

# **GOVERNMENT DEGREE COLLEGE, BHUPALAPALLY**

(Dist : Jayashankar, TELANGANA)



## **PROJECT WORKS**

2021-22

**GOVERNMENT DEGREE COLLEGE, BHUPALPALLY**  
**STUDENT PROJECT WORK**  
**ON**  
**AASARA Pension Scheme and its Consequences in Rural**  
**life-A Study in Mulugu City of Telangana State.**

**2021-22**

Submitted by

- |                     |              |
|---------------------|--------------|
| 1. B.Praveen        | B.A III Year |
| 2. S.Chandu         | B.A III Year |
| 3. P.Srinath        | B.A III Year |
| 4. J.Saikirananjali | B.A II Year  |
| 5. T.Malleswari     | B.A II Year  |
| 6. G.Laxmiraj       | B.A II Year  |
| 7. V.Pradeep        | B.A II Year  |
| 8. B.Anand          | B.A II Year  |



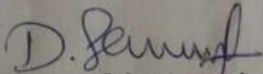
**Under the supervision of**  
**Dr.D.Sandhya**  
**Assistant Professor of Economics**

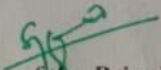
**DEPARTMENT OF ECONOMICS**  
**GOVERNMENT DEGREE COLLEGE BHUPALPALLY**

## CERTIFICATE

This is to certify that the study project entitled "AASARA Pension Scheme and its Consequences in Rural life-A Study in Mulugu City of Telangana State" the present study is carried out by our students

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|---------------------|-------------------|
| 1. B.Praveen        | B. Praveen        |
| 2. S.Chandu         | S. chandu         |
| 3. P.Srinath        | P. Srinath        |
| 4. J.Saikirananjali | J. Saikirananjali |
| 5. T.Malleswari     | T. Malleswari     |
| 6. G.Laxmiraj       | G. Laxmiraj       |
| 7. V.Pradeep        | V. Pradeep        |
| 8. B.Anand          | B. Anand          |

  
Signature of the supervisor  
**Dr. D. SANDHYA**  
Asst. Professor of Economics  
Govt. Degree College, Bhupalpally,  
Dist: Jayashankar Bhupalpally-506169  
Telangana State-506 169

  
Signature of the Principal  
**PRINCIPAL**  
Govt. Degree College, Bhupalpally,  
Dist: Jayashankar Bhupalpally-506169

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# **AASARA Pension Scheme and its Consequences in Rural life-A Study in Mulugu City of Telangana State.**

## **Introduction:**

The need for social safety nets is a critical concern for governments across the globe and for the billions of men, women, and children striving to improve their livelihoods. As interest in and the use of social safety nets keep growing, countries struggle to make social safety net interventions more effective and to integrate them better in their overall social protection and labor systems.

The idea of social security, including pensions, originates from the notion that everyone must have protection against vulnerability and deprivation but in practice, it has come to be linked to job security, whether one has a job in the formal or the informal sector. Under the Directive Principles Article 41, the State is expected to “within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement and in other cases of undeserved want.

Despite constitutional provisions, India spends only 1.4percent of its Gross Domestic Product on social protection. China spends several times more at 5.4percent. As per an Asian Development Bank study in Asia and the Pacific, even much smaller countries do better than India on the social protection index, with Sri Lanka spending 3.2percent, Thailand 3.6percent and Nepal 2.1percent of GDP on social security.

In the past, social security pensions provided were meager and, barely sufficient to cover the basic minimum requirements of the needy. With a view to combat the ever-increasing cost of living and inflation, the Government of Telangana as a part of its social safety net strategy, hereby, introduces the Aasara pensions with a view to ensures secure life with dignity for all the poor. This scheme is meant to protect the most vulnerable sections of society in particular the old and infirm; people with HIV-AIDS, widows, incapacitated weavers and toddy tappers, who have lost their means of livelihood with growing age, in order to support their day to day minimum needs required to lead a life of dignity and social security.

## Need of the Study:

As the government of Telangana is implementing many schemes towards the development of the society among them one of the important schemes is called aasara pension is affecting nearly 39 lakh people who are benefiting from the scheme. Our study is only to a tiny corner of the state, which covers a very little area, though the study needed to understand the implementation of the scheme as well as to know how rural livelihood is affecting the scheme.

## Objectives of the Study:

1. To have a broad idea on pension schemes at all India level and in Telangana state.
2. To analyze the pension schemes of state government of Telangana
3. To find out the impact of the Aasara pension scheme on rural livelihood.
4. To evaluate the ongoing Aasara pensions to suggest the suitable measures..

## Methodology of the Study:

Mulugu city in Mulugu district of Telangana state was chosen for this study. The data were collected both primary and secondary sources. The data gathered through questionnaire, Interview Schedule was administered to collect primary data from the sample beneficiaries. An altogether 60 respondents representing all caste groups were selected by adopting random Sampling Method. Secondary data were collected from relevant literature such as research reports, books, magazines and websites.

## Study Area Brief History :

Mulugu district was formed on February 17, 2019 by bifurcating the Jayashankar Bhupalpally district. Previously Jayashankar Bhupalpally district was part of Warangal district. There is one revenue division of Mulugu under this district and has 9 mandals and 174 village panchayats in it. Mulugu is a town in Mulugu district, Telangana. It is the headquarters of the district, which was formed in 2019 after Jayashankar Bhupalpally district was split. Prior to the reorganization of districts that created Jayashankar Bhupalpally district. The population of Mulugu is around 46,851 according to 2011 census reports. The male population is 23,716 (48.3%) and the female is 22,135 (51.6%). The female-to-male ratio is 1068:1000, which is above the national average 943:1000. The literacy rate is 79.17%, more than national average 74%. Male literacy is 86.59%, which is more than national average of 82.10%, and female literacy rate is 72.32%, more than national average 65.50%. Once it was the biggest revenue division in Telangana state,

The majority of the villages and the hamlets including the city are the habitats of Scheduled

Tribes (75%). The tribal community is Lambadi. Thus the majority of people of the city will communicate in the special tribal language, Lambadi or Banjara (60%). This language is one among the officially recognised dialects by the government of India. This language has no script and is sustained on spoken words

### **Review of Literature:**

James A. Thorson, in *Aging in a Changing Society* tries to figure out the massive population shift, which the world is experiencing, as a revolution unprecedented in human history. Until the 20th century, the worldwide pattern showed women bearing many children, a few of whom lived adulthood, and fewer lived up to old age. Not only the number of older people has been increasing, but the ways in which different generations see the world have been changing as well. The physical as well as 33 Ellen Rhoads Holmes and Lowell D Holmes, *Other Cultures, Elder years*, second edition, London, Sage Publication, 1995. as the psychological process of ageing and the health care system is well explained in the book. The topics are more applied than theoretical.

Ellen Rhoads Holmes and Lowell D. Holmes, the authors of the book, *Other Cultures, Elder Years* are anthropologists who are interested in gerontology say that it is a discipline that must take all people and all cultural traditions into consideration if we are to contribute to an understanding of the process of human ageing. The authors concerned the modernization influences in developing countries and its effect on the status and role of the elderly. Because change is an ongoing process in all societies, the impact of cultural change on the elderly is clearly noted. The book explains how the cultural tradition shapes the needs and roles of seniors. The other concern is with change, especially modernization and accompanying demographic change, and its effect on the status and wellbeing of the elderly.

Srivastava in his book, *The Aged and the Society* compiled the outcome of a socio-economic study conducted in some selected areas of Delhi, covering a wide socio-economic spectrum. The study was carried out in order to identify programmes, services and assistance needed for utilizing the skills and experience of the aged so that they become more useful to society. Much has indeed been written on the humanitarian aspects of the elderly, such as Medicare, old age homes, counselling and community centres.

In *The Rural and Urban Aged*, Maninder Singh Randhawa has attempted to scientifically investigate the various sociological aspects of ageing in both the rural and urban areas. In the rural communities of India, the joint family system is still prevailing to a large extent and such families do not throw the aged to the mercy of the society. There the aged participate in productive activities as much as they can. So the elders in rural communities still enjoy a high status and play a major role in decision making. According to Singh, the aged in the urban area also enjoy a fairly high status in their families and the so-called problems are only a trend. The major problems arise due to the abrupt retirement from an occupation, which is considered as a normal phenomenon of modern industrial society. He quotes Burgess, who points out that the increasing problems of ageing in an urbanized society are: difficulty in finding satisfying and substitute activities, economic security, loss of status, decreasing social participation in organization, greater unhappiness and maladjustment, loss of health and illness. Singh concludes that the aged with higher education and economic status enjoy a leadership position in their families in both rural and urban areas.

Pati and Jena in *Aged in India*, have attempted a multidisciplinary approach towards understanding of the problems the aged and planning for their rehabilitation. The social concepts include transition in social positions, roles, status and characteristics of person. Mohanty<sup>43</sup> says, to know how to grow old is the masterwork of wisdom and one of the most difficult chapters in the great art of living. Jamuna<sup>44</sup> likes to make use of the rural elderly women as resource persons to the communities around and consider them as assets rather than liability. Counselling is also an important measure to the older individual to minimize ruptures with children or younger members and to keep their social relationships in constant repair. The book gives guidelines to planners and social workers for developing action programmes for the cause and care of the elderly population both in rural and urban areas of the country.

*Aging in India* is research conducted by Kirpal Singh Soodan pertaining to the aged in the city of Lucknow. His demographic analysis shows gradual increase in number of aged. He compares the educational level, the age of migration to the city and their economic dependence. He found that the majority of the aged spend their free time doing odd jobs connected with household work, looking after children and 'doing nothing'. Free time pursuit of men was

solitary in nature, while women spent free time in interpersonal activities. Information about the available welfare services was also a major concern of this study.

## **Social Assistance schemes in India :**

### **Indira Gandhi National Old Age Pension Scheme (IGNOAPS)**

The Indira Gandhi National Old Age Pension Scheme (IGNOAPS) is a non-contributory old age pension scheme that covers Indians who are 60 years and above and live the below poverty line. All individuals above the age of 60 who live below the poverty line are eligible to apply for IGNOAPS. All IGNOAPS beneficiaries aged 60–79 receive a monthly pension of Rs. 300 (Rs. 200 by central government and Rs. 100 by state government). Those 80 years and above receive a monthly pension amount of Rs.750.

### **Indira Gandhi National Widow Pension Scheme (IGNWPS)**

Indira Gandhi National Widow Pension Scheme(IGNWPS),introduced in the year 2009,provides BPL(Below Poverty Line) widows in the age group 40 to 64(later revised 40 to 59) with a monthly pension of Rs. 200 per beneficiary. After they attain the age of 60,they qualify for pension under Indira Gandhi National Old Age Pension Scheme(IGNOAPS).

### **Indira Gandhi National Disability Pension Scheme (IGNDPS)**

Eligibility: Individuals aged 18 years and above with more than 80% disability and living below the poverty line.

## **AASARA Pensions in Telangana**

Aasara pension scheme is meant to protect the most vulnerable sections of society, in particular, the old and infirm; people with HIV-AIDS, widows, incapacitated weavers and toddy tappers, who have lost their means of livelihood with growing age, in order to support their day to day minimum needs to be required to lead a life of dignity and social security.

The government, as a part of its welfare measures and social safety net strategy, introduced the “Aasara” pension, with a view to ensuring secured life with dignity for all the poor. The scheme is administered by the Ministry of Rural Development, Government of India. It is fully funded by the Central Government, unlike some other welfare programs where the Union government shares costs with the State Governments. With a view to combat the ever-increasing cost of living and inflation, the Telangana Government introduced on 8th November, 2014, a new Pension scheme called “Aasara” enhancing the monthly Pension from Rs.200/- to Rs.1000/- for old age persons, widows, weavers, toddy tappers and AIDS patients and Rs.500/- to Rs.1500/- for disabled persons. The government also extended the financial assistance @ Rs. 1000/- per month to the poor Beedi worker under Aasara Scheme from the month of March 2015 onwards. In the past, Rs.835.63 Crores per year was spent by the previous Government. Now the Government of Telangana is spending approximately Rs.4000.00 Crores per year for payment of pensions under the new Aasara Pensions Scheme.

The State government increased the budget allocations by Rs 2,356 crore during this fiscal despite the economic slowdown impacting the State revenues, against Rs 9,402 crore in 2019-20. The additional allocations are aimed at fulfilling Chief Minister K Chandrashekhara Rao’s electoral promise to extend the scheme to the age group of 57 and 65 years under the old age category from the current financial year. An official estimation indicated that after extending the age limit, nearly 10 lakh new citizens will benefit from the scheme under the old age category. With 2.56 lakh beneficiaries, Nizamabad district has the largest number of beneficiaries in the State. Jagtial and Hyderabad closely follow with 2.11 lakh and 2.01 lakh beneficiaries, respectively. The districts of Nizamabad, Jagtial, Hyderabad, Warangal urban, Siddipet, Rangareddy, Khammam and Kamareddy among others have considerable number of these beneficiaries. Mulugu has the smallest number of 35,834 beneficiaries.

The scheme was applicable to only the senior citizens, widowed women and differently abled persons in the past. However, it was extended to weavers, toddy tappers and beedi workers apart from single women, HIV and filarial patients, after the State formation. Among the beneficiary categories, the widow pension beneficiaries form nearly 38 per cent of the total 38.4 lakh beneficiaries in the State. About 14.37 lakh women are availing the scheme benefits, followed by 12.07 lakh senior citizen beneficiaries and 4.92 lakh differently abled persons.



## Eligibility Criteria for sanction of AASARA Pension

The Government of Telangana with a view to identify eligible beneficiaries conducted a comprehensive one day Samagra Kutumba Survey (SKS) of households in the State of Telangana on August 19, 2014. The data collected during the Survey is expected to form the basis of identifying the poor and vulnerable who are truly eligible for the social safety net protection, through the AASARA Pensions.

### Age Criteria

Following age criteria should be satisfied by different categories of pensioners to avail Aasara pension.

Type of Pension	Eligibility
Old Age	Age 57 years and above
Weavers	Age 50 years and above
Widow	* Age 18 Years and above. * Death certificate of her husband. * Every year updation on remarriage, for young widows (up to 45 Years)
Toddy Tappers	Age 50 years and above
Pension to persons with HIV/AIDS (ART pension)	Who are undergoing Anti Retroviral Therapy (ART)
Differently Abled (persons with disabilities)	* Irrespective of age. * Disabled persons having a minimum of 40% disability under SADAREM assessment. * In case of Hearing Impaired , the minimum disability should be 51% * In case of minor child, the pension shall be disbursed to the mother/father of the disabled child

### For Old Age

- The age should be 57 years and above.
- Only one pension in a family, preferably women is eligible.
- Landless agriculture laborers, rural artisans/craftsmen slum dwellers, persons earning their livelihood on daily basis in the informal sector like porters, coolies, rickshaw pullers, hand cart pullers, fruit/flower sellers, snake charmers, rag pickers, cobblers, destitute and other similar categories irrespective of rural or urban areas are also eligible.
- Homeless, houseless households residing in temporary informal establishments or huts especially in urban areas are eligible.
- Households headed by widows or terminally ill persons/disabled persons /persons aged 65 years or more with no assured means of subsistence or societal support are also eligible.



**For Widow**

- The age of the widow must be above 18 years.
- The applicant must belong to primitive and Vulnerable Tribal Groups

**For Weavers**

- The age of the weaver must be above 50 years.
- The applicant must belong to primitive and Vulnerable Tribal Groups
- Only one pension in a family can avail of the pension.
- By profession, a person should be in weaving, irrespective of rural or urban areas

**For Toddy Tappers**

- The age of the applicant must be above 50 years.
- The applicant must belong to primitive and Vulnerable Tribal Groups
- By profession, the person should be in Toddy Tapping, irrespective of rural or urban areas.
- For Toddy tapper pensions the verification should be confirmed whether the beneficiary is a registered member in the Co-Operative Society of Toddy Tappers.

