on all sides.

### ↓ **SPAWNING IN NATURAL CONDITION:**

- ✓ The reproduction of a species has to ensure the survival of the species.
- ✓ The development of the oocytes is a long process that occur over a relatively long period of time, and spawning occur when the moment is for the survival of the fry abundant food, shelter etc.,
- ✓ Reproduction is controlled by **INTRINSIC** and **EXTRINSIC** methods.
- ✓ When the fish is about to breed proper environmental conditions are not enough for spawning process. There is a need for the female to encounter a male in the place suited for laying eggs often the behavior male and female of the some species come close to assure fertilization of eggs by the males milt.
- ✓ After spawning occurs the eggs may be left or abundant of these may be some degree of potential case provided for by the male and female.

Injecting the dose which contains pituitary hormone to the breeders, fishes can be made to release germ cells by holding on their ventral side and massaging them gently over the abdomen. Eggs from females and milt from the males are collected into a bowl of water where the eggs kept in haps or hatching tanks can develop into fish fry.







## 6. RESULT :

14.8 MILLION TONS OF FRY'S WERE PRUDUCED BY AQACULTURE PER ANNUM THROUGH AQUACULTURE.

## 7. DISCUSSION:

After the maturation of fishes they can produce eggs. The eggs converted into fry's and then developing into fingerlings. The development and feeding is maintained under the hygienic conditions. After the maturation of fishes they are introduced through aquaculture per annum.

As far as aquaculture and fish production is concerned at time of culture period if we could maintain good condition, then we get more yield but now could not get more than 60% due to cause of stress during transportation.

Avoid stress during transportation and during the culture period we get above 60% of yield.



## 8. CONCLUSION:

AS THE PART OF 6<sup>TH</sup> SEMISTER WE HAD LEARNT SO MANY THINGS ABOUT AQUACULTURE UNDER THE GUIDANCE OF CULTURE TEACHIANS.

WATER MANAGEMENT IS THE IMPORTANT ASPECT IN AQUACULTURE FARM.

FEED MANAGEMENT, POND MANAGEMENT, QUALITY OF SEED ARE ALSO EQUALLY IMPORTANT IN THE AQUACULTURE FARM.

ALL THESE PARAMETERS ARE TAKEN INTO CONSIDERATION FOR THE BETTER YIELD OF AQUACULTURE.

NOW A DAYS AQUACULTURE IS BEING A DWINDLE STAGE BECAUSE OF THE REASONS LIKE:

- DISEASES
- USING OF ANTIBIOTICS.
- LACK OF AWARENESS OF THE PRESENT SITUATIONS OF THE AQUACULTURE.

IF WE CAN PREVENT ABOVE THREE CONDITIONS AS WELL AS WE PROVIDE REQUIRED PHYSICAL, CHEMICAL, BIOLOGICAL PARAMETERS. THE AQUA CAN RETURN THEIR GOLDEN STAGE.





