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### **Impact of Cereal Production on Economy in India**

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#### Abstract

This article discusses the key development in the agriculture sector in productivity gain and integration with domestic and global food and pulses production improvement before discuss in some of the challenges for future agriculture development which include land distribution policies water management using Technology practice and adopt it in Indian agriculture and food Distribution.

Keywords : Impact, Production, Cereal, Productivity, Pulses.

#### Introduction:-

Agriculture is largest source of livelihood for the Indian people. The share of agriculture sector in capital formation of the country's economy has increased from 17.7 percent in 1950 51 to 15.5 percent in 2016-17. Agriculture is the largest free private sector in India. Agribusiness is the only major business which is not subject to Income Tax.

#### **Background:-**

India has a particularly large agriculture sector while the sector's share of GDP has halved in the past 30 years to around 15%, it still employs around half of India's workforce and account for much of the volatility in Indian GDP. India has the second largest area of arable land in the world and is a major producer of a number of Agricultural Products around the turn of the century India over the United State as the world's largest producer of milk and is also major producer of pulses such as chickpea and lentils which are major sources of protein in vegetarian diet.

#### Importance of agriculture sector in Indian economy:-

India's economy is Agrarian and dependent on per Independence agriculture has declined. However the development of the agricultural sector is important for the entry of the country's economy as whole. The development of the agricultural sector contributes to the development of the country's industry and service sector.

#### 1. The share of agriculture in the national income:-

At the time of independence the share of agriculture and allied sector in the GDP was more than 50% and then it declined. The GDP of Agricultural sector represent a positive structural change. In developed Nations the share of Agricultural sector is less taper 3 or 4 percent.

#### 2. Job creation:-

the people in India are engage in agribusiness. At the time of independence more than 70% of the people in India where directly and indirectly dependent on agriculture and allied sector. According to the 2001 census agriculture and allied sector accounted for 58.2 % of employment in the country.

Most of



#### 3. Contribution to foreign trade:-

Since agriculture is the main occupation of the people of India, many types of Agricultural Products are exported. India is one of the top 15 exports of Agricultural commodities in the world.

#### 4. Supply of raw materials:-

The raw materials required for various industries in the Indian agriculture are supplied through the agriculture sector. In this, products like sugar can, Cotton, oilseed, rubber are supplied by the agricultural sector to the industrial sector.

#### 5. Food supply:-

Agriculture in India the tasks of supplying food to the growing population of India is carried out by the agricultural sector. The Government of India's Agricultural Development policy has been pursued mainly to achieve self sufficiency in food production.

#### Development of Indian agriculture:-

Considering the historical background of Indian agriculture traditional and technological practice are adopted in Indian agriculture. since the focus was mainly on food production, agriculture was not viewed from a commercial point of view. Since Independence the government has made effective efforts to develop the agricultural sector through economic planning

- 1. Increased agricultural production and productivity.
- 2. Increase in employment opportunities.
- 3. Reducing income inequality.
- 4. Business approach.

#### •Increase in food grain production in India :-

Cereal production includes production cereal and pulse. The period of Agricultural crop year in India is considered to be between June to July 1950 51 the food grain area in India was only 97.32 million hectares. Production was 5.2 kg/ hectare. According to 2013-14 estimate 264.4 million tons of foot gains where producer.

#### • Appropriate policy should be formulated to increase Cereal Production:-

Demand for pulses is increasing due to the growing population, as a result India has been importing large quantities of pulses for some year now to meet this demand. Last year the production of pulses in the country was 1.9 million tons, but this year it has declined by 1.84 million tons, which is 14 million tons. The country products 1.80 to 1.9 billion tons of pulses annually. Domestic demand for pulses is around 2.40 to 2.50 lakh tons in general impact of pulses means increase supply and increase in supply means that the price should go down, but this is not the case because when supply exceed demand then price goes down, But in this case pigeon peas, gram and all other grains, supply is not growing as fast as demand. Therefore the price of pulses have been steadily rising, prices of pulses effort have to be made to increase the domestic production of pulses.



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#### • Efforts need to be made to increase cereal production:-

Pulses are grown mainly in arrived areas and on light soil. The main reason for low productivity of pulses is that the irrigated area is diverted to high yielding crops like sugar cen and wheat. Outbreaks of disease and pets have lead to a sharp decline in cereal production. Research is underway at Indian agricultural Research institutes and agricultural universities on varieties of high yielding that are resistant to water stress disease resistant short-lived varieties.

In most parts of the state, it is possible to increase production by 50 to 60% by using the irrigation created by the water shed development program for pigeon Peas and gram crops. With the availability of improved varieties of pulses under the seed village The Seed village scheme by the agricultural Universities and the state government, productivity is accepted to increase significantly in the near future.

The drip and Sprinkle system used for cereal crop is increasing their productivity and is future if the using of valence irrigation system for pigeon Peas production is increased, it will help in increasing production and save water.

#### •Large demand for domestic cereal in the domestic market:-

Considering the demand and production of cereal in the country, it can be seen the annual combined growth rate of cereal production is much lower than the combined rate of population growth. The population growth rate is 1.91 % and the annual growth rate cereal production is only 0.51 percent.

Considering the per capita daily requirement of cereal and the rate of population growth. Indias cereal demand will reach about 22 million tonns by 2020.