**For Disabled Person**

- A person of any age can apply for the scheme.
- The applicant must belong to primitive and Vulnerable Tribal Groups

**Documents Required**

- Aadhaar Card
- Income Certificate
- Death Certificate in case of a widow
- Xerox copy of registration in the Cooperative society of Toddy Tappers.
- Weavers should submit a Xerox copy of registration in the Co-operatives society of weavers.
- SADAREM Certificate in the case of persons with disabilities 40% or above and 51% in respect to the hearing impaired.
- Bank Account Passbook

Government hereby fixes the pension amount per month for the following categories of pensioners as detailed below table:

Category	Monthly Pension Amount (INR)
Old Age	2016
Widow	2016
Disabled	3016
Weavers	2016
Toddy Tappers	2016
Person with HIV AIDS, Filaria	2016

## Research Study

### Social status of the sample beneficiaries

As per the survey majority of the beneficiaries are related to the BC/SC/ST communities (92%)

**Table-1:**  
**Social Status of the Respondents**

Social Status	Respondents	Percentage
FC	12	20.0
BC	25	41.66
SC	15	25.0
ST	8	13.33
<b>Total</b>	<b>60</b>	<b>100.0</b>

Source: Primary data

Above Table shows the social status of sample size. Total sample size is 60. Among them 20 respondents are from Forward Category-OC (20%), 25 respondents are from Backward Classes-BC (41.66%), 15 respondents are from Sheduled Castes-SC (25%) and 8 respondents are from Scheduled Tribes-ST (13.33%).

**Table-2:**  
**Category Basis of the Respondents**

Category	<b>Widow</b>	<b>Old-age</b>	<b>Disabled</b>	<b>Total</b>
OC	03	06	1	12
BC	07	12	3	25
SC	05	10	2	15
ST	02	08	1	8
<b>Total</b>	<b>17</b> <b>(28.33)</b>	<b>36</b> <b>(60.0)</b>	<b>07</b> <b>(11.66)</b>	<b>60</b> <b>(100.0)</b>

Source: Primary data

The table-2 shows the category of pension on social status of sample respondents. As per the data 60 percent beneficiaries are getting old age pensions, 28.33 percent are getting widow pensions, 11.66 percent are getting disabled. Most of the respondents are receiving old-age pensions, next to that widow and others

**Table-3:**  
**Living status of the Respondents**

<b>Social status</b>	<b>Single</b>	<b>Spouse</b>	<b>Joint family</b>	<b>Total</b>
Widow	10	-	07	<b>17</b>
Old-age	02	29	05	<b>36</b>
Disabled	-	05	02	<b>07</b>
<b>Total</b>	<b>12</b> <b>(20.0)</b>	<b>34</b> <b>(53.66)</b>	<b>14</b> <b>(23.33)</b>	<b>60</b> <b>(100.0)</b>

Source: Primary data

The table-3 shows the living status of pensioners on the basis of social status of sample respondents. Among total sample size 53.33 percent are living with spouse 20 percent are single and 23.33 percent are joint family.

**Table-4:**  
**Pension using status of the Respondents**

Category	Own needs	Joint family needs	For children	Total
Widow	07	05	05	17
Old-age	25	06	05	36
Disabled	03	02	02	07
<b>Total</b>	<b>37</b> <b>(60.66)</b>	<b>13</b> <b>(21.66)</b>	<b>12</b> <b>(20.0)</b>	<b>60</b> <b>(100.0)</b>

Source: Primary data

The table-4 indicates the pension using status of pensioners on the basis of category of pension of sample respondents. 60.66 percent beneficiaries are using pension amount for their own needs, 21.66 percent are spending for joint family needs and 20.0 percent are spending for their children needs.

**Table-5:**  
**Dependency for livelihood of the Respondents**

<b>Category</b>	<b>Only pension</b>	<b>Pension and working</b>	<b>Other Sources</b>	<b>Total</b>
Widow	05	10	02	17
Old-age	07	25	04	36
Disabled	02	05		07
<b>Total</b>	14 (23.33)	40 (66.66)	06 (10.0)	60 (100.0)

Source: Primary data

As per the table-5 we came to know that for 23.33 percent of pensioners the source of income is only pension, 66.66 percent of the beneficiaries are getting their income through pension and working, remaining 10 percent earning through other sources.

**Table-6:**  
**Health status of the respondents**

<b>Social status</b>	<b>No health issues</b>	<b>Seasonal disease</b>	<b>Chronic disease</b>	<b>Total</b>
Widow	02	12	03	17
Old-age		20	16	36
Disabled	03	04		07
<b>Total</b>	05 (8.33)	36 (60.0)	19 (31.66)	60 (100.0)

Source: Primary data

The above table shows that the respondents said that 8.33 percent have no health issues, 60.0 percent are suffering with seasonal diseases and 31.66 percent facing chronic diseases in which they have a life threat.

**Table-7:**  
**Mode of receiving pension amount**

<b>Mode of receiving</b>	<b>Number of respondents</b>	<b>Percent</b>
Through online	60	100.0
Receiving at home	-	-
Through cheque	-	-
<b>Total</b>	<b>60</b>	<b>100.0</b>

Source: Primary data

According to the above table 100 percent of the beneficiaries are receiving their pension amount by through online.

**Table-8:**  
**Impact of Aasara pension on the basis of fulfilling food needs**

<b>Category Of pension</b>	<b><i>Pre-Aasara Not satisfied</i></b>	<b>Neutral</b>	<b><i>Post-Aasara satisfied</i></b>	<b>Neutral</b>
Widow	14	03	17	00
Old age	28	08	33	03
Disabled	07	00	07	00
Total	49 (81.66)	11 (18.33)	57 (95.0)	03 (5.0)

Source: Primary data

The above Table shows that Impact of pre -aasara pension on fulfilling food needs 81.66% are not satisfied with the amount they are receiving. 18.33 percent of the respondents neutral. Impact of Post aasara (after 2014) pension on fulfilling food needs 95 percent satisfied with the amount. Remaining 5 percent of the respondents neutral.

**Table-9:**  
**Impact of Aasara pension on the basis of fulfilling medical needs**

<b>Category Of pension</b>	<b><i>Pre-Aasara Not satisfied</i></b>	<b>Neutral</b>	<b><i>Post-Aasara satisfied</i></b>	<b>Neutral</b>
Widow	10	07	17	00
Old age	25	11	33	03
Disabled	07	00	07	00
Total	42 (70.0)	08 (12.33)	57 (95.0)	03 (5.0)

Source: Primary data

The above Table shows that Impact of pre -aasara pension on fulfilling medical needs 70 percent are not satisfied with the amount they are receiving. 12.33 percent of the respondents neutral. Impact of Post aasara (after 2014) pension on fulfilling medical needs 95 percent satisfied with the amount. Remaining 5 percent of the respondents neutral.

**Table-10:**  
**Impact of Aasara pension on the basis of Improving Standard of living**

<b>Category Of pension</b>	<b><i>Pre-Aasara Not satisfied</i></b>	Neutral	<b><i>Post-Aasara satisfied</i></b>	Neutral
Widow	15	02	17	-
Old age	32	04	32	04
Disabled	07		07	-
Total	54 (90.0)	06 (10.0)	56 (93.33)	04 (6.66)

Source: Primary data

The above Table shows that Impact of pre -aasara pension on Improving Standard of living 100 percent are not satisfied with the amount they are receiving.10percent of the respondents neutral. Impact of Post aasara (after 2014) pension on Improving Standard of living 93.33 percent satisfied with the amount. Remaining 6.66 percent of the respondents neutral.

**Table-11:**  
**Impact of Aasara pension on the basis of fulfilling other needs**

<b>Category Of pension</b>	<b><i>Pre-Aasara Not satisfied</i></b>	Neutral	<b><i>Post-Aasara satisfied</i></b>	Neutral
Widow	10	07	12	05
Old age	23	13	31	05
Disabled	07	00	07	00
Total	40 (66.66)	20 (33.33)	50 (83.33)	10 (16.66)

Source: Primary data

The above Table shows that Impact of pre -aasara pension on **other needs** 66.66 percent are not satisfied with the amount they are receiving. 33.33 percent of the respondents neutral. Impact of Post aasara (after 2014) pension on Improving Standard of living 83.33 percent satisfied with the amount. Remaining 16.66 percent of the respondents neutral.

## **Major Findings:**

- Impact of post aasara pension on fulfilling food needs, 95% are satisfied with the amount they are receiving, Remaining 5 percent of the respondents neutral.
- Impact of post aasara pension on fulfilling medical needs, 95% are satisfied with the amount they are receiving, Remaining 5 percent of the respondents neutral.



- Impact of post aasara pension on fulfilling other needs, 83.33% are satisfied with the amount they are receiving, Remaining 16.66 percent of the respondents neutral.
- Impact of post aasara pension on improving standard of living, 93.33% are satisfied with the amount they are receiving, Remaining 6.66 percent of the respondents neutral.

### **Suggestions:**

- Delivery mechanism should be corrected because most of the beneficiaries widow/old-age groups
- In some of the areas middlemen are existing in sanction of pension amount to the beneficiaries. Hence we strongly suggest the government to look into this matter where government is blamed by these acts
- It is highly recommended that due to inflation most of the people are spending their income on essentials hence we suggest the government to increase the pension amount to meet essentials in which they are foregoing to satisfy another essential want.

### **Conclusion**

There are some loopholes in delivery mechanism if they are corrected, Aasara will really improves the livelihood and those who are suffering with chronic diseases and seasonal diseases policy makers has to take appropriate or suitable measures for improving their health conditions and standard of living.

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## Questionnaire

1. Name of the Asara pension beneficiary:
2. Age:
3. Male/female:
4. Type of asara pension:
5. On which category he/she taking pension:
6. How much pension is taking in past:
7. Details of family members:
8. For how many years they are taking pension:
9. How much is pension taking at present:
10. How many members are eligible to take pension in the family?
11. How they are drawing the money (bank, post office,near grama panchayat
12. Did you facing any problem whether taking the pension:
13. Tell me your opinion about Asara pension:
14. Living status of the beneficiary
15. Pension using status of the beneficiary
16. Dependency for livelihood of the beneficiary
17. Health status of the beneficiary
18. Mode of receiving pension amount :
19. Impact of Aasara pension on the basis of fulfilling food needs

Medical needs

Improving Standard of living

Other needs



## Field Study Photos

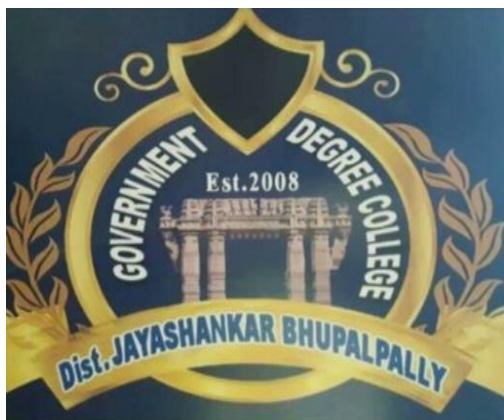






# GOVERNMENT DEGREE COLLEGE, BHUPALPALLY

JAYASHANKAR DISTRICT -506169



## DEPARTMENT OF ENGLISH STUDENT STUDY PROJECT (2021 – 22)

**TITLE: THE IMPACT OF ENVIRONMENT ON THE PERFORMANCE OF  
JAYASHANKAR BHUPALPALLY DISTRICT SCHOOL STUDENTS IN ENGLISH  
LANGUAGE –A STUDY:**

Certified that this is a bonafide work done by the following IInd year students  
of this college in the subject English

### NAME OF THE STUDENTS:

- 1.B.Umesh ... B.A.II Yr
- 2.A.Sarovaram Shastri ... B.A.II Yr
- 3.MD.Rizwan ...B.Com.II Yr
- 4.A.Sairam... B.Com. II Yr
- 5.P.Mahesh Babu ... B.Sc.(P.S.) II Yr
- 6.E.Naresh ... B.Sc.(P.S.) II Yr

*SUPERVISED BY ....*

T. SREEDHAR

Lecturer in English

# GOVERNMENT DEGREE COLLEGE, BHUPALPALLY

JAYASHANKAR DISTRICT -506169



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SUPERVISED BY ....

T. SREEDHAR

Lecturer in English

Principal  
**PRINCIPAL**

Govt. Degree College, Bhupalpally,  
Dist: Jayashankar Bhupalpally-506169



**A PROJECT REPORT ON**

**THE IMPACT OF ENVIRONMENT**  
**ON THE PERFORMANCE OF**  
**JAYASHANKAR BHUPALPALLY**  
**DISTRICT SCHOOL STUDENTS IN**  
**ENGLISH LANGUAGE –A STUDY:**

**STUDENT STUDY PROJECT**  
**(2021-2022)**

**A PROJECT REPORT SUBMITTED TO THE**  
**DEPARTMENT OF ENGLISH**

**Government Degree College, Bhupalpally**

**Under the guidance of**  
**Department of English**

# ACKNOWLEDGEMENT

Presentation, inspiration and motivation have always played a key role in the success of any venture.

We take this opportunity to express our gratitude to all those who have made it possible for us to accomplish this project.

We express our sincere thanks to **Dr.S.Shyamprasad**, Principal, **T.Sreedhar and A.Varalaxmi**, Department of English, **Govt. Degree College, Bhupalpally**, for encouraging us to the highest peak and to provide us the opportunity to prepare the project. We are immensely obliged to our friends for their elevating inspiration, encouraging guidance and kind supervision in the completion of our project.

Last, but not the least, our parents are also an important inspiration for us. So with due regards, we express our gratitude to them.

By.....

- 1.B.Umesh ... B.A.II Yr
- 2.A.Sarovaram Shastri ... B.A.II Yr
- 3.MD.Rizwan ...B.Com.II Yr
- 4.A.Sairam... B.Com. II Yr
- 5.P.Mahesh Babu ... B.Sc.(P.S.) II Yr
- 6.E.Naresh ... B.Sc.(P.S.) II Yr

# **TITLE :THE IMPACT OF ENVIRONMENT ON THE PERFORMANCE OF JAYASHANKAR BHUPALPALLY DISTRICT SCHOOL STUDENTS IN ENGLISH LANGUAGE – A STUDY:**

## **INTRODUCTION**

### **1.1 BACKGROUND OF THE STUDY:**

English language occupies a prominent place in the Indian school curriculum. The English language is one of the legacies to bequeathed Indians by the British which will be difficult to do away with. This is because it is the major medium of instruction in our schools, of business transactions, of communication both nationally and internationally. It is the language of mass communication and propaganda in mass media. In literature and Arts, it is the language of novels, poems, short stories, music and drama. In social occasions, English language is used for conversation and interpersonal relationship. It is also the key to educational advancement. The life-wire of all activities in all works of life and key for better job opportunities.

It is our official language and therefore imperative that every student should be able to read, write and communicate in good simple English. This is important if our district should overcome its health, economic, political and social problems.

The language is gradually losing its standard. In view of this, teaching and the use of English language should be given prominent attention in secondary schools as the majority of parents are illiterates and cannot provide a conducive home environment for language acquisition nor afford good schools for their children's education. The environment will always affect the language used.

The need for mastery of English at the child's early stages in life is far reaching because it makes for effective communication, better understanding and academic performance as the child moves from one level of education to another. A child with a solid knowledge of English language at the primary school will encounter less problems in reading and understanding books and materials on science and technology which are to a large extent positively correlated with social and economic development. There is need therefore for much more concern about effective teaching and learning of English language in our secondary schools and about products of our secondary schools not being able to meaningfully express themselves in English.

From the foregoing, the English language is very important now that the country is geared towards technological, social, economic and political development. A solid foundation in English should be laid for the children, right from the start as the much-talked about transfer of technology will be meaningless if the majority of students are poor at English as most materials on science and technology are written in English. Lack of understanding of these materials and poor communication with experts will definitely hamper our move for national development in all spheres of life.

Teachers of English have a role to play to lay a solid foundation for the teaching of English as a subject. The researcher therefore sought to find out from teachers of English in secondary schools as well as senior secondary students of Jayashankar Bhupalpally district, the influence of environment on performance of students in English.

## **1.2 STATEMENT OF PROBLEM:**

Local government is a bilingual society. It is inhabited mostly by lower-class citizens. This is why “vernacular” is commonly used in our area especially among students of secondary schools.

It has been observed that there are many instances of physical environment in which a society lives being reflected in its language, often in the structure of the lexicon.

Since the government has implemented the educational language policy in the country, it is vividly true that environment handicap has contributed greatly to the problems but then there are equally other factors that have contributed to the total differences on English language mastery by students, in secondary schools in this area such as:

Non use of learning activities, inadequate of skilled teachers, lack of operation of audio-visual with the aid of electricity, mother tongue, interference, lack of adequate library facilities, poor social infrastructural facilities; physical condition of classroom situation and lack of evaluation of inspectorate to schools. Finally, social class problem and lack of instructional material and poor preparation by teachers.

## **1.3 PURPOSE OF THE STUDY:**

The English language plays a vital role to the government as it is being used for the purpose of government and administration, as documentation of government records; administrative instruction and minutes, legislation; court records and proceedings.

Again English is most noticeable in the field of education as it is being introduced as a subject in the first years of primary school and from the third year of the primary school up to university level as a medium of instruction.