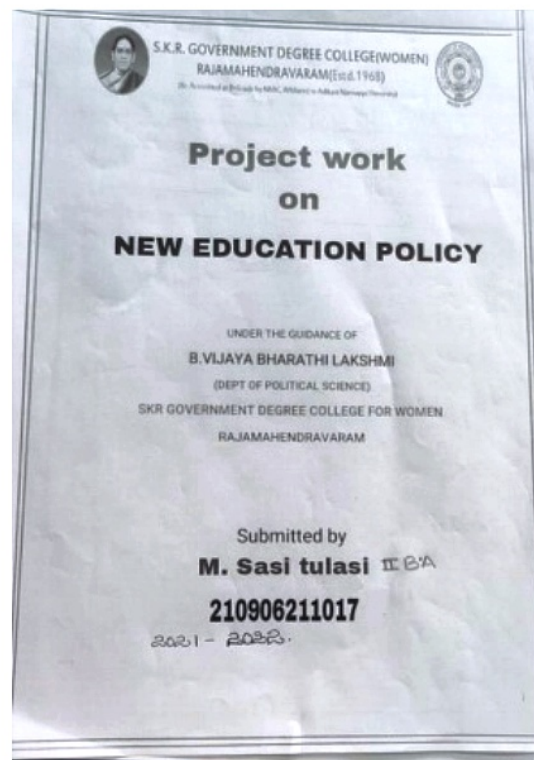
**SKR COLLEGE FOR WOMEN, RAJAHMUNDRY**

**[Re – Accredited by NAAC “B+GRADE”]**

**STUDENTS PROJECT 2021 - 22**

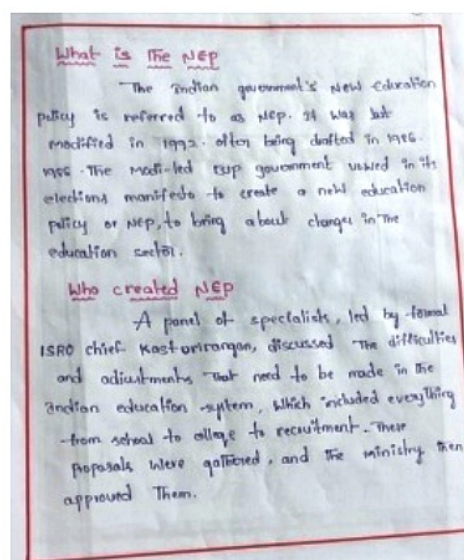
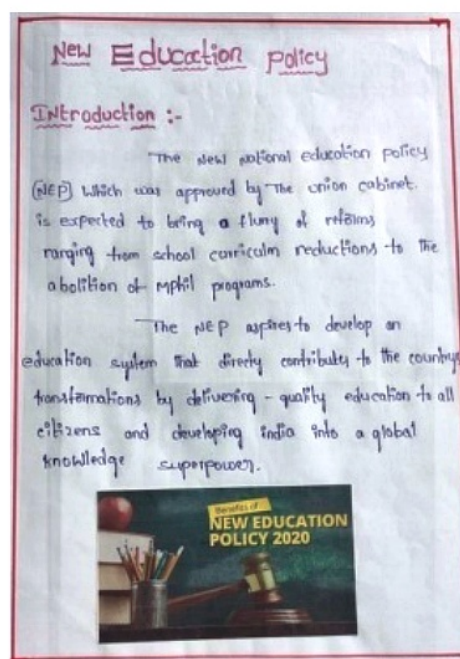
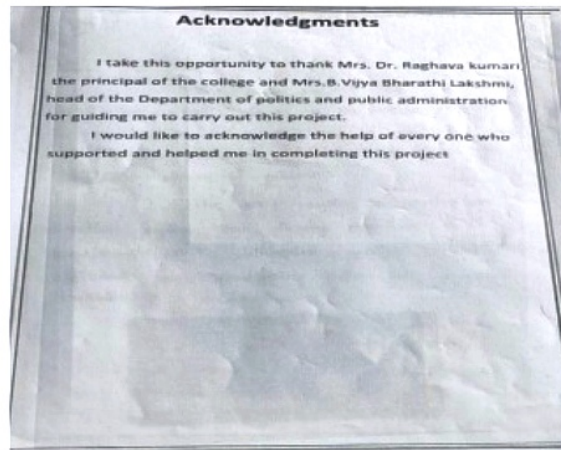
**DEPARTMENT OF POLITICAL SCIENCE**

**TOPIC : NEW EDUCATION POLICY**

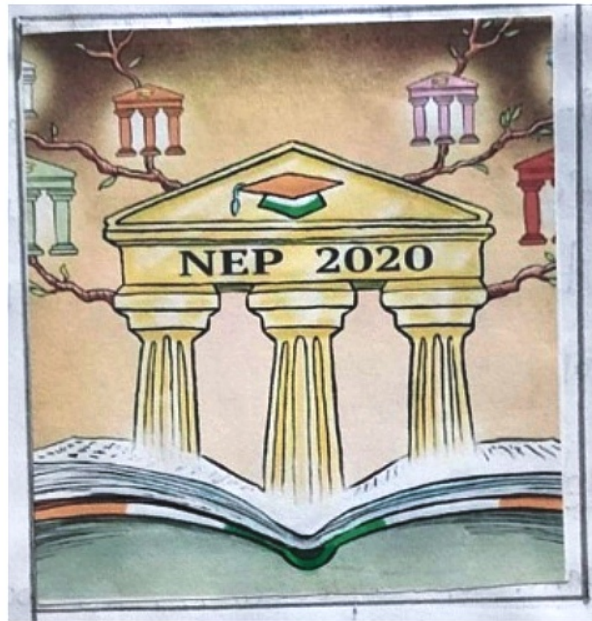


Sl. No.	NAME OF THE TOPIC	PAGE NO
1	Certificate	2
2	Acknowledgment	1
3	Introduction	3
4	Summary	3 to 9
5	Conclusion	9