At present the total production will increase by 15 to 16 lakh tonns depending on the domestic cereal sector and the rate of productivity growth. This means important 6 to 7 lakh pulses to meet the country's demand for pulses. Pulses import have lead to an increase in foreign exchange expenditure, which has raised from rs. 481 crore in 1992 91 and rs.2738 crore in 2012-13.

Lentils account for 62 % of India's cereal export. Pulses export wear around rupees 553 crore in 2004-5 and in increased to rs 1279 crore in 2012-13. Increase in productivity by adopting improved Technology can lead to higher economic benefits than other Cash crop in the future.

#### • Conclusion:-

Adverse and favourable issues are important issues facing the Indian agriculture sector. The agriculture sector is spread across the country, the impact on the agricultural sector is affecting the entire economy. It is not possible to remove the adversity facing the Indian agricultural sector, but it is necessary to remove search adversity with effort. It is important for the government to provide all kind of assistance to the farmers. It is also important for the farmers to adopt a commercial approach and strength by developing it.

#### **References:-**

1. Bhajpa Sandeep (2012), Agricultural History of Ancient India, New Delhi :Cyber Tech Publications, Pp 7-11.



- 2. Bose, T. K. Someone, M. G. Vegetable Crops in India, Calcutta, 1985
- 3. Savadee A. B. (2004), The mega state Maharashtra 2004-05 Aarti Publication Pune.P. No 12.
- 4. 4. Radhan K. G(2004), Intellectuels Book Bureau, Bhopal, Page No 27.
- 5. S. I. R The Wealth of India ,Raw Materials Volume. II, Delhi 1950.
- 6. I. C. A. R. Handbook of Agriculture, New Delhi, 1980.
- 7. Agrawal AN Indian Agriculture, Vanilla Edu. Books 1986



# **Topic – New Education Policy of Holistic Approach**

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ABSTRACT :- The National Education Policy 2020 (NEP 2020) is formulated to revamp education system and lay down road map for new India. It was approved Indian cabinet on 29th July 2020. This paper is a maiden attempt to highlight New education policy of holistic approach and study India vision towards overall transformation education system to meet the challenges of 21st Century. Recently Government of India announced its new Education policy which is based on the recommendations by an expert committee headed by (Dr. Kasturirangan) Former chairman of the Indian Space Research Organization (ISRO). This paper highlights on various policies announced in the higher education system and compare them with the currently adopted system. Various innovations and predicted implications of NEP 2020 on the Indian higher education system along with its merits are discussed. This study is based on secondary data and exploratory in nature. Findings are based on a systematic review of existing literature. It was found that one of the main objectives of NEP 2020 is to increase student's enrollment in all educational institutions such as elementary school, professional and higher education by 2030. To achieve that it has suggested progressive reform in the existing education and governance systems. This study is preliminary review of policy document and it can be taken as base for future research with empirical data to study the impact of NEP after its implementation. NEP 2020 is expected to give big leap to higher education in India. NEP 2020 is largely a very progressive document, with a firm grasp on the current socio-economic landscape and the prospect to meet future challenges. If implemented properly; then it has got everything to make India global hub in education by 2030. Well defined and futuristic education policy is essential for a country at school and college levels due to the reason that education leads to economic and social progress. Different countries adopt different education systems by considering the tradition and culture and adopt different stages during their life cycle at school and college education levels to make it effective. Finally, some suggestions are proposed for its effective implementation towards achieving its objectives. this article mainly focuses on NEP 2020 and its impact on Higher Education. This paper also outlines ( Holistic Approach of the New



Education Policy 2020) the salient features of NEP and analyses how they affect the existing education system.

Key Words :- Education, Holistic, Multidisciplinary, Policy, Approach

**Objectives Of The Study :-** The National Education policy 2020 has many initiatives to improve the quality and the broadness of the education system in India. The objectives of this study on National Education Policy 2020 are :

- To highlights and overview the policies of the newly accepted higher education system (NEP 2020)
- > Comparison of National Education policy 1986 & National Education policy 2020.
- > To identify the innovations in new national higher education policy 2020.
- > To predict the implications of NEP 2020 on the Indian higher education system.
- > To discuss the merits of Higher Education Policies of NEP 2020.

**Introduction :-** The National Policy on Education is a policy formulated by the Government of India to promote education amongst India's people. The policy covers elementary education to colleges in both rural and urban India. The first NPE was promulgated by the Government of India by Prime Minister Indira Gandhi in 1968, the second by Prime Minister Rajiv Gandhi in 1986, and the third by Prime Minister Narendra Modi in 2020.