Furthermore, in the mass media, English is in a predominant position. All the national newspapers are published in English, Radio, non-musical programmes, newscasters. Television are almost entirely in English.

Therefore, the main purpose of this study is to look at how some environmental factors affect students' performance in English, its prospects and problems faced by students. In addition, the study is geared towards making some recommendations.

#### **1.4 SIGNIFICANCE OF THE STUDY:**

This study will be of great significance to the students, teachers, parents, educational planners, language planners as well as the government.

- (a) It will instill in the learners/students the quest and zeal to study and master English.
- (b) To the teachers, it will enable them to be committed by making adequate preparations of their lesson note and lesson plan.
- (c) On the part of the parents, the feed back they get through their children's results will motivate them to encourage their children in the requisition of the language.
- (d) To the educational planners, they would be most privileged because the study will take the form of evaluation on what they have earlier planned, thereby putting into consideration the implementation of this policy.
- (e) The language planners will discover from this study problems faced by their schools within this language community and design appropriate instructional materials for effective teaching and learning of the English language.
- (f) Finally, this work will be useful to the government. It will enable them to make available trained personnel both for English language and material resources for the efficient implementation of the policy. They will also be geared to make and provide learning facilities, equipment and other language laboratory to aid and motivate the students in the proper method of studying English language.

In summary, this study will be an invaluable asset to parents in shaping the English language performance of their children because children are affected by the quantitative and qualitative limitations of parental language model.

## 1.5 RESEARCH QUESTIONS

1. Does the school have enough qualified English language teachers?
2. Does the class size influence or affect written assignments to students?
3. Does the school have a well-equipped library?
4. Do parents socio-economic status or background affect or influence students study of English.

## 1.6 DELIMITATION

This study is specifically concerned with the influence of environment on the performance of students in English language in secondary schools in Jayashankar Bhupalpally district of Telangana State. The environment in this sense comprises; the physical school environment, the community environment, home background (socio-economic status), facilities for language teaching and learning and language teaching professional background-teaching skills and commitment.

## 1.7 LIMITATION

This study is restricted to the secondary schools in Jayashankar Bhupalpally district of Telangana State. However, the researcher was able to visit all the places for collection of data.

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## 1.8 DEFINITION OF TERMS

Some terms used in this study have been defined in their operation terms to suit the purpose of this study for instance:

**Environment:** This has to do with the whole personal behavior together with conditions and influence that affect the development and life of the student.

**Teaching Aids/Learning Activities:** These are materials which enhance teaching and learning, assist or promote the process of teaching and learning; such as textbooks, audio-visual equipment, chalk, chalkboard, biro, flashcards and charts.

**Pidgin English:** A language that developed when individuals from different linguistic backgrounds here and there are in need to communicate; used basically for mutual intelligibility.

**Interference:** Negative influence of one language to another usually due to proper mastery of one and an imperfect mastery of the other.

**Mutual Intelligibility:** Understanding among language speakers when each of them speaks.

**Home Background:** there are factors influencing a child from his or her family environment.

**Mother Tongue:** The language of a child's mother or parents.

**Project survey**

Name of the student : P. Thammur  
Class : 9th A      Name of the school : ZPHS BHUPALPALLY

Sl.No	Questions	Student answers	
		Yes	No
1	Does the school have enough qualified English language teachers?	✓	
2	Does the classroom and infrastructure influence or affect written assignments to students?	✓	
3	Does the school have a well-equipped library?		✓
4	Do parents socio-economic status or background affect or influence students study of English.	✓	



## Project survey

Name of the student : K. Shiva Ram

Class : 10<sup>th</sup>

Name of the school : Z.P.H.S Tangedu

Sl.No	Questions	Student answers	
		Yes	No
1	Does the school have enough qualified English language teachers?	✓	
2	Does the classroom and infrastructure influence or affect written assignments to students?	✓	
3	Does the school have a well-equipped library?		✓
4	Do parents socio-economic status or background affect or influence students study of English.	✓	









**GOVERNMENT DEGREE COLLEGE, BHUPALPALLY  
JAYASHANKAR DISTRICT - 506169**



**Department of zoology  
Student Study Project**

**Dt. 23-02-22**

**Title of the Project: Immunity against Covid -19 in student community B.Z.C., I, II, III year students,  
GDC Bhupalpally - A Survey**

Certified that this is a bonafide work done by the following B.Sc., III year students of this college in the subject of Zoology.

**NAME OF THE STUDENTS:**

1. A. Harika
2. A. Vihari
3. G. Supraja
4. L. Saritha
5. M. Sowmya
6. N. Sai Prasanna
7. N. Spandana
8. S. Ramya
9. T. Sravani
10. Y. Sravani
11. S. Rohit

**SUPERVISED BY**

**Dr. P. Gowri**

**Assistant Prof. of Zoology**

  
**Principal**  
Govt. Degree College, Bhupalpally,  
Dist. Jayashankar Bhupalpally-506169

# **Immunity against Covid -19 in student community B.Z.C., I, II, III year students, GDC Bhupalpally - A Survey**

## **Introduction:**

**Dt.23-02-22**

The students of GDC, Bhupalpally (B.Z.C. III year) has undertaken this project work to find out the immunity against Covid-19 in student community of B.Z.C. I, II and III years.

The disruptive effects of the COVID-19 outbreak have impacted almost all sectors of our society. Higher education is no exception. Students faced an increasingly uncertain environment, like financial and health shocks to complete their studies or fear of becoming seriously sick along with the transition to online learning academic performance and expectations about future employment.

This survey attempts to shed light on the immunity against COVID-19 pandemic on college students. The present work is carried out to find out whether the student community got immunity after vaccination or they are susceptible to re infection as there are reported cases across the state.

The Corona virus disease 2019 (COVID-19) pandemic is a major threat to public health and has had a significant impact on all aspects of life. The Corona virus disease 2019 (COVID-19) pandemic has been a health issue of great concern since 2020. Mortality rate is more particularly among the high-risk population, including people who are obese, smokers, and patients that have cancer, chronic kidney disease, heart conditions, immune compromised state, sickle cell disease, and type 2 diabetes mellitus.

In addition to the health impact of COVID-19, it has a significant economic burden that cannot be underestimated. It has caused a substantial reduction in workforces and an increase in unemployment globally. In December 2020, several vaccines were authorized to prevent COVID-19 infection, vaccination has now begun in several countries around the world. Nevertheless, people who have vaccinated with two doses are also effected by covid 19 which leads to the doubt of safety and efficacy of the vaccines and also the immune response of the body to the virus as several cases of re infection have been reported across the globe.

## **List of Participants in the project work:**

### **B.Z.C. IIIyr students :**

**A. Harika, A. Vihari, G. Supraja, L. Saritha, M. Sowmya, N. Sai Prasanna,  
N. Spandana, S. Ramya, T. Sravani, Y. Sravani, S. Rohit**

## **Materials and methods:**

A questionnaire was made using Google forms. The link was then distributed via whatsapp group and e mails. . The data collection period is 1-12-20 to 30-12-20. The questionnaire contains five sections.

The first section collected participants information, including marital status, obesity status, health status. The second section gathered information about the participants' experience with COVID-19. The third section collected information about vaccination of participants toward COVID-19, while the fourth evaluated their knowledge about COVID-19, transmission methods, and preventive measures. and treatment availability. The fifth section asked about the preventive measures against COVID-19 used by the participants.

The degree of Covid-19 risk affecting participants were categorised into high risk and low risk groups. The high-risk group included obese, under weight, anaemia Type 2 diabetes mellitus/ Pulmonary Disease /Kidney Failure/Heart Disease. The medium-risk group included those who did not fit for the high-risk category but were overweight or with Type 1 diabetes mellitus/Hypertension/Asthma/Taking steroids or immunosuppressant drugs/Hepatic diseases/ Thalassemia / Lung fibrosis. The low-risk group included all other participants that do not fit the previously mentioned criteria.

### **Protocol of the study:**

- Preperation of Questionnaire
- Designing the google form
- Access to the mobile number whatsapp group and email ids
- Sending messages
- Recording the information
- Evaluation

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## Questionnaire on Immunity against Covid-19 in Student community (B.Z.C)

**1. The virus causing Covid 19 infection is called:**

- A. SARS
- B. SARS-COV-2
- C. 2019-nCov
- D. Both Band C ( )

**2. The first case of covid 19 is reported in**

- A. China
- B. Japan
- C. Wuhan
- E. D. India ( )

**3. What is your Age group ?**

- A. 18-19
- B. 19-20
- C. 20-21
- F. D. 21-22 ( )

**4. Weight status**

- A. Under weight
- B. Obese
- C. Over weight
- D. Normal weight ( )

**5. Marital status**

- A. Married
- G. Unmarried ( )

**6. Do you have any chronic diseases**

- A. Diabetes
- B. Heart disease
- C. Kidney disease
- H. No ( )

**7. Do you have covid?**

- A. Yes
- I. No ( )

**8. Have you had contact with any covid person?**

- A. Yes
- J. No ( )

**9. Have you got tested for corona?**

- A. Yes
- K. No ( )



**10. What is the result of the Test?**

- A. Positive
- L. Negative ( )

**11. What are the symptoms of Covid 19?**

- A. Fever, Chill,
- B. Cold and Cough
- C. Diarrhoea , loss of smell and taste.
- M. All ( )

**12. How many days you have suffered with fever and other symptoms of covid ?**

- A. 5 days
- B. 7days
- C.10 days
- D. 15 days ( )

**13. Where you have undergone treatment?**

- A. At Home
- B. At Hospital ( )

**14. Have you got vaccinated?**

- A. Yes
- B. No ( )

**15. How many doses of Vaccine you have taken?**

- A. single dose
- B. Two doses ( )

**16. Have you got covid after vaccination?**

- A. Yes
- B. No ( )

**17. How is covid 19 transmitted?**

- A. contaminated water
- B. contaminated food
- C. Inhalation of respiratory droplets of infected person
- D. Touching wild animals ( )

**18. Which of the following measures prevent the transmission of virus?**

- A. Wearing a mask
- B. Maintaining physical distance
- C. Hands Hygiene
- D. All the above ( )

**19. Which is the best method for prevention of Covid- 19 infection ?**

- A. Using standard precautions
- B. Vaccinations ( )

**20. Impact of Covid 19 on consumption of fresh fruits and vegetables**

- A. No change
- B. Increased
- C. Decreased
- D. Little change ( )

**Results:**

Fifty participants were enrolled in the study. Most of the participants were between 18–21 years, 50% of the participants were female and 50 % are male participants.

The participants had done the PCR test to check if they had COVID-19, and 20% of the participants tested positive and 80% of students have not reported positive to the PCR test though they suffered with mild symptoms. Of the total participants 5% of participants reported corona after taking two doses of vaccine last year and 95% of students have not reported corona.

**Discussion:**

In recent history, vaccination has played an essential role in reducing the burden of infectious diseases. It prevents deaths. Vaccines from different companies, including Covaccine, Covishield, sputnik etc., have recently been approved, but their distribution is still limited.

Although the percentage of the population who need to be vaccinated to achieve herd immunity against COVID-19 is not yet well-known, in general, 50–90% of the population needs to be immune either naturally or by vaccines to achieve herd immunity.

Getting vaccinated could save the life. The present study reveals that COVID-19 vaccines provide strong protection against serious illness, hospitalization and death and also some will make less susceptible to the virus so that and the transmission of virus to others will also be decreased which means getting vaccinated also protects the people around you.

The results of this study indicate that though the students get vaccinated against covid 19 they should take all precautionary measures like wearing mask, sanitation, cleanliness to maintain the immune system healthy as the antibodies formed by vaccination will remain only for a short period and also to prevent the spread of virus. There is also still a chance that you could also pass the virus on to others who are not vaccinated if precautions are not taken. The Healthcare providers must activate their roles and address these concerns by increasing awareness about the role of vaccination in preventing the spread of infection and acquiring herd immunity. This could be achieved by conducting different awareness campaigns via various media outlets guided by healthcare providers=

**GOVERNMENT DEGREE COLLEGE, BHUPALPALLY**  
**JAYASHANKAR DISTRICT - 506169**



**Department of zoology**  
**Student Study Project**

**Dt. 10-11-22**

**Title of the Project:**

**Common Diseases in Cattle**

Certified that this is a bonafide work done by the following D.Z .C., IInd year students of this college in the subject of Zoology.

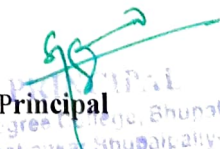
**NAMES OF THE STUDENTS:**

1. G. Sanjay
2. M. Sravani
3. A. Sirivennala

**SUPERVISED BY**

**Dr. P. Gowri**

**Assistant Prof. of Zoology**

  
**Principal**  
Govt. Degree College, Bhupalpally,  
Dist: Jayashankar, Bhupalpally-506169

PROJECT WORK  
ON  
COMMON DISEASES  
IN CATTLE

వసువుల నచ్చు వ్యాధులు

గొంతువాపు వ్యాధి

⇒ బ్యాక్టీరియా వల్ల వస్తుంది

లక్షణాలు:

⇒ ఘోర ఆవృత  $104^{\circ}\text{F} - 106^{\circ}\text{F}$

⇒ గొంతు 4 మెడ వాపు

⇒ కన్నులు ఎరగా ఉంటాయి

⇒ శ్వాస తీసుకోవడంలో ఇబ్బంది.

బుబ్బువాపు వ్యాధి

⇒ బ్యాక్టీరియా వల్ల కలుగుతుంది

⇒ ఘోర ఆవృత  $104^{\circ}\text{F} - 106^{\circ}\text{F}$ .

⇒ భరిత మందుగీరించి నిరసంగా ఉంటాయి

⇒ బుబ్బు, తొడిమలకు నొప్పుగా ఉంటుంది

గొంతు వ్యాధి

⇒ వైరస్ వల్ల వస్తుంది

⇒ ఘోర ఆవృత  $104^{\circ} - 106^{\circ}\text{F}$

⇒ నోటిలో చిగుళ్ళపై పొటలు

⇒ మేతలోని తీసుకోక పొవడం

⇒ salivaborn

⇒ foot and mouth disease vaccine

RAKSHA OVAC TRIVALENT

మనగాది ఖాది

⇒ వైరస్ వల్ల వస్తుంది

⇒ థూర ఆవుతే  $104^{\circ}F - 105^{\circ}F$ .

⇒ పాడుగు సైన్, చున్నుంపైన పాకులు వేకువగా వస్తాయి.

⇒ నిర్రల సన్నని పాకులు

⇒ మగ పశువులలో పాకులు, భేష్టంపై, తోడంపై ఏర్పడుతాయి.

గాలిలలోకి మోకలలో వచ్చు ఖాదులు

చుట్టుకు లొగుం

⇒ బ్యాక్టీరియా వల్ల వస్తుంది

⇒ అంతరి శర్యులు June/July.

⇒ రక్షణలు తనిపించవు.

⇒ నిరసంగు వుంటాయి.

తాంపుండు ఖాది

⇒ బ్యాక్టీరియా వల్ల వస్తుంది

⇒ చుట్టడినీలయ నరికొత ప్రమయంలో ఏకువ.

⇒ గిట్టుం మట్టిభాగం నిర్రగా తండుతుంది

⇒ నిర్రగా తండునలరం ఖాది చుట్టు సడుతుంది

⇒ నడినడుం కిష్టం చుట్టుతుంది

⇒ చేడు నసన వస్తుంది.

గాత్రకుండు వ్యాధి

- ⇒ వైరస్ వల్ల వస్తుంది.
- ⇒ దూర తీవ్రత  $104^{\circ}\text{F} - 105^{\circ}\text{F}$
- ⇒ నొటగుండె salivary
- ⇒ నొరు, నొయక గీట్లల మధ్య ప్రుండ్ల పడుతాయి.
- ⇒ ఇంప్రుండ్ల వల్ల కుండుత నడుస్తాయి.
- ⇒ vaccination in the month of April
- ⇒ నొట ప్రుండ్లను చాడుష్యూం పర్మంగనెంట్ తో కడిగి బొంక్ గ్లీసోల్స్ ఇంటిమిమెంట్ రుద్దాలి.

నొర నొయక వ్యాధి

- ⇒ వైరస్, బొయకలు వల్ల కలుగుతుంది
- ⇒ తీవ్ర దూర తీవ్రత  $104^{\circ}\text{F} - 106^{\circ}\text{F}$ .
- ⇒ పెదవులు, చిగుళ్ళు ఎర్రు పడుతుంది
- ⇒ గీట్లులు నొచి ఎర్రగా ఉంటాయి
- ⇒ salivary.
- ⇒ అవర దశలో నొయక నొర రంధ్రాలకి మరుతుంది.
- ⇒ Antibiotic, నొప్పి నివారణ మందులు వేడాలి.
- ⇒ నొటలోని ప్రుండ్లను 1% చాడుష్యూం పర్మంగనెంట్ తో కడిగి బొంక్ గ్లీసోల్ నొటలో రుద్దాలి.
- ⇒ Heparin ointment క్షుడ వాడవచ్చు.