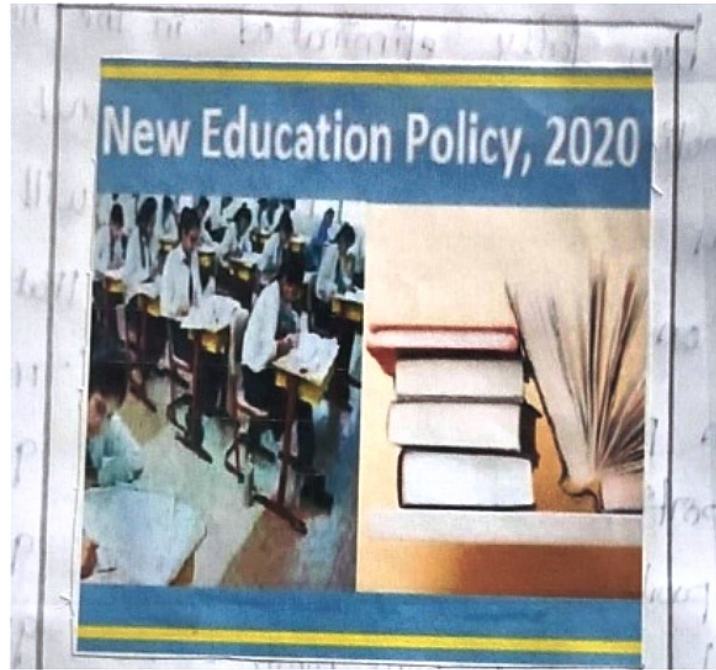


### New System of Education :-

The new Education policy 2020 was adopted by the Modi government. The 10+2 structure has been fully eliminated in the new education policy. Our country's educational curriculum has been based on 10+2 but it will soon be based on 5+3+3+4. This means that one-half is from primary to second grade, the second portion is from third to fifth grade, the third part is from sixth to eighth grade, and the last part is from ninth to 12th grade. Learn about 5+3+3+4 format in this article.

We'll provide you a quick overview of the 'New Education Policy 2020' including the scheme benefits, key features.





Schooling starts at the age 3 years old:-

The education policy extends compulsory schooling from the age bracket of 6-14 years to 3-18 years. The NEP includes three years of previously unrecognized pre-schooling for children aged 3-6 years in the school curriculum. The new system will include 12 years of formal education and three years of Anganwadi/pre school education.

The 10+2 school curriculum framework will be replaced with 5+3+3+4 curriculum structure corresponding to ages 3-8, 8-11, 11-14 and 14, 18 years respectively with an emphasis on early childhood care and education (ECE)





Mother tongue as medium of instruction

The NEP emphasizes pupils' native language as the medium of teaching while adhering to the "three-language formula" and ensuring that no language is imposed on anyone. The NEP simply suggests using the mother tongue as a medium of instruction rather than making it mandatory.

According to policy paper, children learn and grasp non-biased topics faster in their native language.

The home language mother tongue local language, 51 regional languages will be used as the medium of instruction until at least grade 5, but preferably until 8 and beyond.





Following that wherever practicable  
The home or local language will be taught  
as a language both public and private  
schools will follow this the regulation adds

science arts commerce gets blurred

There would be no formal distinction  
between arts and science, curricular and  
extra-curricular activities, or vocational and  
academic programs under NEP 2020. students  
can choose from a variety of disciplines  
Throughout the streams internships will be  
included in vocational education, which will  
begin in sixth grade.

FYUP programme Returns & No. More  
Dropouts

Under the NEP undergraduate degrees  
will last three or four years with several  
exit alternatives available during that time.  
After one year of study in a topic or  
field, including vocational and professional  
field, colleges will be required to award  
a certificate, a diploma following two years  
of study, or a Bachelor's degree after a  
three-year program.

The government will also create  
an Academic Bank of credit to store academic  
credits earned at various HEIs digitally  
so that they can be transferred and counted  
toward a final degree.



Finally, based on the foregoing points, we can conclude that this policy implements much-needed adjustments. There was no uniform system in place, which has now been eliminated. It has more transparency and a single national agency in charge of overseeing the whole education system in the country.