The National Education Policy 2020. Which was approved by the Union Cabinet of India on 29 July 2020, outlines the vision of India's new education system. The new policy replaces the previous National Policy on Education, 1986. The policy is a comprehensive framework for elementary education to higher education as well as vocational training in both rural and urban India. The policy aims to transform India's education system by 2021. The language policy in NEP is a broad guideline and advisory in nature; and it is up to the states, institutions, and schools to decide on the implementation. The NEP 2020 enacts numerous changes in India's education policy. It aims to increase state expenditure on education from around 6% of the GDP as soon as possible. In January 2015, a committee under former Cabinet Secretary T. S. R. Subramanian started the consultation process for the New Education Policy. Based on the committee report, in June 2017, the draft NEP was submitted in 2019 by a panel led by former Indian Space Research Organization (ISRO) chief Krishnaswamy Kasturirangan. The Draft New Education Policy 2019, was later released by Ministry of Human Resource Development, followed by a number of public consultations. " The vision of the National Education Policy is:

"National Education Policy 2020 envisions an India-centric education system that contributes directly to transforming our nation sustainably into an equitable and vibrant knowledge society by providing high-quality education to all"

**NEP 2020:** National Education Policy 2020 will bring in ambitious change that could transform education system in the country. It will bring about revolutionary changes in the education system of India. NEP 2020 aims at building a global best education system rooted in Indian ethos, and aligned with the principles enunciated in the discussion below, thereby transforming India into a global knowledge superpower. NEP 2020 is necessarily addressing the crippling challenges that have affected the Indian Education System for over last few decades. Certain thrust areas of the policy are:



- In Primary Education, poor literacy and numeracy outcomes :- Several reports show that 50% children lack basic numeracy the ability to understand and work with numbers and literacy despites spending five years in school. NEP 2020 basically looks at this foundational learning as a core area and aims at developing multiple skills and abilities among the students.
- In Middle and Secondary Education, high dropout levels, curriculum inconsistency:-Dropout rates at the secondary level in several states have increased over the past three years according to the ministry's data. There are multiple reasons behind drop out such as poverty, poor health and distance from school. Moreover, large variations in dropout rates exist across states, gender, ethnicity and class. Even the Gross Enrolment Ratio is also decreasing considerably as the data indicates that a significant proportion of enrolled students are dropping out after class 5 and especially after class 8. Therefore, minimizing dropout rate and increasing Gross Enrolment Ratio, particularly at middle and secondary education level is also a thrust area of the policy.
- In Higher Education, a lack of multi-disciplinary approach and flexibility with regards to subject choice, assessment as well as a skill-gap:- Dropout rate is also increasing in higher education institutions. At the same time Gross Enrolment Ratio is decreasing and remained about less than half of that is in middle and secondary education. It means many students are not enrolling in higher education. Hence, the policy mainly focuses on to minimizing dropout rate and increasing Gross Enrolment Ratio in higher education institutions.
- Moreover, overall thrust areas for NEP 2020 include childhood care, curriculum design, language/medium of instruction, teacher training, teacher appraisal, assessment pattern and evaluation and exam format. A new assessment centre called, (PARAKH, Performance, Assessment, Review and Analysis of Knowledge of Holistic Development) is proposed to determine the standards for education.

**Principle Guidelines :-** The foundational pillars of this policy are *access, equity, quality, affordability and accountability.* The policy strongly believes in the thought that the purpose of education is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper and creative imagination, with sound ethical moorings and values. Thus, it aims at producing engaged, productive, and contributing citizens for building an equitable, inclusive and plural society as envisaged by our Constitution. The principle guidelines on which this policy is based are:

- Flexibility :- for learners to choose their subjects and programmes, and thereby choose their paths in life according to their own talents interests.
- ➢ No hard separations :- between arts and sciences, between curricular and extracurricular activities, between vocational and academic etc. to ensure the integrity and unity of knowledge and eliminate harmful hierarchies among and silos between different areas of learning.
- Multi-disciplinary :- and holistic education across the sciences, social sciences, arts, humanities and sports for a multi-disciplinary world.



- Emphasis on conceptual understanding :- rather than rote learning and learning for exams only, on creativity and critical thinking to encourage logical decision-making and innovation, on ethics as well as human and Constitutional values empathy, respect for others, cleanliness, etiquette, courtesy, democratic spirit, spirit of service, scientific temper, liberty, responsibility, pluralism, equality and justice and on life skills cooperation, teamwork, communication and resilience.
- Regular formative assessment for learning :- rather than the summative assessment that encourages today's coaching culture.
- A respect for diversity and respect for the local context :- in all curriculum, pedagogy, and policy by always keeping in mind that education is a concurrent subject.
- > Total equity and inclusion :- is the cornerstone of all educational decisions to ensure that all students are able to thrive in the education system.
- Resource efficiency :- without any compromise on equity and quality along with optimum utilisation of resources.
- Being teachers and faculty as the heart of a learning process :- their rigorous recruitment and preparation, continuous professional development, positive working environments and service conditions are require to be assured.
- A light but tight oversight and regulatory system to ensure integrity and transparency of the educational system through audit and public disclosure while simultaneously encouraging innovation and creative ideas through autonomy, good governance and empowerment.
- > Outstanding research as a prerequisite for outstanding education and continuous development.
- Continuous policy-making based on regular assessment of realities on the ground by educational experts.
- ➤ A rootedness and pride in India and its rich, diverse, ancient and modern culture, knowledge systems and traditions, and its forward looking aspirations to be incorporated in an accurate manner, and form an anchor and source of inspiration for all education.
- Education is a public service and not a commercial activity or source of profit, and access to quality education must need to be considered a fundamental right of every citizen.
- Lastly, substantial investment in a strong, vibrant public education system as well as the encouragement and facilitation of true philanthropic private participation.