బొబ్బ తొరం, sheep pox, అచ్యుతేష్.

లక్షణాలు:

- ⇒ High Temperature  $104^{\circ}\text{F} - 106^{\circ}\text{F}$
- ⇒ కళ్ళు ఎరువడం నిశ్చయ కలుగుతాయి.
- ⇒ దుడ్డు వెళ్ళుతుంది. పాలిచ్చే పశువులకు.
- ⇒ Oct-Nov. sheep pox vaccination done.

పురుగు తొరం P.P.R.

లక్షణాలు:

- ⇒ శిశువులకు నొప్పి కలుగుతుంది ఉంటుంది.
- ⇒ నొప్పి, పెదవులు, నాలుక, కంటిమీద ఉబ్బు పొక్కులు ఏర్పడుతాయి.

⇒ January లో P.P.R ఉపశాంతి చేయాలి.

కొల్ల తొరం వ్యాధులు:

కొత్త తొరం

- ⇒ వైరస్ రోగి వ్యాధి
- ⇒ పక్షవాతపు లక్షణాలు
- ⇒ శిశువులకు నొప్పి, అతుల్యత కలుగుతుంది ఉంటుంది.

కొల్ల పానీయం

- ⇒ గుడ్డి ఉబ్బు తగ్గించాలి
- ⇒ కనులపై ఉబ్బు పొక్కులు
- ⇒ వైరస్ రోగి వ్యాధి.

Disease	Vaccine	Dosage
ఇంటివాపు వ్యాధి బుబ్బు వ్యాధి గాలి కుంటు వ్యాధి	తక్కు ట్రయోవ్యాక్	పశువులు - 3 ml బేబిలకు - 1 ml తుంటి కంటేరిం (IM)
చిలుకు తోగం	చిలుకు తోగం బీజా	బేబిలకు - 2 ml చరకం క్రింద (IV)
పురు తోగం	తక్కు P.P.R బీజా	బేబిలకు - 1 ml చరకం క్రింద (IV)
మీసాచి తోగం	తక్కు ఫిప్ ఛాన్స్	బేబిలకు - 1 ml చరకం క్రింద (IV)
కొక్కరి తోగం	కోర్.డి బీజా	కొక్కరి 0.5 ml చరకం చర్మర (మెడ కింద) (IV) తుంటి కంటేరిం (IM)
బుబ్బు వాపు వ్యాధి	తక్కు ట్రయోవ్యాక్	పశువులు 3 ml బేబిలకు 1 ml తుంటి కంటేరిం (IM)
గాలి కుంటు వ్యాధి	తక్కు ట్రయోవ్యాక్	పశువులు 3 ml బేబిలకు 1 ml తుంటి కంటేరిం (IM)
రెబ్బిన్ తోగం	తక్కు రెబ్బిన్ బీజా	ఒక్క పశువుకు - 1 ml చరకం క్రింద (IV) తుంటి కంటేరిం (IM) కుక్కల కంటేరిం 0, 3, 7, 14, 28 తొడుల తార్కిత మెను తొలు

**GOVERNMENT DEGREE COLLEGE, BHUPALPALLY**  
**JAYASHANKAR DISTRICT - 506169**



**Department of zoology**

**Student Study Project**

**Dt. 15-11-22**

**Title of the Project:**

**Adulteration of Milk**

Certified that this is a bonafide work done by the following B.Z.C., II year students of this college in the subject of Zoology.

**NAMES OF THE STUDENTS:**

1. T. Lavanya
2. B. Laxmi
3. R. Maha Laxmi

**SUPERVISED BY**

**Dr. P. Gowri**

**Assistant Prof. of Zoology**

**Principal**

Govt. Degree College, Bhupalpally,  
Jayashankar Bhupalpally District - 506169

# PROJECT WORK

College Name : Government  
Degree college [Model].BHPL

Semister : Semister - IV

Subject : Dairy Science

Project : Adulteration tests in milk  
and Fat test

Names : R. Maha Laxmi

B. Laxmi

T. Lavanya.

Groups : Bsc. Dairy Science.

Hall ticket : 425213217

425213203

425213220



**Aim :** Adulteration tests in milk and Fat tests

**Introduction :** Farmers add adulterations in the milk for increase the SNF and FAT percent age. We have to test the milk in dairy. After test result negative we allow the milk to dairy.

**ADULTERATIONS :** We had so many Adulterations. Ex :- Urea, Starch, Sugar, Sodium chloride (Salt), Mastitis, Detergents etc. For different benefits they different Adulterants. The detection tests are :-

**Detection of Urea :**

**Reagents :**

1) Urea reagent - (UR-1)

**Test Method :** Take 2 ml of milk sample in a test tube, add 2 ml of Urea reagent-1 (UR-1) and mix. A very distinct yellow colour indicates the presence of urea in milk. Normal milk gives a slight yellow colour due to the presence of natural urea.

## Detection of Starch :-

Reagents :-

Starch reagent - 1 (ST-1)

Test Method :- Add a little of water to 3 ml of milk sample in a test tube and boil for few minutes, cool and add 3 drops of starch reagent - 1 and mix. A blue colour indicates the presence of starch in milk.

## Detection of Sugar :-

Reagents :-

Sugar reagent - 1 (S-1)

Sugar reagent - 2 (S-2)

Test Method :- Take 5 ml milk sample in a test tube, add 2 ml of sugar reagent - 1 (S-1) and 4 drops of sugar reagent - 2 (S-2). Mix the contents and place the tube in boiling water bath for 5 minutes. A red colour indicates the presence of sugar in milk.





# Detection of Sodium chloride :-

Salt

Reagents :-

Sodium chloride reagent-1 (SC-1)

Sodium chloride reagent-2 (SC-2)

Test Method :- Take 5.0 ml of Milk sample in a test tube. Add 0.5 ml of sodium chloride reagent-1 (SC-1) and mix well. Add 2 ml of Sodium chloride-2 (SC-2) and mix thoroughly. A chocolate brown precipitate indicates the absence of sodium chloride and an yellow colour indicates the presence of sodium chloride in milk.



# Detection of Detergents

Reagents :-

1. Detergent reagent - 1 (DT-1)

Test Method :- Take 5 ml of milk sample in a test tube, add 5 drops of Detergent reagent-1 (DT-1) and mix. Normal milk gives a pale greyish - purple colour. A dark purple colour indicates the presence of detergents (abnormal milk with increased alkalinity) in milk.

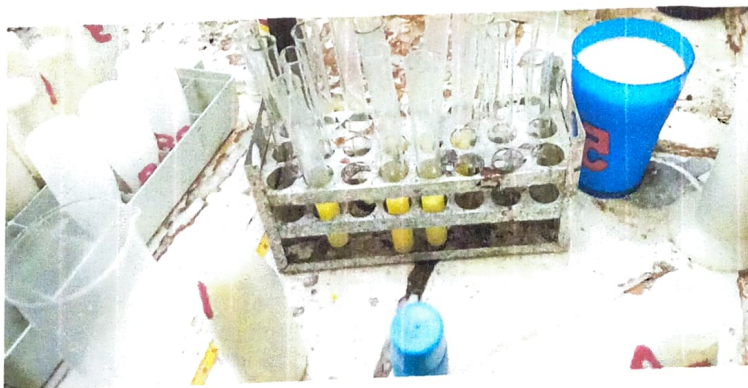
## Detection of Mastitis :-

Reagents :-

1. Mastitis reagent - 1 (M-1)

Test Method :-

Take 5 ml of milk sample in a test tube, add 1 ml of Mastitis reagent-1 (M-1) and mix. Normal milk gives an yellow colour. Milk from infected udders gives a green colour. [Detection of raw milk (Direct raw milk) only]





# Fat Test :-

We have two methods to know the fat percent age. 1) Milk analyzer 2) Gerber method.

**Milk analyzer :-** Take 20 ml milk sample then we put the sample in the stirrer and press the 'start' button. This process will be take 12 seconds, after that milk sample put in the milk analyzer, press the start button, after taking some times machine shows fat % and SNF % and water content. in the display.



**Gerber Method:-** The Gerber Method is a primary and historic chemical test to determine the fat content of milk and other substances.

**Gerber method :-**

**Material Required :-**

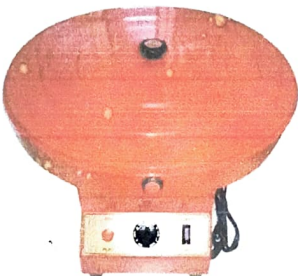
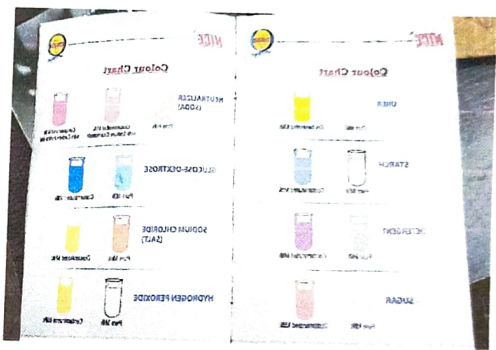
- 1) Milk
- 2) Sulphuric acid (sp. gr. 1.82)
- 3) Amyl alcohol (sp. gr. 0.82-0.83)

**Apparatus :-**

- 1) Milk sample bottle.
- 2) 10 ml automatic tilt measure for  $H_2SO_4$
- 3) 1 ml automatic tilt measure for amyl-alcohol.
- 4) 10.75 ml capacity milk pipette.
- 5) Dairy floating thermometer.
- 6) Thermostatic water bath.
- 7) Gerber's centrifuge machine (1100 rpm)
- 8) butyrometer
- 9) Butyrometer stand
- 10) Rubber stopper.

**Procedure :-** Put the clean and dry butyrometer in a butyrometer stand with open mouth upwards. Run 10 ml of sulphuric acid with the





tilt measure in the butyrometer. pipette out 10.75 ml of milk sample gently by the side of butyrometer whose temperature is about 15-21 degrees C. pour 1 ml. of amyl alcohol with tilt measure. stopper the butyrometer with the help of lock stopper using regulating pin. The tube is well shaken till mahogany red colour is obtained keep the butyrometer in hot water bath till it attains 21 degree C. and the butyrometer [in hot water bath till] are placed in the centrifuge at 1100 rpm for 4 minutes. Take out the butyrometer in an upright position with the stopper end down wards.

Note :- Reading should be taken from bottom of the fat column to lower border of meniscus on the scale.







THE TELANAGANA STATE DIARY DEVELOPMENT  
CO-OPERATIVE FEDERATION LIMITED  
SIDDIPET, KARIMNAGAR, MILK SHED, SIDDIPET.



## TRAINING CERTIFICATE

This is to certify that Ms. **R.Maha laxmi** D/O **Suresh** studying B.Sc., DZC (Diary Science) in government degree college, Bhupalapally has undergone on job training from **01.06.2022** to **18.06.2022** at Vijaya diary siddipet and she completed her training successfully during this period.

  
Manager

Manager  
T.S.D.D.C.F.  
Siddipet Dairy, SIDDIPET  
TSDDCF Ltd.,  
Siddipet, Karimnagar, Milk shed.



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SIDDIPET, KARIMNAGAR, MILK SHED, SIDDIPET.



## TRAINING CERTIFICATE

This is to certify that Ms. **B.Laxmi** D/O **Venkat reddy** studying B.Sc., DZC (Diary Science) in government degree college, Bhupalapally has undergone on job training from **01.06.2022** to **18.06.2022** at **Vijaya diary siddipet** and she completed her training successfully during this period.

  
Manager

T.S.D.D.C.F.L

Siddipet, Karimnagar, Milk shed.  
Manager,  
Siddipet Dairy, SIDDIPET  
TSDDCF Ltd.,



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## TRAINING CERTIFICATE

This is to certify that Ms. **T.Lavanya** D/O **Malleshham** studying B.Sc., DZC (Diary Science) in government degree college , Bhupalapally has undergone on job training from **01.06.2022** to **18.06.2022** at Vijaya diary **siddipet** and she completed her training successfully during this period.

  
Manager

T.S.D.D.C.Fd  
Manager  
Siddipet Dairy, SIDDIPET  
Siddipet, Karimnagar, Milk shed.

GOVERNMENT DEGREE COLLEGE, BHUPALPALLY  
JAYASHANKAR DISTRICT - 506169



DEPARTMENT OF TELUGU  
STUDENT STUDY PROJECT

2021-22

TITLE : తెలుగు సాహిత్యంలోని ఇద్దరు బ్రాహ్మణుల  
విశిష్టత, విశిష్టత

Certified that this is a bonafiede work done by the following B.ComII year students of this college in the subject of Telugu

NAME OF THE STUDENTS:

- 1.CH.PRAVALIKA
2. K.KEERTHANA
3. MD.RIZWAN
4. L.KAVYA
5. O.MANASA

SUPERVISED BY

  
B.SRINIVAS

Lecturer in Telugu

  
Principal

PRINCIPAL  
Govt. Degree College, Bhupalpally,  
Dist: Jayashankar Bhupalpally-506169



తెలుగు సాహిత్యంలో ఇద్దరు అద్భుత గానీకలు  
B.com I, II, III years Students, GDC భూపాలవల్లి

### 1. బలచక్రవర్తి

బలచక్రవర్తి దానాలలో ఇది చక్రవర్తి అంటారు. దశావతారాల్లో  
(శ్రీ మహావిష్ణువు) పోదవ అవతారమైన వామనమూర్తి  
మూడు అడుగుల శలం అడుగగా బలదానమివ్వగా, బల  
(హరి) (అవిక్రమ కూష్మాన్ధి) ఎత్తి రెండు పాదాలతో  
అకారణం, భూగోళం నింపగా, మూడో అడుగు అక్కడ  
ఉని (ప్రతి)ంచగా బల తన విశిష్ట చూపటాడు

బలచక్రవర్తి ప్రవృత్తును మనవడు. దేవాంబు, విదేశీయుల  
తనముడు. ఇతని భార్య అశ్వినీ. రాక్షసమైనప్పటికీ ఇతనిలో  
ఎన్నో సుగుణాలున్నాయి. పర్యం మద దండెత్తి ఇందుని చెడించి,  
సహ్యాధిపత్యం సంపాదించాడు. ఒకసారి ప్రవృత్తునితో మాట్లాడుతూ  
విష్ణుమూర్తిని అలనాడేదంటూ ప్రవృత్తునితో కలసం వచ్చి  
(శ్రీ హరి వల్లే నీ పదవి పోతుందని చెప్పాడు. అదే  
బలచక్రవర్తి మూడు అకారాలు. ఆ క్రిమి-చక్రవర్తి  
విష్ణుమూర్తి వామనమూర్తిగా అవతారమెత్తి, మత్స్య-చక్రవర్తి  
బలచక్రవర్తి వద్దకు వచ్చి మూడు అడుగుల నీలమ దానంగా  
కొరకుటాడు.

వచ్చింది సాక్షాత్తు శ్రీ హరి ఉని గ్రహించిన రాక్షస  
గురువు ఈశ్వరమూర్తి, బలచక్రవర్తి దానమివ్వకుండా  
కమండలం నుంచి కారణమన్న నీటి భారకు అడ్డంపడగా



మనకు భక్తులు కమండలం కామరూపి పాడుస్తాడు.  
అగిల మంత్రాచార్యునికి ఒక కన్న పాటంది. అదే  
మనకు ఒక అడుగులూ నేలను, మరొక అడుగులూ  
ఆకాశాన్ని ఆరేపించి, మూడవ అడుగుతో సంపాద  
మాదమని బలచక్రివల్లీని కలిగి, బలచక్రివల్లీ శిరస్సు  
మాంశలాడు. మూడవ అడుగు అక్కడ మోపి, బలచక్రివల్లీని  
పాతాళానికి పంపాడు.

భాద్రపద శుక్ల ద్వాదశి విశ్ణువు విడవ అవతారమైన  
వామనానికి ఇది వేదమైన దినము.

వామనడు బ్రహ్మచారి వాడు. అపస్వని పోన రిడితకి, కన్య  
ముగ్ధుల వల్ల పుట్టిన వాడు.

విరాచనడు అనే దైత్యుని కాదుకు బల. దైత్యులను నట్టిన  
బల గొప్ప విశ్ణుభక్తుడు. అందుచేత అతడు విశ్ణువు  
అభిమానాన్ని అధికంగా చూసినాడు. అందుచేత అతనికి  
గర్వం కలిగి దైవతాన్ని బాధించడంతో మూలకానాడు.

అప్పుడు దైవతల క్షేమానారాధనను సన్నాధికి పల్లి  
బల బాధ పొగొట్టవలసిందిగా ప్రార్థించారు. భక్తుని  
భంగపెట్టడానికి విశ్ణువుకి అదిలా ఇష్టం లేక పోయింది.

అయినా దైవతల విన్నపం చేకూరక అప్పింది కాదు.

అందుచేత విశ్ణువు వామనమూర్తిగా బ్రహ్మచారి  
మూలకుని వృషాంతా బలచక్రివల్లీ దగ్గరకు వెళ్ళాడు.  
వచ్చేవామనుని చూచి బల సంభాసనం మీద  
మంచి లోచనాని మీద వామనుని కుంభాపట్టాడు.

బద్ధుడి బల అతని రాకకు కారణం అడిగాడు.



c Falls

వైదపత్తనానికి గాను తనకు అపహ్లామి కావాలని  
తనను బలని కలిపాడు. అపహ్లామి అంటే మూడు  
అడుగుల నీల అని కరడం అడువగా బల ఇస్తున్నాడు.  
మంత్రముక్తంగా దానకర్మ చెయ్యవడానికి బల  
తన గురువైన (శుక్రడికి) శుక్రాచార్యునికి కరుణ చేస్తాడు.

శుక్రాచార్యుడు వచ్చి వామనడి అంతర్కంఠహించి  
బలచక్రవర్తిగా చెబుతాడు. ఇది అపారదానమని  
కూడా వాటిస్తాడు. దానం ఇవ్వటం అంటే నిన్ను  
పాతాళంలానికి తొక్కివేస్తాడని కూడా అంటాడు.  
దానం బలదానమైనా అదిన మాట అప్పటిలేదన్నాడు.  
దానం చేసేందుకు నీరు వడలదానికి బలచక్రవర్తి దారి  
చెంబులతాడు.

Bithoor

## 2. సత్సహృదిత్వం

హృదిత్వం అంటే మనసు లోని అందమైన అంశాలను బహుళ ప్రసాదించడం. ఇతడు సత్సహృదిత్వం అంటే అందమైన అంశాలను బహుళ ప్రసాదించడం. ఇతడు సత్సహృదిత్వం అంటే అందమైన అంశాలను బహుళ ప్రసాదించడం.

### అందమైన అంశాల హృదిత్వం కథ

హృదిత్వం అంటే మనసు లోని అందమైన అంశాలను బహుళ ప్రసాదించడం. ఇతడు సత్సహృదిత్వం అంటే అందమైన అంశాలను బహుళ ప్రసాదించడం. ఇతడు సత్సహృదిత్వం అంటే అందమైన అంశాలను బహుళ ప్రసాదించడం.

### సత్సహృదిత్వం:-

హృదిత్వం అంటే మనసు లోని అందమైన అంశాలను బహుళ ప్రసాదించడం. ఇతడు సత్సహృదిత్వం అంటే అందమైన అంశాలను బహుళ ప్రసాదించడం. ఇతడు సత్సహృదిత్వం అంటే అందమైన అంశాలను బహుళ ప్రసాదించడం.



మజ్జిమ న కై ఇచ్చునట్లు వాగ్దత్తము చేసి ఉండిన  
 నమను ఇమ్రాని నిర్భందించ దానికి ఇతని భార్యను ఉపయోగ  
 పండాలుని కాలచునట్లును సకలం భూమియందు -  
 వసింపనట్లును చేసి ఇతని కొడుకును పాముబొకరివలె  
 చంపి ఆవల నిరవరాగి రియిన ఇతని భార్యపై శిశుపాత్ర  
 పాతకమును మోపఁజేసి ఆమెను శిశువులాల అగునట్లు  
 చేయించి ఎట్లును బాంకించ నేరక పామెను. కడపట అన  
 ప్రమత్తము ఎల్లప్రశ్నముల రియపాగా శుభ్రాదిదౌవతల  
 శిశు పార్శ్వంధునికి ప్రేక్షకము రియ ఇతని కొడుకును  
 (బలకించి మరల మనపటి ఎట్లు రాక్షసత్వము వహించునట్లు  
 రినుగిహించరి. అట్లుడు విశ్వావత్రుడు తాను అసికాన్  
 రాక్షసును ఇచ్చి బహుకాలము క్రమకు బిడ్డి అపస్సుచేసి  
 అర్జించిన మహావైశ్ణవమును ఇతనికి భారపాసి చరకాలము  
 రాక్షసపద సుదపే సత్తామార్గంధుడు రిని విశ్లాఘి  
 పాండుము రిని అశిర్వాదించి చనియెను కనుకనో సత్తాము  
 నందు పార్శ్వంధునికి మించిన వారు లోరని చగడ్మియై  
 కలగి డిన్నడి.

(2వ చ/మండు)

సామాన్య శివచక్రవర్తి రింజటివాడు ( )

- అ) బలచక్రవర్తి
- ఆ) సత్సహస్రిశ్చంద్రుడు
- ఇ) శ్రీరాముడు
- ఈ) శ్రీమహావిష్ణువు

2. శ్రీమహావిష్ణువు దశవటారాల్లో వామనావతారం ఎవ్వడి ( )

- అ) రెండవ
- ఆ) మూడవ
- ఇ) నాలుగవ
- ఈ) పాదవ

3. వామనుడు తన పదానికి తిక్కలు ( )

- అ) పాదవటి వాడు
- ఆ) పొట్టివాడు
- ఇ) బన్నవాడు
- ఈ) పేదవాడు

4. శ్రీమహావిష్ణువు బలచక్రవర్తిని ఎన్నుకొనుటకు సులంకావాలని కోరాడు ( )

- అ) నాలుగు కొడుకుల నెల
- ఆ) రెండుగురుల నెల
- ఇ) మూడుగురుల నెల
- ఈ) ఏదీ కాదు

పక్రివర్తి మొక్క గురువు ( )

హరిశ్చంద్రుడు

అ) శక్తిహితుడు

బ) శామితుడు

ఆ) శివమూర్తివిష్ణువు

6) సత్సహరిశ్చంద్రుడు ఈ వంశానికి చెందినవాడు ( )

అ) శామితుడు

బ) శక్తిహితుడు

ఆ) శివమూర్తి

ఇ) సత్సహ

7) హరిశ్చంద్రుని భార్య పేరు ( )

అ) పిహి

బ) శామి

ఆ) పండ్రిమతి

ఇ) శక్తిమతి

8) ఈ విషయమున సత్సహను కలిగిన వాడెవడని పరికినది ( )

అ) విశ్వామిత్రుడు

బ) విశ్వమిత్రుడు

ఆ) విశ్వమిత్రుడు

ఇ) విశ్వమిత్రుడు

**GOVERNMENT DEGREE COLLEGE,  
BHUPALPALLY**

JAYASHANKAR DISTRICT -506169



**DEPARTMENT OF HISTORY  
STUDENT STUDY PROJECT**

(2021 – 22)

**TITLE: RAMAPPA – HISTORICAL IMPORTANCE**

Certified that this is a bonafide work done by the following IIInd year students of  
this college in the subject **HISTORY**

NAME OF THE STUDENTS:

- 1.B.Shyam ... B.A.II Yr
- 2.A.Sarovaram Shastri ... B.A.II Yr
- 3.B.Srujan ...B.A. II Yr
- 4.G.Laxmiraj... B.A. II Yr
- 5.S.Harish ... B.A. II Yr
- 6.G.Saikrishna ... B.A. II Yr

  
SUPERVISED BY ....

M.HYMAVATHI

Lecturer in History

  
Principal



Sl. No	Title	Pg No
1.	Introduction	2
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# RAMAPPA- HISTORICAL IMPORTANCE

## INTRODUCTION

Ramappa Temple, also known as the 'Rudreshwara temple ', is a Kakatiya style Hindu temple dedicated to the god Shiva, Located in Telangana, India. It is 15 km from Mulugu, 66 km From Warangal, 209 km(130 mi) from Hyderabad. An inscription In the temple says it was constructed in the year 1213CE by Recharla Rudra alias Recharla Rudri Reddi - A General for Kakatiya ruler Ganapathideva 1199-1262. Located in the vicinity of Ramappa Lake , the Ramappa Temple complex which consist of three temples was constructed between 1212 and 1234,designed and architect by Ramappa After whom the temple complex is named.

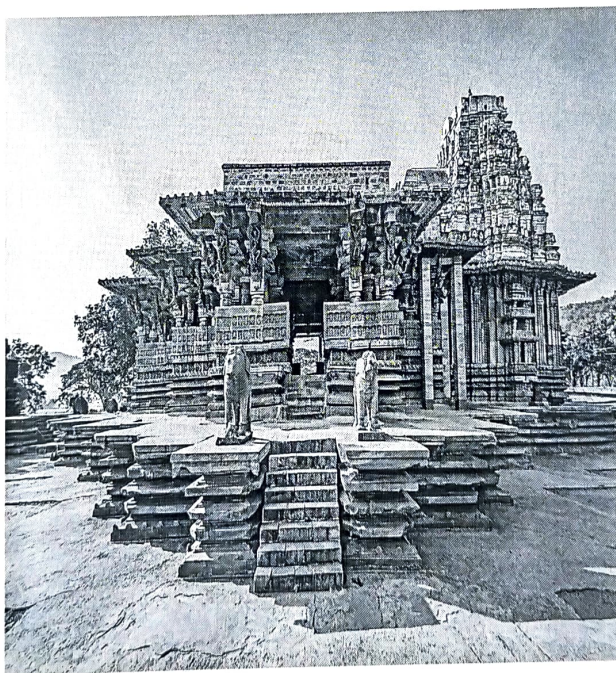
Marco Polo, during his visit to the Kakatiya empire, supposedly called the temple " the brightest star in the galaxy of temples ". Ramappa Temple stands majestically on a 6-foot high star-shaped platform.The hall in front of the sanctum has numerous carved pillars that have been positioned to create an effect that combines light and space wonderfully. The temple is named after the sculptor Ramappa, who built it, making it the only temple in India to be named after its craftsman.

The main structure is in a reddish Sandstone, but the columns round the outside have large brackets of black basalt which is rich in iron,

magnesium and silica. These are carved as mythical animals or female dancers or musicians, and are " the masterpieces of Kakatiya art, notable for their delicate carving, sensuous postures and elongated bodies and heads" . On 25th July 2021 , the temple was inscribed as a UNESCO World Heritage Site as " Kakatiya Rudreshwara (Ramappa) Temple, Telangana " .

## **OBJECTIVES OF STUDY:**

- To overcome the looming gap of socio-cultural backgrounds of the students.
- To educate about culture and traditions of native district.
- To enhance the knowledge of Kakatiya Kingdom.
- Exposure of students to the sociolinguistic feature.



## **DATA ANALYSIS**

## **DESCRIPTION:**

The roof (Garbhalayam) of the temple is built with bricks, which are so light that they are able to float on water.

Some bricks of the Ramappa Temple and Humayan's tomb were sent for examination to Dr. Habib Human, Chief Chemist of Government Industrial Laboratory, Hyderabad. He was reported as follows.

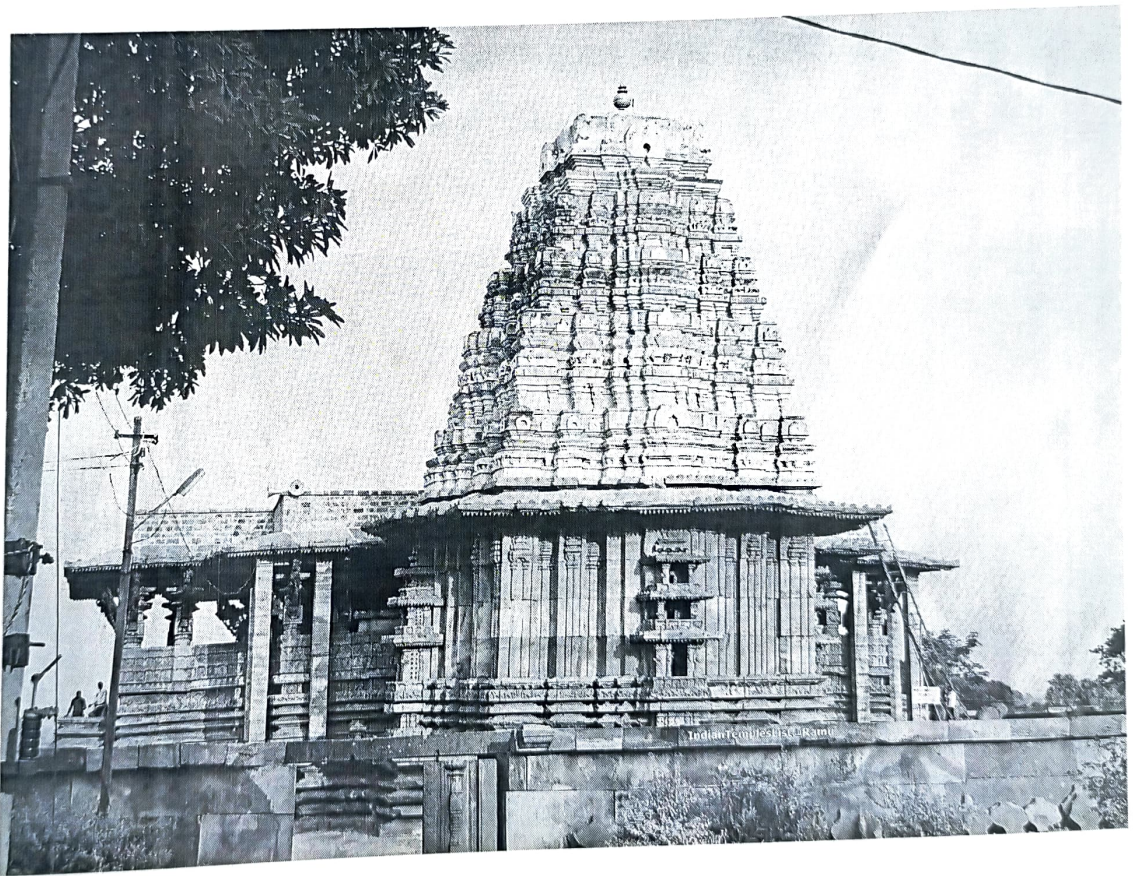
The samples of floating bricks from Bidar are similar to those from Warangal, as far as the method of manufacture is concerned. The material used to make the brick spongy was apparently saw dust. The weight of the specimens is  $\frac{1}{3}$  to  $\frac{1}{4}$  of the ordinary bricks of the same size. The Bidar specimens show better quality as regards homogenous mixing and uniform burning than their proto-types from Ramappa as a result of which the porosity is well-maintained in the body of bricks from Bidar and they float well in water.

## **DATA ANALYSIS:**



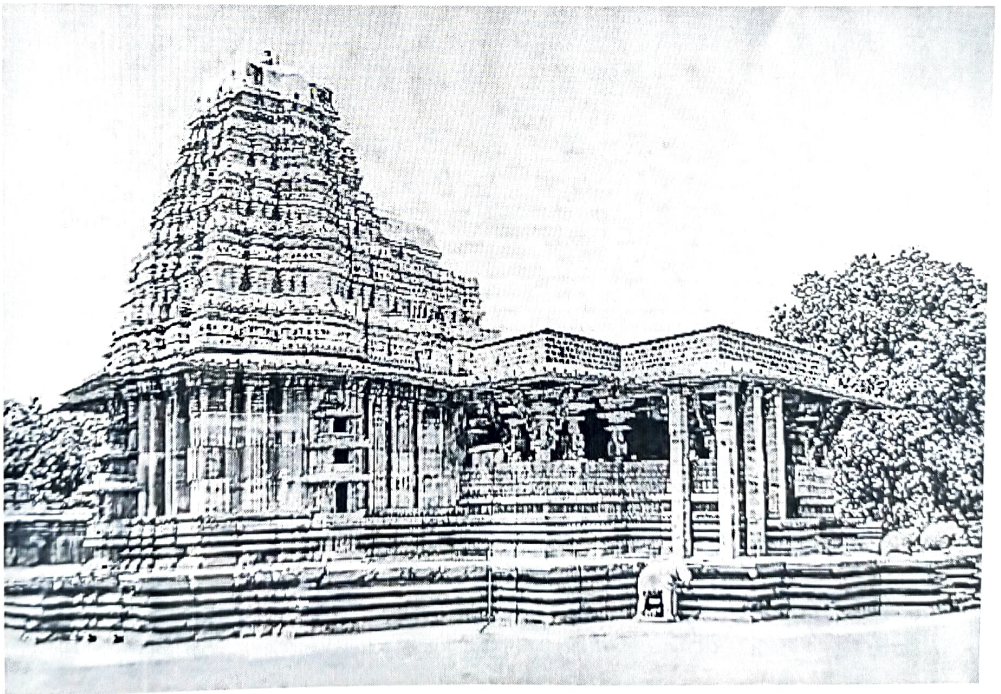
Warangal in the Deccan plateau is home to the very classic and brilliant Kakatiya art "The Rudreshwara Temple which is popularly known as the Ramappa Temple is one such amazing piece of art that stands as testimony of the royal Kakatiyas. The temple got its name Ramappa because of its Chief Sculptor Ramappa. It is Probably the only temple in the country to be known by the name of its sculptor

### RAMAPPA TEMPLE





There are two small shiva shrines on either side of the main temple. The enormous Nandi within facing the shrine of shiva remains in good condition. Nataraja Ramakrishna revived Perini Sivatanavam (Perini Dance) by seeing the sculptures in this temple the dance poses written in Nritya Rathnavali by Jayapa Seneani also appear in these sculptures. The temple remained intact even after repeated wars plunder and destruction during wars and natural disasters there was a major earthquake during the 17th century which caused some damage, It survived the earthquake due to it is "Sand box technique" of laying foundation. Many of the smaller structures were neglected and are in ruins. The Archaeological survey of India has taken charge of it. The main entrance gate in the outer wall of the temple is ruined.