Recently, the Union Cabinet has approved the **new National Education Policy 2020** with an aim to introduce several changes in the Indian education system - **from the school to college level.** 

- > The NEP 2020 aims at making India a global knowledge superpower
- The Cabinet has also approved the renaming of the Ministry of Human Resource Development to the Ministry of Education.
- > The NEP cleared by the Cabinet is **only the third major revamp of the**
- > framework of education in India since independence.
- > The two earlier education policies were brought in 1968 and 1986.



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#### **School Education :-**

- Universalization of education from preschool to secondary level with 100% Gross Enrolment Ratio (GER) in school education by 2030.
- > To bring 2 crore out of school children back into the mainstream through an **open** schooling system.
- ➤ The current 10+2 system to be replaced by a new 5+3+3+4 curricular structure corresponding to ages 3-8, 8-11, 11-14, and 14-18 years respectively.
- It will bring the uncovered age group of 3-6 years under school curriculum, which has been recognized globally as the crucial stage for development of mental faculties of a child.
- > It will also have 12 years of schooling with three years of Anganwadi/ pre schooling.
- Class 10 and 12 board examinations to be made easier, to test core competencies rather than memorised facts, with all students allowed to take the exam twice.
- School governance is set to change, with a new accreditation framework and an independent authority to regulate both public and private schools.
- > Emphasis on Foundational Literacy and Numeracy, no rigid separation between academic streams, extracurricular, vocational streams in schools.
- **Vocational Education** to start from **Class 6 with Internships**.
- Teaching up to at least Grade 5 to be in mother tongue/regional language. No language will be imposed on any student.
- Assessment reforms with 360 degree Holistic Progress Card, tracking Student Progress for achieving Learning Outcomes

#### Education In India (Constitutional Provisions) :-

Part IV of Indian Constitution, Article 45 and Article 39 (f) of Directive Principles of State Policy (DPSP), has a provision for state-funded as well as equitable and accessible education.



The 42 Amendment to the Constitution in 1976 moved education from the State to the Concurrent List. The education policies by the Central government provides a broad direction and state governments are expected to follow it. But it is not mandatory, for instance Tamil Nadu does not follow the three-language formula prescribed by the first education policy in 1968.

> The 86 Amendment in 2002 made education an enforceable right under Article 21-A.

#### **Related Laws :-**

Right to Education (RTE) Act (2009) aims to provide primary education to all children aged 6 to 14 years and enforces education as a Fundamental Right. It also mandates 25% reservation for disadvantaged sections of the society where disadvantaged groups.

#### Way Forward :-

- ➤ A New Education Policy aims to facilitate an inclusive, participatory and holistic approach, which takes into consideration field experiences, empirical research, stakeholder feedback, as well as lessons learned from best practices.
- It is a progressive shift towards a more scientific approach to education. The prescribed structure will help to cater the ability of the child stages of cognitive development as well as social and physical awareness. If **implemented in its true vision**, the new structure can bring India at par with the leading countries of the world.
- Gross Enrolment Ratio in higher education to be raised to 50% by 2035. Also, 3.5 crore seats to be added in higher education. The current Gross Enrolment Ratio (GER) in higher education is 26.3%.
- Holistic Undergraduate education with a flexible curriculum can be of 3 or 4 years with multiple exit options and appropriate certification within this period.
- M.Phil courses will be discontinued and all the courses at undergraduate, postgraduate and PhD level will now be interdisciplinary.
- > Academic Bank of Credits to be established to facilitate Transfer of Credits.
- Multidisciplinary Education and Research Universities at par with IITs, IIMs, to be set up as models of best multidisciplinary education of global standards in the country.
- The National Research Foundation will be created as an apex body for fostering a strong research culture and building research capacity across higher education.
- Higher Education Commission of India will be set up as a single umbrella body for the entire higher education, excluding medical and legal education. Public and private higher education institutions will be governed by the same set of norms for regulation, accreditation and academic standards. Also, Higher Education Commission of India will be having four independent verticals namely,
- National Higher Education Regulatory Council for regulation,
- General Education Council for standard setting,
- Higher Education Grants Council for funding,
- National Accreditation Council for accreditation.



Affiliation of colleges is to be phased out in 15 years and a stage-wise mechanism to be established for granting graded autonomy to colleges. Over a period of time, every college is expected to develop into either an autonomous degree-granting College, or a constituent college of a university.

#### **Other Changes :-**

- An autonomous body, the National Educational Technology Forum will be created to provide a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration.
- > National Assessment Centre- 'PARAKH' has been created to assess the students.
- > It also paves the way for foreign universities to set up campuses in India.
- It emphasizes setting up of Gender Inclusion Fund, Special Education Zones for disadvantaged regions and groups.
- National Institute for Pali, Persian and Prakrit, Indian Institute of Translation and Interpretation to be set up.
- It also aims to increase the public investment in the Education sector to reach 6% of GDP at the earliest.
- > Currently, India spends around 4.6 % of its total GDP on education.

**Research Methodology & Limitation :-** This paper is a maiden attempt to study NEP 2020 and subject to certain limitations as the research is based on the secondary data. The results are highlighted through literature review and recommendations have been made. This study can act as a base for future research based on empirical investigations and the impacts of NEP 2020 after its implementation can be found. However, this research can be taken as base for further study on different aspect of NEP 2020. This research is a descriptive study. The necessary secondary data was collected from various websites including those of Government of India, magazines, journals, other publications, etc. This data was then analysed and reviewed to arrive at the inferences and conclusions.