## **TRANSPOTATION:**

### **Direct bus services to Ramappa from Hanumakonda, Warangal District:**

The tourists who wants to visit Ramappa, the government of Telangana has facilitated the direct transportation from Hanumakonda, Warangal district

### **The timings of Bus:**

Start at 8.30 am in Hanamkonda and reaches Ramappa by 10.10 am. The return journey beings at 3.40 pm and reaches Hanamkonda by 5.20 pm. The fare for an adult is Rs.65 and for the children is Rs. 35.

### **Ramappa Location**

Village	-	Palampet
District	-	Mulugu
State	-	Telangana
Country	-	India



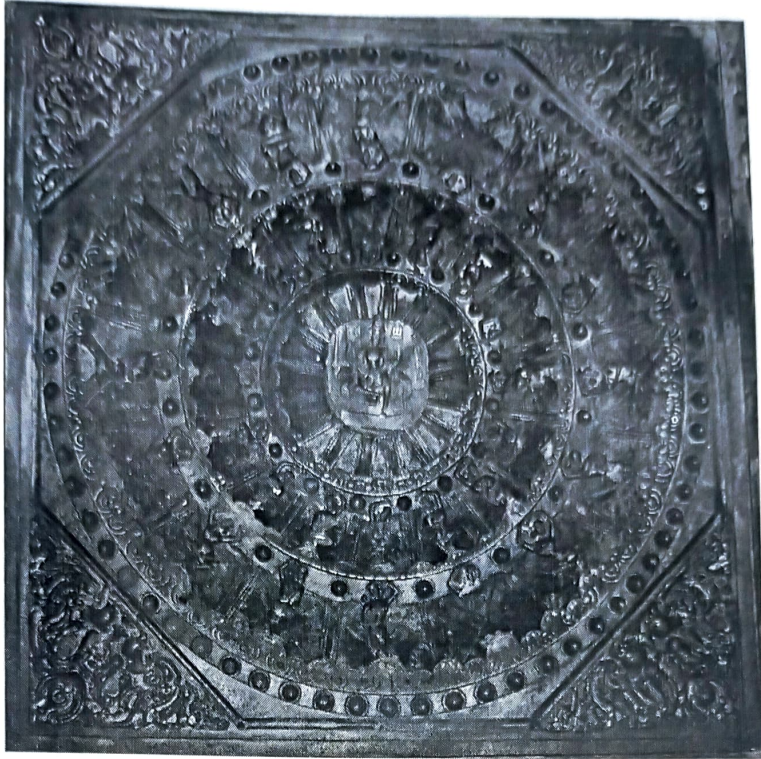
## IMPORTANCE:

Ramappa temple is a Kakatiya Style Hindu temple dedicated to the God Shiva. An inscription in the temple says it was constructed in the year 1212 (1213) CE by Recherla Rudra, a General of Kakatiya Ruler Ganapathi Deva 1199-1262.

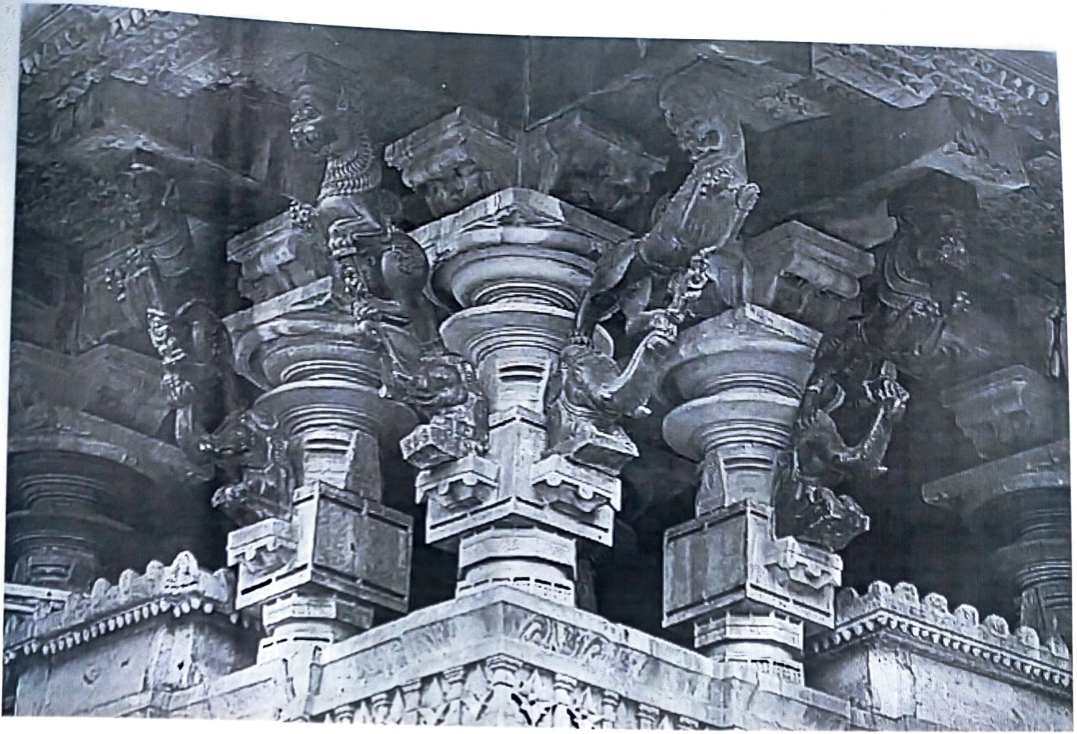
On 25th July 2021 the temple was inscribed as a UNESCO world heritage site as "Kakatiya Rudreshwara (Ramappa) Temple, Telangana, executed works in temple in a span 14 years. One of the great famous temple Ramappa most spiritual place celebrates Maha Shiva Ratri very grand manner. Telangana State one of the tourist place Ramappa temple so many people from different places in country visit so Telangana Government economically income sources Ramappa temple.



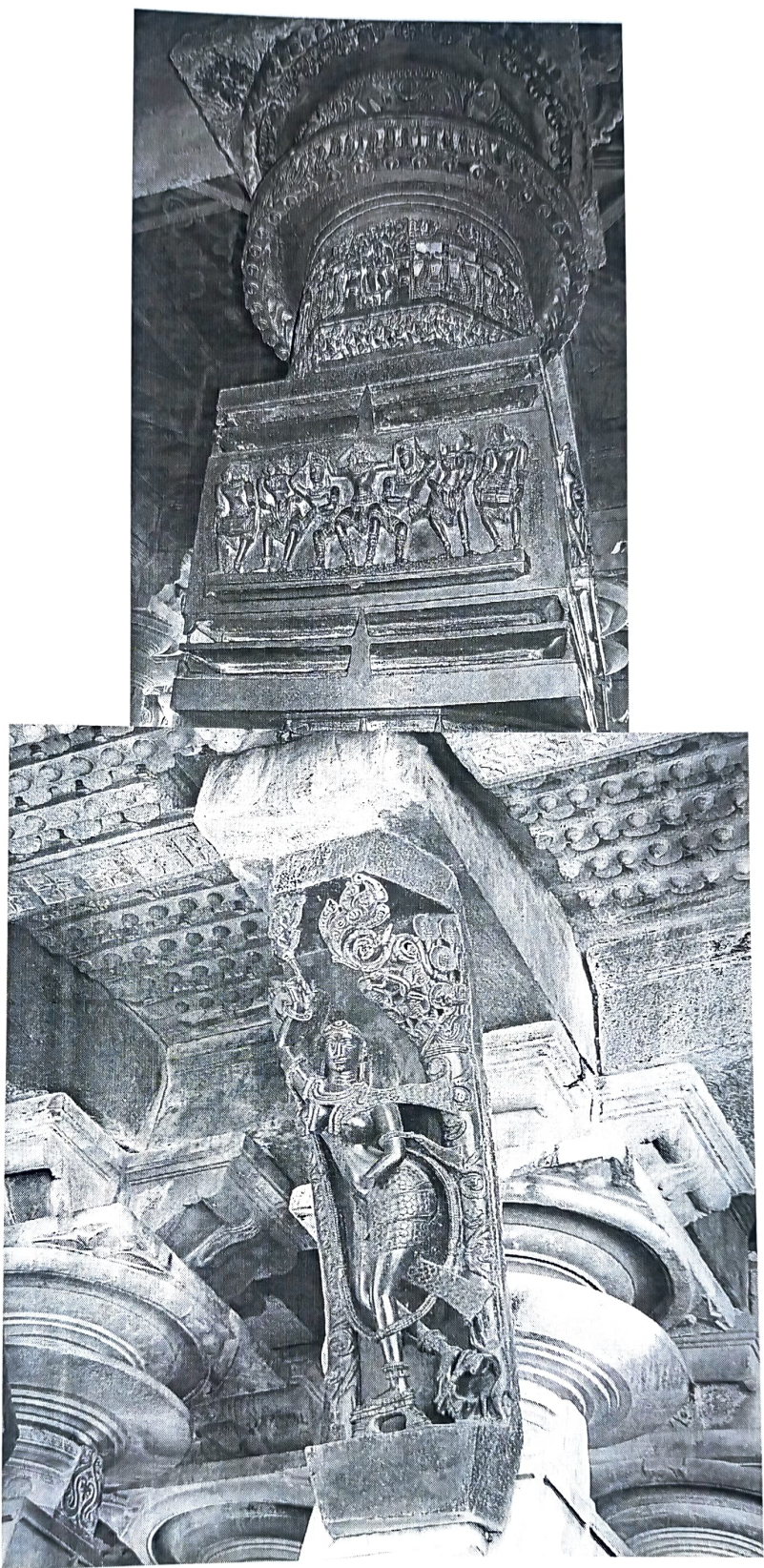
**Idols and Sculptures in the temple:**







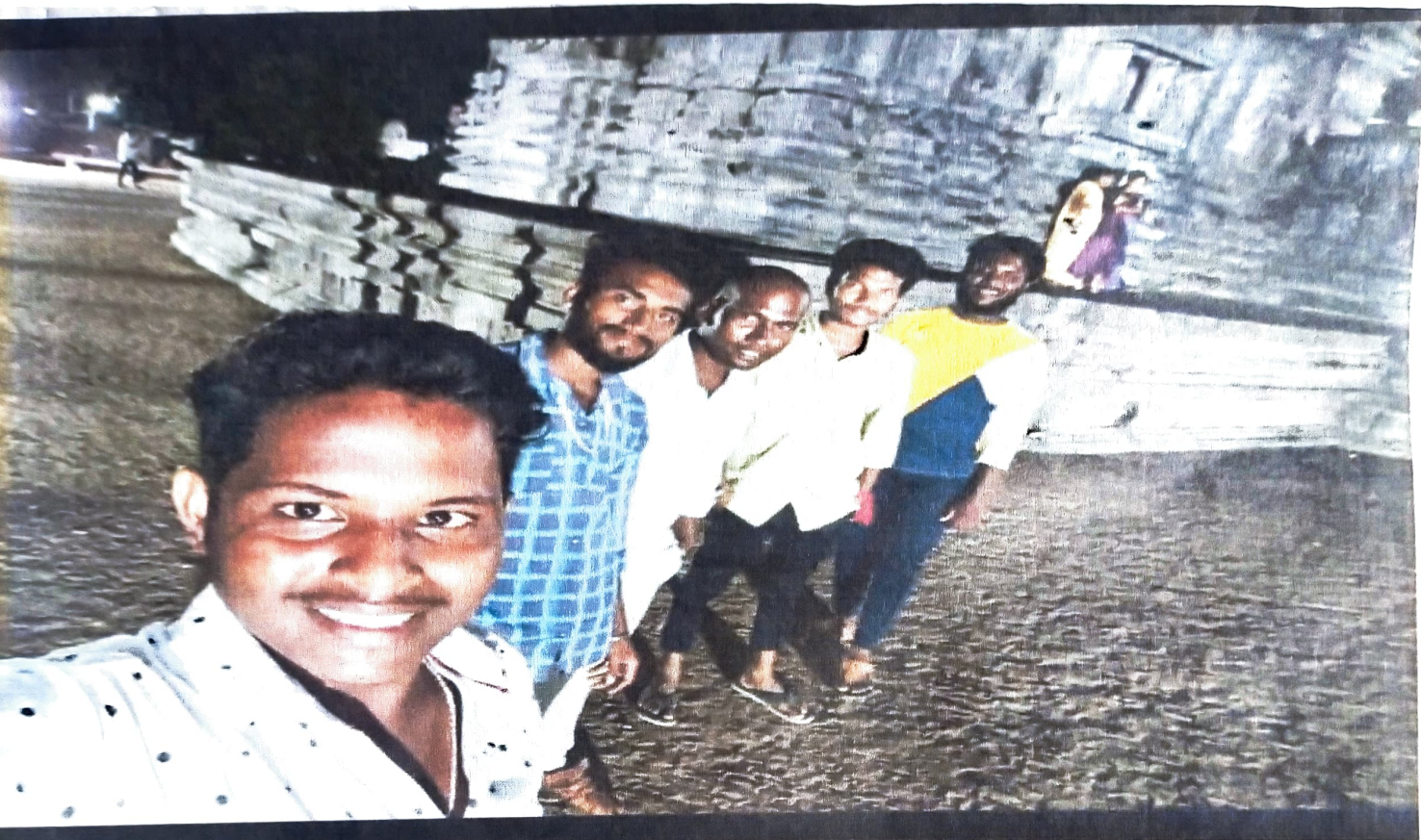




## CONCLUSION:

Ramappa temple is a Kakatiya style Hindu temple dedicated to the God Shiva. Ramappa temple is famous for Shivalinga & Nandi. The Roof (Garbhalingam) of the temple is built with bricks which are so light weight that they are able to float on water. There are two small Shrines on either side of the main temple the enormous Nandi within, facing the Shrine of Shiva remains in good condition. Nataraja Ramakrishna revived Perini Sivatanavam (Perini Dance) by seeing the sculptures in this temple. The dance poses written in Nattya Rathnavali by Jayapa Senami also appear in these sculptures. The devotees celebrates Mahashivaratri very grand manner in Ramappa temple. So many people from different places from India as well as abroad are visited and applause the skill of sculptors and Kakatiyas. Telangana Government also getting income from national and international visitors.