**Review Of Literature :-** Education plays a strong role in building nation; education decides the future of the nation, the destiny of its people. The impact is going to be a durable one in terms of growth and development of the state and subject. The role of education and its importance can't be ignored in today's scenario. The expansion and development is seen if we compare the pre independence and post-independence era. After 34 years Indian Govt. is going to change the way India will study, this is the third amendment in the education policy. There are several changes planned in New National Education Policy 2020 that may actually affect all the stakeholders (Kalyan Pawan, 2020). The objective of the policy is to prepare country to face challenges of next decades of 21st century and make India a global hub in education with multidisciplinary and liberal education, Aithal, P. S. et al in their paper highlighted important aspects of new education policy and compared them with the existing conventional education system. NEP 2020 emphasized to promote innovations and expected to have varied implications on the Indian teaching system. It has also laid down framework for its effective implementation. Jha, Patel (2020) has discussed drawbacks of the New Education Policy, 2020. The present NEP is third in its series which India is going to implement. It took thirty four years to formulate it since the last



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one in 1986. The policy has number of relevant considerations regarding how to provide quality education of global standard, bring equality in education and increase participation of private players. Survavanshi, S. (2020) has stressed upon development of teacher in Indian universities on Chinese university model. It emphasized that autonomy should be provided to college and university teachers to decide their teaching methodology and support should be provided for research, and innovation. The proposal of operational and financial autonomy to HEIs is a futuristic step ahead. (2020) National Education Policy 2020 will prove to be a milestone for Indian Education. NEP-2020 provides a comprehensive framework for primary education to include teaching business & technical education. It also got provision for internet-based e-leanings which is paradigm shift from conventional system. The essence of NEP is access, equity, affordability, responsibility, and quality in accordance with United Nations sustainable goals. NEP is not free from loopholes but it has taken deep insight into global scenario. It should be implemented with great caution to address challenges that are required for fostering quality education for all.



**1. National Education Policy (1968) :-** In India, the Social Work Education was commenced in the year 1936, with the establishment of Tata Institute of Social Sciences. In the post-independence reforms, education was given prominence. In the year 1966, first education policy was announced. This was aimed at "Radical Restructuring" and aimed at equal education opportunities in order to achieve complete education with national integration. This policy aimed at promoting the significance of education among the Indians, primary education and secondary education is given priority and the establishment of schools in both rural and urban areas.

**2. National Education Policy (1986) :-** The NEP of 1986 aimed promoting minority education, education for women equality, education of SC, ST and backward sections and emphasis was more given towards equal education opportunities and education to all sections of the society. This new education policy has given highest priority in solving the problem of school dropouts



and adopts an array of meticulously formulated strategies based on micro planning and applied at the grass root levels of all over the country. A national mission was launched for the achievement of this NEP 1986. Based on the literature review of education policy of 1966 emphasized on equal education to all and the NEP of 1986 gave prominence to women education and promoting minority education and reducing dropouts from the schools.

**3. National Education Policy (1992, 2005) :-** The 1986 National Policy on Education was modified in 1992 by the P. V. Narasimha Rao government. In 2005, Former Prime Minister Manmohan Singh adopted a new policy based on the (Common Minimum Programme) of his United Progressive Alliance government. Programme of Action 1992, under the National Policy on Education, 1986 envisaged to conduct of a common entrance examination on all India basis for admission to professional and technical programmes in the country. For admission to Engineering and Architecture, Planning programmes, Government of India vide Resolution dated 18 October 2001 has laid down a Three – Exam Scheme (JEE and AIEEE at the National Level and the State Level Engineering Entrance Examinations (SLEEE) for State Level Institutions – with an option to join AIEEE). This takes care of varying admission standards in these programmes and helps in maintenance of professional standards. This also solves problems of overlaps and reduces physical, mental and financial burden on students and their parents due to multiplicity of entrance examinations.

**4. New Education Policy (2016, 2017) :-** New Education Policy by Prime Minister Narender Modi government addressing gender discrimination, Creation of Education tribunals, and a common curriculum for Science, Mathematics and English. New Education Plan with major changes scheduled to be launched by the Prime Minister Narender Modi government in 2017.

#### 5. New Education Policy (2020) :-

- This is the first education policy of the 21st century and will replace the thirty four year old National Policy on Education 1986
- The new policy aims for universalization of education from pre-school to secondary level with 100 per cent Gross Enrolment Ratio in school education by 2030 and aims to raise GER in higher education to 50 per cent by 2035
- > NEP 2020 will bring two crore out of school children back into the main stream
- NCERT will develop a National Curricular and Pedagogical Framework for Early Childhood Care and Education for children up to the age of eight
- NEP 2020 calls for setting up a National Mission on Foundational Literacy and Numeracy by the Ministry of Education. States will prepare an implementation plan for attaining universal foundational literacy and numeracy in all primary schools for all learners by grade 3 by 2025
- All students will take school examinations in Grades 3, 5 and 8 which will be conducted by the appropriate authority. Board exams for Grades 10 and 12 will be continued, but redesigned with holistic development as the aim
- A new National Assessment Centre, PARAKH (Performance Assessment, Review and Analysis of knowledge for Holistic Development), will be set up as a standard-setting body



- NEP emphasises on setting up of Gender Inclusion Fund and also Special Education Zones for disadvantaged regions and groups
- Every state/district will be encouraged to establish (Bal-Bhavan) as a special daytime boarding school, to participate in age-related, cancer-related and play-related activities. Free school infrastructure can be used as Samajik Chetna Kendras
- A common National Professional Standards for Teachers will be developed by the National Council for Teacher Education by 2022, in consultation with NCERT, SCERT teachers and expert organisations from across levels and regions
- NEP 2020 aims to increase the Gross Enrolment Ratio in higher education including vocational education from 26.3 per cent in 2018 to 50 per cent by 2035 and aims to add 3.5 crore new seats to higher education institutions
- The policy envisages broad-based, multidisciplinary, holistic Under Graduate education with flexible curricula, creative combination of subjects, integration of vocational education and multiple entry and exit points with appropriate certification
- The National Research Foundation will be created as an apex for fostering a strong research culture and building research capacity across higher education
- Affiliation of colleges is to be phased out in 15 years and a state-wide mechanism is to be established for granting grades autonomy to colleges
- By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree
- > A National Mission for Mentoring will be established, with a large pool of outstanding
- senior/retired faculty who would be willing to provide short and long term mentoring, professional support to university, college teachers
- > The National Scholarship Portal will be expanded to track the progress of students receiving scholarships

**Highlights Of Indian National Education Policy 2020 :-** The National Education Policy 2020 envisions an India centered education system by considering its tradition, culture, values and ethos to contribute directly to transform the country into an equitable, sustainable, and vibrant knowledge society. By drawing inputs from its vast and long historical heritage and considering the contributions from many scholars to the world in diverse fields such as mathematics, astronomy, metallurgy, medical science and surgery, civil engineering and architecture, shipbuilding and navigation, yoga, fine arts, chess, etc., the entire Indian education system is founded and built. The objective of the currently announced NEP 2020 is to provide a multidisciplinary and interdisciplinary liberal education to every aspirant to raise the current gross enrolment ratio (GER) to 50% by 2035. The various educational lifecycle stages announced in the policy are listed in table 1 along with their special features.

Table 1 : Various educational stages to be implemented as per NEP 2020 :-

S.	Educational	Features	
No.	life-cycle		
	Stage		



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1	Foundation Stage	Five years Foundational Stage provides basic education which is flexible, multilevel, play-based, activity-based, and discovery based learning. Using time tested Indian traditions and cultures, this stage is continuously improved by research and innovation for the cognitive and emotional stimulation of children
2	Preparatory Stage	Three years Preparatory stage consists of building on the play-, discovery-, and activity-based learning. In addition to it, this stage gradually introduces formal classroom learning with textbooks. The focus is to expose different subjects to the students and prepare them to delve deeper into insights.
3	Middle school Education Stage	Three years of Middle school education focus on more abstract concepts in each subject like sciences, mathematics, arts, social sciences, and humanities. Experiential learning is the method to be adopted in specialised subjects with subject Students are exposed to the semester system and yearly two class level examinations will be conducted.
4	Secondary Education Stage	Four years of Secondary school education is designed to provide multidisciplinary subjects including Liberal Arts education. This stage will be built on the subject-oriented pedagogical and curricular style with greater depth, greater flexibility, greater critical thinking, and attention to life aspirations, Students are exposed to the semester system and will study 5 to 6 subjects in each semester. There will be Board exams at the end of 10th and 12th standards.
5	Under- graduation Education Stage	The Undergraduate degrees in every subject will be of either three- or four-year duration with multiple exit options including a certificate after passing first year, a diploma after passing second year, or a Bachelor 's degree after passing third year. The four years undergraduate degree programme is preferred with major, minors and research projects
6	Post- graduation Education Stage	The Master's degree – a one-year for four years bachelor degree students, a two- year degree for three years bachelor degree students, and an integrated five-year degree with a focus on high quality research in the final year. The Masters' degree will consist of a strong research component to strengthen competence in the professional area and to prepare students for a research degree.
7	Research Stage	Research stage consists of pursuing high quality research leading to a Ph.D. in any core subject, multidisciplinary subject, or interdisciplinary subject for a minimum period of three to four years for full-time and part-time study respectively. During Ph.D. they should undergo 8-credit coursework in teaching/ education/ pedagogy related to their chosen Ph.D. subject. The earlier one-year MPhil programme is discontinued.
8	Lifelong learning	The NEP 2020 proposes lifelong learning and research to avoid human beings becoming obsolete in society in terms of knowledge, skills, and experience to lead a comfortable life. It is believed that education and research at any stage of life will give further maturity for satisfaction in life.



#### Comparison of National Education policy (1986) & National Education policy (2020) :-

The 1986 National Education policy focussed on the modernization of the education sector using information technology. More attention was given to restructuring teacher education, early childhood care, women's empowerment, and adult literacy. It also proposed that the autonomy of universities and colleges will improve the quality of education services. But NEP 1986 failed to improve the quality of education in terms of creating graduates with employability skills and failed to generate research output in terms of patents and scholarly publications. To compensate for the failure of previous NEPs, NEP 2020 has proposals of a liberal education to support multidisciplinary and cross-disciplinary education and research in under-graduation and post-graduation levels. Table 2 compares the improvements of some of the features of National Education policy 2020 with its previous National Education policy1986.