## **REFERENCES:**

- Newspapers Articles
- Books
- Field Work
- Telugu Academy Books



GOVERNMENT DEGREE COLLEGE, BHUPALPALLY  
JAYASHANKAR DISTRICT -506169



DEPARTMENT OF MATHEMATICS  
STUDENT STUDY PROJECT  
2021 – 22


**TITLE:** Indian Mathematician and their Contribution.


*Certified that this is a bonafide work done by the following B.SC (MPCs)  
2<sup>nd</sup> year students of this college in the subject MATHEMATICS*

NAME OF THE STUDENTS:

1. A.RAMESH	A. Ramesh
2. E.NARESH	E. Nareesh
3. V.SATHWIK	V. Sathwika
4. A.PRATHYUSHA	A. Prathyusha
5. B.VARALAXMI	B. varalaxmi

SUPERVISED BY

  
R. SRIDHAR  
Lecturer in mathematics

  
Principal  
PRINCIPAL  
Govt. Degree College, Bhupalpally,  
Dist: Jayashankar Bhupalpally-506169

# ABSTRACT

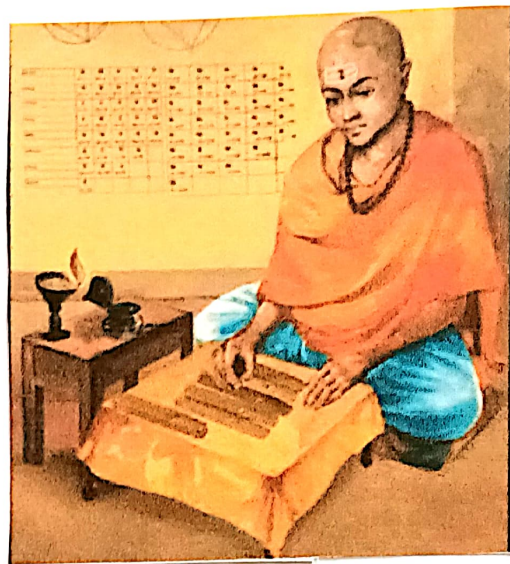
Indian mathematics has its roots in vedic literature. Between 1000 B.C. and 1800 A.D. various treatises on mathematics were authored by Indian mathematicians in which were set forth for the first time, the concept of zero, numeral system, techniques of algebra and algorithm, square root and cube root. However, despite widely available, reliable information there is a distinct and inequitable neglect of the contributions of the sub-continent. Many of the developments of Indian mathematics remain almost completely ignored, or worse, attributed to scholars of other nationalities, often European. However a few historians are reluctant to acknowledge the contributions of Indian mathematicians. They believe Indians borrowed the knowledge of mathematics from Greeks.

In this article author has written the significant Indian mathematicians brief history and their contributions.



# BRAHMAGUPTA

Brahmagupta was the foremost Indian mathematician of his time. He made advances in astronomy and most importantly in number system including algorithms for square roots and the solution of quadratic equations.



Brahmagupta, whose father was Jisnugupta, wrote important works on mathematics and astronomy. In particular he wrote Brahmasphutasiddhanta, in 628. The work was written in 25 chapters and Brahmagupta tells us in the text that he wrote it at Bhinmal which today is the city of Bhinmal. This was the capital of the lands ruled by the Gujara dynasty.

Brahmagupta became the head of the astronomical observatory at Ujjain which was the foremost mathematician centre of ancient India at this time.

Outstanding mathematicians such as Varahamihira had worked there and built up a strong school of mathematical astronomy.

### Brahmagupta's mathematical works:

Astronomy, gravity theory, negative numbers, zero, quadratic equations and square roots were among his works. Most of Brahmagupta's material comes from old sources like the [Brahmagupta's] Brahmasputasiddhanta, which has twenty-five chapters.

Brahmasputasiddhanta means "the system of the god of creation and astronomy." Brahmagupta wrote items common to the mathematical and astronomical developments of the time in the first ten chapters of the book.

### The themes included:

- \* Mean planet longitudes.
- \* True planet longitudes
- \* Diurnal rotation.
- \* Lunar eclipses
- \* Solar eclipses
- \* Rising and setting of the sun/moon.
- \* Phase of the moon



The second half of the book contains significant world knowledge. It contains algebra, calendar observations and calculations, metres, spheres, and instruments.

## Brahmagupta's Theorem on cyclic Quadrilaterals

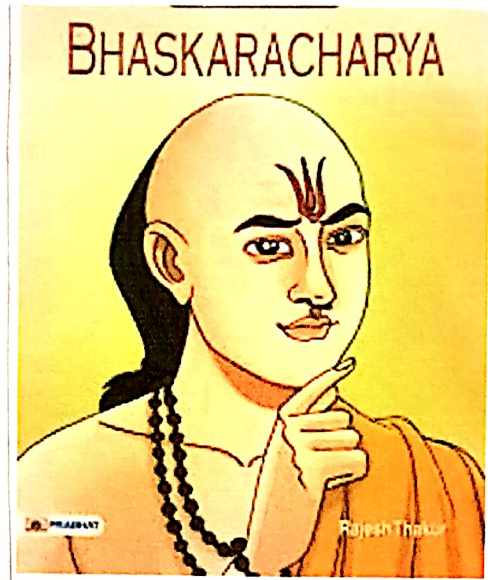
Brahmagupta even attempted to write down these rather abstract concepts, using the initials of the names of colours to represent unknowns in his equations, one of the earliest intimations of what we now know as algebra.

Brahmagupta dedicated a substantial portion of his work to geometry and trigonometry. He established  $\sqrt{10}$  (3.162277) as a good practical approximation for  $\pi$  (3.141593), and gave a formula, now known as Brahmagupta's formula, for the area of a cyclic quadrilateral, as well as a celebrated theorem on the diagonals of a cyclic quadrilateral, usually referred to as Brahmagupta's Theorem.



# BHASKARACHARYA

A Popular astronomer and one of the great Indian mathematicians, Bhaskara helped Aryabhatta by dispersing his mathematics creations. He was not only viewed as a great mathematician of India but also a writer and authored a book named "**Siddhanta Siromani**". He is



an Indian mathematician born in the 7th century. He claimed that dividing a number by zero makes it infinity, and the total of infinity and any number comes out to be infinity. The Indian mathematicians and their contributions have made new discoveries, which has led to a greater understanding of numerous fundamentals of mathematics.

\* For instance, Bhaskara used letters to denote unknown quantities, similar to current algebra, and cracked indeterminate equations of 1<sup>st</sup> and 2<sup>nd</sup> degrees.

\* He solved single-type quadratic equations.

- \* Bhaskara studied regular polygons up to those with 384 sides and obtained an approximate value of  $\pi = 3.141666$ .
- \* He suggested many explanations in Brahmagupta's work, especially in obtaining a general solution to the Pell equation ( $x^2 = 1 + Py^2$ )
- \* Bhaskara also gave many solutions to equations like (e.g.,  $x^2 = 1 + 61y^2$ , where  $x = 1,766,319,049$  and  $y = 226,153,980$ ).

**Bhaskara II (1114-1185)**, also known as Bhaskaracharya to avoid confusion with Bhaskara I, was an Indian mathematician and astronomer. From verses, in his main work, Siddhanta Shiromani, it can be inferred that he was born in 1114 in Vijjadavida and living in the only ancient Sahyadri mountain ranges of western Ghats, believed to be the town of patan in chalisgaon, located in present day khandesh region of Maharashtra. He also wrote another treatise named Karana Kautuhala.



# The Siddhanta - Siromani

## Lilavati

The first section Lilavati (also known as Patiganta or ankaganita), named after his daughter, consists of 277 verses. It covers calculations, progressions, measurement, permutations and other topics.

## Bijaganita

The second section Bijaganita (Algebra) has 213 verses. It discusses zero, positive and negative numbers, and indeterminate equations including Pell's equation, solving it using a kuttaka method. In particular, he also solved the  $61x^2 + 1 = y^2$  case that was to elude Fermat and his European contemporaries centuries later.

## Grahaganita

In the third section Grahaganita, while treating the motion of planets, he considered instantaneous speeds.

$$\sin y' - \sin y \approx (y' - y) \cos y$$

$$\frac{d}{dy} \sin y = \cos y.$$

$y'$  close to  $y$ , in modern notation.

# SHAKUNTHALA DEVI

Shankunthal Devi (4 November 1929 - 21 April 2013) was an Indian mental calculator and writer, popularly known as the "Human computer". Her talent earned her a place in the 1982 edition of the Guinness Book of World Records. However, the certificate for the record was given posthumously on 30 July 2020. despite Devi achieving her world record on 18 June 1980 at **Imperial college, London**. Devi was a precocious



child and she demonstrated her arithmetic abilities as the University of Mysore without any formal education.

Devi strove to simplify numerical calculations for students. She wrote a number of books in her later years, including novels as well as texts about mathematics, puzzles, and astrology. She wrote the book *The world of Homosexuals*, which is considered the first study of **homosexuality in India**. She saw homosexuality in a positive light and is considered a pioneer in the field.



## Contribution of Shakunthala Devi in Mathematics

An upcoming biographical movie to be released on May 8, 2020 made by Anu Menon entitled "Shakunthala Devi" has triggered the interests of people in this gifted personality who has been credited with title "human computer". A genius who could impress people right from the age of three is also a multi-faceted personality good at motivational speeches and authoring books of different genres. A writer and mathematician bundled in one, Shakunthala Devi's life and accomplishments have inspired millions around the world. Here are a few interesting facts about Shakunthala Devi that will feed your curiosity to know her.

### Her mathematical talents recognized

As early as five years of her age, the world could realize that she was a child prodigy. She was found to be an expert in highly complex mental arithmetic.

Her passion to expand the human capacity made her develop the concept known as "Mind Dynamics".

## A place in the Guinness Book of World Records.

Her talents earned her a place in the Guinness Book of World Records in the year 1982. She was praised as the authentic heroine of her times and she could command the headlines in newspapers and magazines. It was said she could outperform the fastest computers of her times.

## The most unique book she authored

She had a soft heart towards homosexuals. She treated homosexuality in a positive vein and wrote a book titled The World of Homosexuals, which is the first ever book on homosexuality in India. She argued that all people exhibit different sexual tendencies and orientations at different times and there is nothing called homosexuality or heterosexuality in the world. She has also authored a number of books on astrology and cooking.

## She never liked the title 'Human computer'

In acknowledgement of her talents, she was heralded as 'Human computer' after she projected her talents in the BBC channel hosted by Leslie Mitchell on



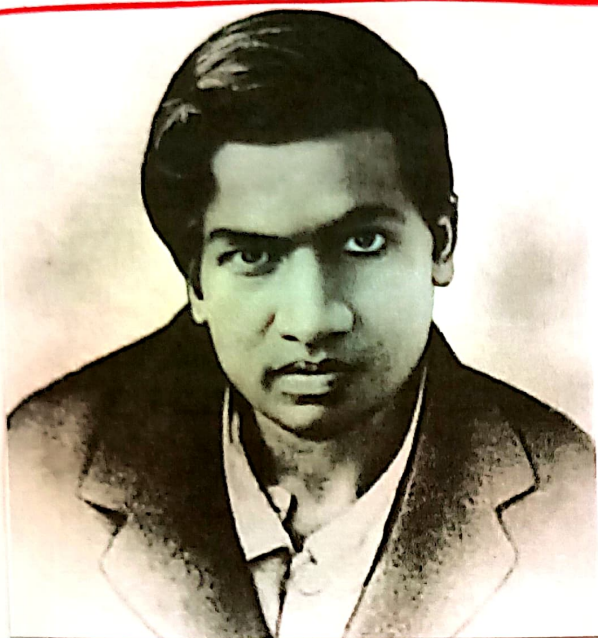
October 5, 1950. However, she never liked this title. She said, human mind has incomparably much capabilities than the computer and it is not appropriate to compare human mind with computers.

## Shakunthala Devi Number

Shakunthala Devi attained universal fame when she demonstrated her ability multiply two random numbers of 13 digits. She could mentally multiply  $7,686,369,774,870 \times 2,645,099,745,779$  on 18 July 1980 and gave the correct answer as  $18,947,668,177,995,426,773,730$  within just 28 seconds.

## Shakunthala Devi death reason

Notably, the first woman mathematician in India, Shakunthala Devi died in Bangalore on 21 April 2013 at the age of 83 due to cardiac and respiratory problems.



# SRINIVASA RAMANUJAN

Srinivas Ramanujan was a great Indian mathematician. He was born on 22<sup>nd</sup> December 1887 in Madras Tamil Nadu during British Government. His full name was 'Srinivasa Iyenger Ramanujan'. His father's name was Kuppaswamy Srinivasa Iyengar and his mother's name was Komalata Ammal.

It is very shocking for many people but he never studied mathematics and he studied mathematics and became its expert in the latter part of his education. He completed his graduation from Cambridge University, London. He made a lot of his theories which are very popular in



the world and -that is why his theories still get used in lots of countries. He wrote many books comprising his theories and formulas. He is famous for his contribution to number theory and infinite series. His birthday is celebrated as National Mathematics Day in India every year.

He was died on 26<sup>th</sup> April 1920, at the age of 32 years in Madras. He worked for a very short period but his teachings are still alive in many people's mind and text books. His contribution in the field of mathematics has been immense and will be remembered forever.

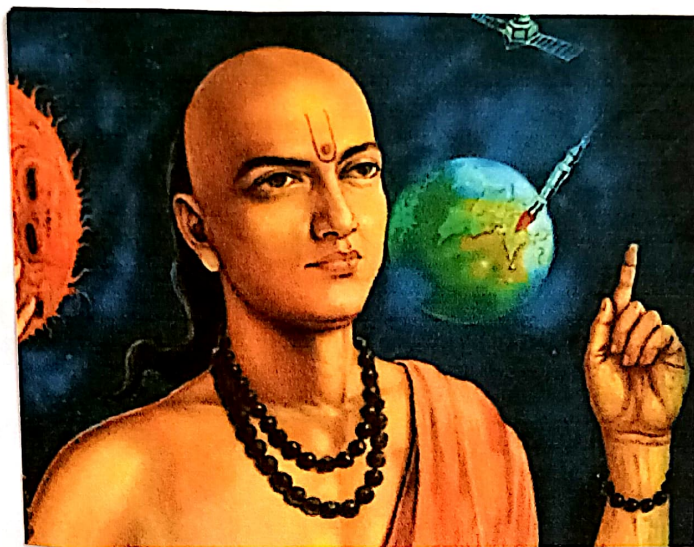
Ramanujan had a great passion for maths from the age of 12, he had almost no formal training in pure mathematics, he made substantial contributions to mathematical analysis, number theory, infinite series and continued fractions

Ramanujan 1729 is the only number whose expressions can take place as the sum of the cubes of two different sets of numbers. so people call 1729 number is the magic number.

- A mathematical genius, child prodigy. The man who knew Infinity.
- He sent a set of 120 theorems to professor Hardy of Cambridge. As a result he invited Ramanujan to England.
- In his final years, he discovered the mock theta functions.



# ARYABHATTA



Aryabhata is a mathematician who had a humble beginning during the Gupta dynasty in a small village in Bihar known as Aryabhata. Breaking all the religious stereotypes and social stigma at that point of time, Aryabhata rose above all the difficulties and became the first mathematician and scientist of India and gave birth to the theories of modern science and mathematics that we study today. Aryabhata was the first mathematician astronomer and scientist of India who created or discovered the number zero, the place value system, algebraic identities, trigonometrical

functions, the value of  $\pi$ , the shape of the solar system and the whole concept of rotation and revolution of planets. The field of science and mathematics is immense. Because of his discoveries and inventions, a lot of other discoveries in various other fields from physics to medicine to engineering has been given birth to.

The scientific community of today is forever grateful to the inventions of Aryabhatta thousands of years back.

The inventions of Aryabhatta stand as a testimony for the intellectual brilliance and advanced thinking of Indian society thousands of years back. Although the credit for many scientific discoveries is taken by the people from west the invention and discoveries by Indians and Hindus in the country thousands of years back holds a special place in the world of science and mathematics.