Table 2 : Comparison of National	Education policy 1986 &	National Education policy 2020
1	1 2	1 2

S.No.	NEP 1986	NEP 2020
1	The role of education is the all-round	Objective is to provide Multidisciplinary &
	development of students	interdisciplinary liberal education.
2	Common education structure of 10	Common education structure of 5+3+3+4 is
	(5+3+2)+2+3+2 is followed.	suggested
3	The first preliminary education starts at 6th	The first preliminary education starts at 3 <sup>rd</sup>
	year of a child as Primary school level.	year of a child as a Foundation stage
4	Two years higher secondary level and two	Four years Secondary education stage is
	years pre-university levels were separately	designated by clubbing Two years higher
	considered and both had board exams	secondary level and two years pre-university
		levels. Exams are suggested at the school
		level except for Board level exams at 10th
		and 12th.
5	Two years of higher secondary level,	Four years Secondary education stage
	students choose specialization areas and	contains common subjects and elective
	subjects like Science subjects or Commerce	subjects. Choice is based on liberal
	subjects or Arts subjects	education policy.
6	Undergraduate programmes are for three	Undergraduate programmes are of four years
	to four years.	with a provision to exit after one year with a
		diploma, after two years with an advanced
		diploma, after three years with a pass degree,
		and after four years with project based
		degree.
7	Postgraduate education is of two years	Postgraduate education is of one to two
	with specialization focus	years
		with more specialization & research focus.
8	Examination is independent of teaching. All	Examination is a part of a continuous



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	examination and evaluation is affiliating	evaluation system. Faculty members who are
	university controlled. There is a little role of	teaching a subject are responsible for
	teaching faculty members in evaluating the	evaluation and examinations are
	students directly.	departmental affairs
9	Students have the freedom to choose	Students have the freedom to choose
	subjects across their area of study.	subjects outside and across their area of
		study.
10	A one year research degree leading to	A one year research degree leading to
	M.Phil. in any subject is offered to provide	M.Phil.
	preliminary experience to do research.	in any subject is discontinued due to the
		reason that students are exposed to
		preliminary research in their undergraduate
		and post-graduate courses.
11	Social engagement for every student as a	Social engagement for each student is
	part of the programme curriculum is	compulsory and should be equal to at least
	optional.	one full semester across the entire duration
		of the programme
12	Undergraduate programmes of 3 years to 4	All undergraduate programmes are of 4
	years depending on the type of then	years
	programme.	with, in some cases, exit at 3 years is
		possible
		with a degree certificate.
14	Currently, teachers education comprises of	The proposed teachers education comprises
	two years B.Ed. programme after graduation.	of four years integrated B.Ed. This degree is
	So secondary school teachers have to spend	a compulsory requirement to become faculty
	5 years after their higher secondary	in School education Stages.
	education to teach at higher the secondary	
	level.	

#### Innovations in NEP 2020 :-

- > 100 top Indian Universities will be encouraged to operate in foreign countries.
- > 100 top Foreign Universities will be allowed and facilitated to operate in India
- Every classroom shall have access to the latest educational technology that enables better learning experiences.
- ➢ Faculty Stability will be provided in an appointed institution with generally no transfer to other institutions.
- ➢ Faculty members get curriculum and pedagogy freedom within an approved framework.
- Based on academic and research performance, faculty incentives & accountability will be fixed.



- Faculty fast-track promotion system for high impact research contributions will be offered.
- Focus on achieving sustainable Education Development Goal (SEDG) & GER of 50% by 2035.
- All students should be encouraged to take SWAYAM online courses at least two courses per semester.
- > Inclusion of research and internships in the undergraduate curriculum as a very essential component.

Use Of Technology For Better Educational Reach :- The online teaching practices need to be considered for addressing the equitable use of technology for better reach. The parallel usage of online will be an enhancer and also inexpensive. Usage of recorded lectures and notes along with chat sessions and tutorials will enhance the classes. Utilizing enabling spectacular teachers and to work in partnership are to be encouraged. The possibility of online under graduate courses could also be experimented. Focus on learning by doing and peer to peer learning to be considered. Utility of labs, workshops and assessment centres providers country wide can be used while offering online courses for students spread throughout the country. The network connectivity requirement is accomplishable with the fast developing technology and the digital policy that our country is trying to achieve. It is essential to focus on the course delivery process. The areas to focus are the e-resources, course based intervention, delivery and evaluation. The facilities focussed are the mobile Apps, TV channels, courses available in regional languages, Facebook sessions, online counselling and podcasts. Integrated regulations for open distance learning and online programmes need to be considered as both have commonalities in many aspects. Flexibility should be made available at the institution level and then across institutions considering credit transfers and credit repositories. For the entry - exit options provided, exit is acceptable but for entry policies need to be Specified. Curriculum with majors and multidisciplinary minors provide flexibility to follow passion. Considering ICT the points focussed are information at fingertips, better reach using TV, augmented reality and games to enhance learning, The challenges are based on the readiness of the institution in terms of ICT infrastructure and technical support, readiness of faculty in terms of gadgets and technical support, readiness of students to adapt and library readiness for remote access. Opening up the institute facilities to the industry and a healthy collaboration is essential.