- \* Aryabhatta was born in 476 A.D in Kusumpur, India.
- \* He was the first person to say that Earth is spherical and it revolves around the sun.
- \* He gave the formula  $(a+b)^2 = a^2 + b^2 + 2ab$
- \* He taught the method of solving the following problems:

$$1+2+3+4+5+\dots+n = \frac{n(n+1)}{2}$$

$$1^2+2^2+3^2+4^2+5^2+\dots+n^2 = \frac{n(n+1)(2n+1)}{6}$$

$$1^3+2^3+3^3+4^3+5^3+\dots+n^3 = \left(\frac{n(n+1)}{2}\right)^2$$

$$1^4+2^4+3^4+4^4+5^4+\dots+n^4 = \frac{n(n+1)(2n+1)(3n^2+3n-1)}{30}$$

————— \* —————

**GOVERNMENT DEGREE COLLEGE,  
BHUPALPALLY**

JAYASHANKAR BHUPALPALLY DISTRICT - 506169



**Project Work**

**DEPARTMENT: PHYSICS**

**Academic year : 2021-22**

**Project Name :- CHANDRAYAN-II, Mission**

**Students Involved :-**

- ① A. Akhila
- ② B. Mounika
- ③ N. Navatha

- ④ P. Shwetha BSc(MPC) 4<sup>th</sup> year
- ⑤ N. Ravali

**INCHARGE**

**PRINCIPAL**

Govt. Degree College, Bhupalpally,  
Dist: Jayashankar Bhupalpally-506169



# chandrayaan-2

Mission type Lunar orbiter, lander, rover  
operator Indian Space Research Organisation (ISRO)  
COSPAR ID 2019-042A (<https://nssdc.gsfc.nasa.gov/nmc/spacecraft/display.action?id=2019-042>)

SATCAT no :- 44441

Website : [www.isro.gov.in/chandrayaan2-home-0](http://www.isro.gov.in/chandrayaan2-home-0)  
(<https://www.isro.gov.in/chandrayaan2-home-0>)

Mission duration  
orbiter: ~ 7 years  
Elapsed: 1 month, 2 days  
Vikram lander  $\leq 14$  days [1] [2]  
Pragyan rover:  $\leq 14$  days [2]

## spacecraft properties

Manufacturer Indian Space Research Organisation, [ISRO]

Launch mass  
combined [wet] : 3,850 kg [8,490 lb] [3] [4] [5]  
combined [dry] 1,308 kg (2,884 lb) [6]  
orbiter (wet) : 2,379 kg (5,245 lb) [7]



orbiter (dry) : 682 kg (1,504 lb) [6]

vikram lander (wet) : 1,471 kg (3,243 lb) [4] [5]

vikram lander (dry) : 626 kg (1,380 lb) [6]

prayan rover : 27 kg (60 lb) [4] [5]

power orbiter 1kw [7]

vikram lander : 650 W

prayan rover : 50 W

### start of mission

Launch date 22 July 2019, 14:43:12 IST (09:13:12 UTC) [8]

Rocket GSLV Mk III [9] [10]

Launch site Satish Dhawan Space Centre Second Launch pad

contractor Indian Space Research Organisation [ISRO]

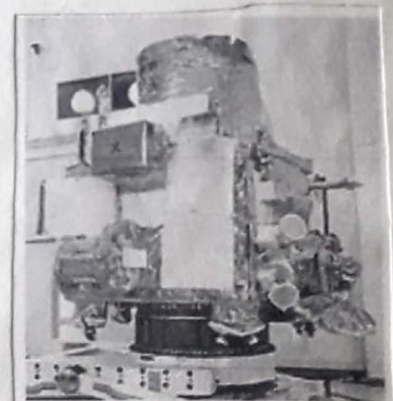
### Moon orbiter

orbital insertion 20 August 2019, 09:02:15 IST (03:32 UTC) [11]

orbital parameters

periapsis altitude 100 km (62 mi) [13]

Apoapsis altitude 100 km (62 mi) [13]



Chandrayaan-2 orbiter at integration facility



Inclination

$90^\circ$  (polar orbit)

Moon lander

spacecraft  
component

Rover

Landing date

7 September 2019, 01:53:15T

(6 September 2019, 20:23 UTC) <sup>[14][15]</sup>

chandrayaan programme.



Mission chandrayaan - 2:

[Candra-yana transl "mooncraft" <sup>[15][16]</sup> pronunciation) is the second lunar exploration mission developed by the Indian Space Research Organisation (ISRO) after chandrayaan-1 <sup>[19][20]</sup> it consisted of a lunar orbiter, the Vikram lander, and the Pragyan lunar rover, all of which were developed in India. The main scientific objective is to map and study the variations in lunar surface composition, as well as



as the location and abundance of lunar water [22][23]



The mission was launched on its course to the Moon from the second launch pad at Satish Dhawan Space Centre on 22 July 2019 at 8:43 PM IST [09:13 UTC] by a Geosynchronous satellite Launch vehicle Mark III (GSLV Mk III) [9][10][24]

The craft reached the Moon's orbit on 20 August 2019 and began orbital positioning manoeuvres for the landing of the Vikram lander [25]. Vikram and the rover were scheduled to land on the near side of the Moon, in the south polar region [26] at a latitude of about  $70^\circ$  South at approximately 20:23 UTC on 6 September 2019 and conduct scientific experiments for one lunar day, which approximates two Earth weeks.

However, the lander deviated from its intended trajectory starting at 2.1 kilometers (1.3 mi) altitude and had lost communication when touchdown confirmation was expected [28][29]. Initial reports suggesting a



a crash<sup>[30]</sup><sup>[31]</sup> have been confirmed by [ISRO] chairman k. sivan stating that the lander location had been found, and "it must have been a hard landing"<sup>[32]</sup> Both ISRO and NASA tried unsuccessfully to communicate with the lander for two weeks before the lunar night set in the orbiter, part of the mission with eight scientific instruments, remains operational and is expected to continue its seven-year mission to study the Moon.



## Contents

History

objectives

Design

orbiter

vikram lander

pragyan rover

payload

orbiter

vikram lander



(7)

in August 2009, with scientists of both countries conducting a joint review [35] [36]

Although ISRO finalised the plan for Chandrayaan-2 per schedule [37] the mission was postponed in January 2013 [38] and rescheduled to 2016 because Russia was unable to develop the lander on time [39] [40]. Roscosmos later withdrew in wake of the failure of the Fobos-Grunt mission to Mars since the technical aspects connected with the Fobos-Grunt mission were also used in the lunar projects which needed to be reviewed [39]. When Russia cited its inability to provide even by 2015, India decided to develop the lunar mission independently [38] [41]



The spacecraft's launch has been scheduled for March 2018 but was first delayed to April and then to October to conduct further tests on the vehicle [42] [43]



on 19 June 2018 after the program's fourth comprehensive Technical Review meeting, a number of changes in configuration and landing sequence were planned for implementation, pushing the launch to the first half of 2019<sup>[44]</sup>. Two of the lander's legs got minor damage during one of the tests in February 2019<sup>[45]</sup>. Chandrayaan-2 launch was initially scheduled for 14 July 2019, 21:21 UTC [15 July 2019 at 02:51 IST local time with landing expected on 6 September 2019<sup>[20]</sup>. However, the launch was aborted due to a technical glitch and was rescheduled<sup>[46][8][47]</sup>. The launch occurred on 22 July 2019 at 09:13 UTC (14:43 IST) on the first operational flight of a GSLV Mk III M2<sup>[48]</sup>.



## Objectives

The primary objectives of the Chandrayaan-2 lander were to demonstrate the ability to soft-land



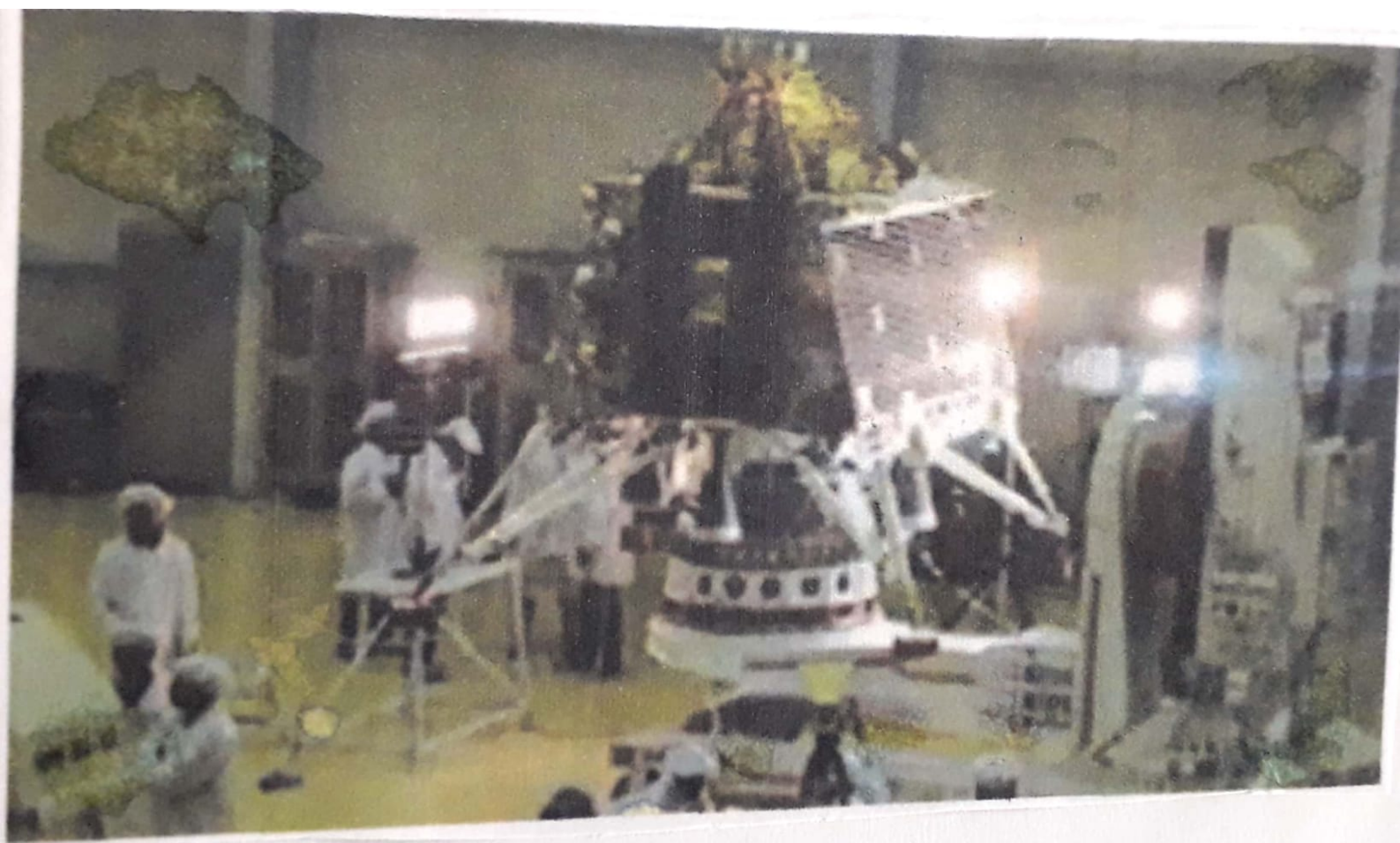
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## Objectives

The primary objectives of the Chandrayaan-2 lander were to demonstrate the ability to soft-land





Dry mass: 682 kg (1,504 lb) [6]

power generation capacity: 1000 W [23]

Mission duration: approximately 7.5 years, extended from the planned 1 year owing to the precise launch and mission management in lunar orbit [1] [59]

Vikram lander:-

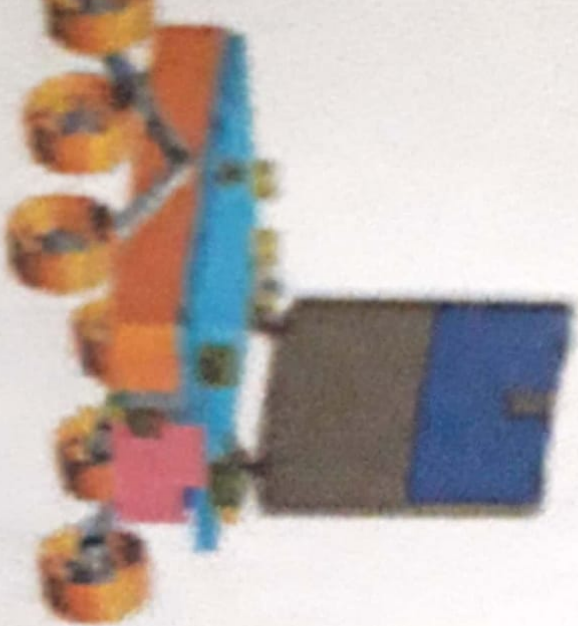
The mission's lander is called Vikram (Sanskrit ~~विष्णु~~ lit. valour [61]) → pronunciation named after Vikram Sarabhai [1919–1971] who is widely regarded as the founder of the Indian space programme [62]



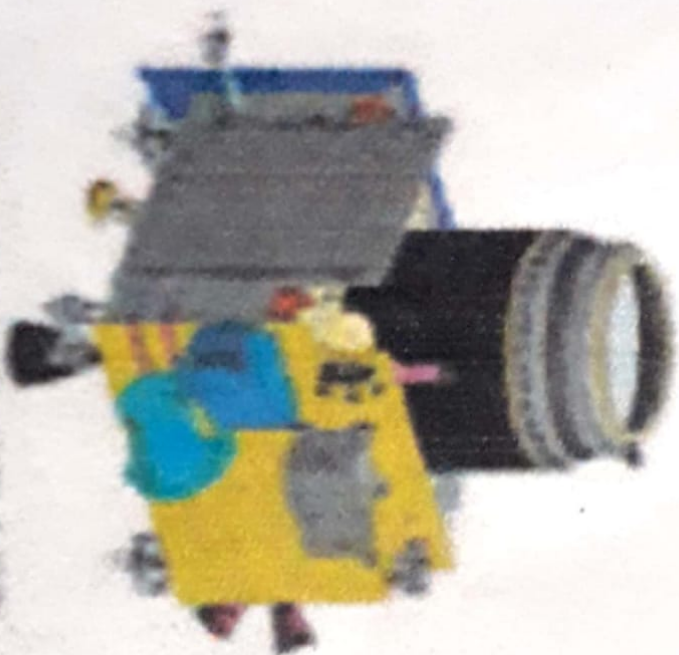
The Vikram lander detached from the orbiter and descended to a low lunar orbit of 30 km x 100 km (19 mi x 62 mi). Using its 800 N (180 lbf) liquid main engines it then performed a comprehensive check of all its on-board systems before attempting a soft landing that would have deployed the rover.



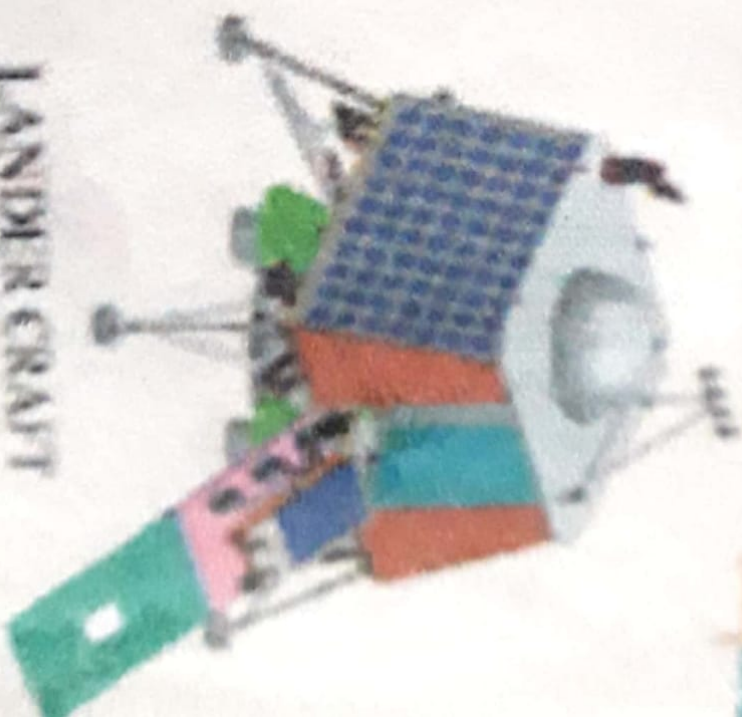
# Chandrayaan - 2 Configuration



ROVER



ORBITER CRAFT



LANDER CRAFT



roughly locate them on the surface to help assess the ability of the lander's sensors to select a landing site [72]

Dimensions  $2.54 \times 2 \times 1.2 \text{ m}$  [23]

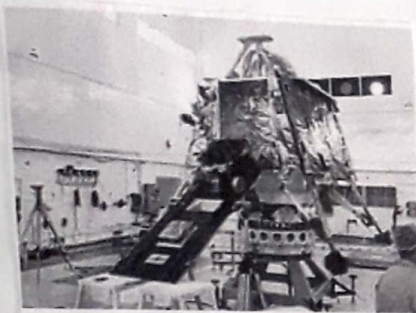
Gross lift-off mass  $1,471 \text{ kg}$  (3,243 lb) [3]

propellant mass  $845 \text{ kg}$  (1,863 lb) [6]

Dry mass  $626 \text{ kg}$  (1,380 lb) [6]

power generation capability:  $650 \text{ W}$

Mission duration  $\leq 14$  days (one lunar day) [2]



Rover Pragyan mounted on the ramp of Vikram lander



Images of the Earth captured by Chandrayaan-2 Vikram lander camera L14 [60]

Pragyan rover:-

The mission's rover is called Pragyan [Sanskrit:-

प्रज्ञा, lit. wisdom [73] [74] pronunciation] [75] [73]

with a mass of  $27 \text{ kg}$  (60 lb) would have operated on solar power [4] [5]. The rover was to move on 6 wheels traversing 500 meters on the lunar surface at the rate of  $1 \text{ cm}$  per second per form