**More Holistic and Multidisciplinary Education :-** The NEP 2020 claims that, a holistic and multidisciplinary education would aim to develop all capacities of human beings -intellectual, aesthetic, social, physical, emotional, and moral in an integrated manner. Such an education will help develop well-rounded individuals that possess critical 21st century capacities in fields across the arts, humanities, languages, sciences, social sciences, and professional, technical, and vocational fields an ethic of social engagement; soft skills, such as communication, discussion and debate and rigorous specialization in a chosen field or fields. The NEP 2020 envisions one large multidisciplinary Higher Education Institution in or near every district, by 2030. Towards the attainment of such a holistic and multidisciplinary education, the flexible and innovative curricula of all shall include credit-based courses and projects in the areas of community



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engagement and service, environmental education, and value-based education. Environment education will include areas such as climate change, pollution, waste management, sanitation, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development and living. Value-based education will include the development of humanistic, ethical, Constitutional, and universal human values of truth, righteous conduct, peace, love, nonviolence, scientific temper, citizenship values, and also life-skills; lessons in seva -service and participation in community service programmes will be considered an integral part of a holistic education.

Salient Features Of NEP Related To Higher Education :- The new NEP has been introduced with an aim to formalize changes in the system from school level to college/university level. Keeping in mind the developing scenario, education content henceforth, will focus on keyconcepts, ideas, applications and problem-solving angles. The National Education Policy is expected to bring positive and long-lasting impact on the higher education system of the country. The fact that foreign universities will be allowed to open campuses in India is a commendable initiative by the government. This will help the students experience the global quality of education in their very own country. The policy of introducing multi-disciplinary institutes will lead to a renewed focus on every field such as arts, humanities and this form of education will help students to learn and grow holistically. Thus, students will be equipped with stronger knowledge base. The introduction of single common entrance test is another positive step which will reduce the stress of multiple competitive exams and ease off the pressure of preparing for so many of them. It will also ensure a level playing ground for all student applicants going forward. Establishing Academic Bank of Credit (ABC) is definitely a robust idea to store the academic credits that students earn by taking courses from various recognized higher education institutions. A student can earn scores by completing a course and these will be credited to the ABC account. One can then transfer these credits if he/she decides to switch colleges. If a student ever drops out for some reasons, these credits will remain intact which means he/she can come back years later and pick up from where the student had left. The new higher education regulatory structure will ensure that distinct administrative, accreditation, financing, and academic standard-setting roles are performed by separate, autonomous, and empowered bodies. These four structures will be established as four independent verticals within a single umbrella institution, India's Higher Education Commission. There are a lot of reforms and new developments which have been introduced by NEP in the higher education sector. Some of the salient features are:-

- Single regulatory body for higher education :- The NEP aims to establish Higher Education Commission of India which will be the single regulatory body except for legal and medical education.
- Multiple entry and exit programme :- There will be multiple entry and exit options for those who wish to leave the course in the middle. Their credits will be transferred through Academic Bank of Credits.
- > Tech- based option for adult learning through apps, TV channels :- Quality technology-based options for adult learning such as apps, online courses modules,



satellite-based TV channels, online books, and ICT-equipped libraries and Adult Education Centres, etc. will be developed.

- E-courses to be available in regional languages :- Technology will be part of education planning, teaching, learning, assessment, teacher, school, and student training. The e-content to be available in regional languages, starting with 8 major languages Kannada, Odia, Bengali among others to join the e-courses available in Hindi and English.
- Foreign universities to set-up campuses in India :- World's top 100 foreign universities will be facilitated to operate in India through a new law. According to the HRD Ministry document, "such (foreign) universities will be given special dispensation regarding regulatory, governance, and content norms on par with other autonomous institutions of India."

#### Merits Of New Education Policy 2020 :-

- The Government aims to make schooling available to everyone with the help of NEP 2020.
- Approximately two crore school students will be able to come back to educational institutes through this new approach.
- According to the NEP 2020, the Education Ministry is to set up a National Mission on Foundation.
- Literacy and Numeracy. The responsibility for successful implementation for achieving the foundation numeracy and literacy for all students till class three falls upon the states of India. This implementation is scheduled to be done by 2025.
- One of the merits of NEP 2020 is the formation of National Book Promotion Policy in India.
- This new plan focuses on setting up a Gender Inclusion Fund. Special Education Zones for disadvantaged regions and groups is also in the focused list.

#### Drawbacks Of The New Education Policy 2020 :-

- In the New Education Policy 2020, language is a negative factor as there is a problematic teacher to student ratio in India, thus introducing mother languages for each subject in academic institutes is a problem. Sometimes, finding a competent teacher becomes a problem and now another challenge comes with the introduction of the NEP 2020, that is bringing study material in mother languages
- According to the NEP 2020, students willing to complete their graduation have to study for four years while one can easily complete his/her diploma degree in two years. This might encourage the pupil to leave the course midway
- According to the National Education Policy 2020, students of the private schools will be introduced with English at a much earlier age than the students of the Government schools. The academic syllabus will be taught in the respective regional languages of the government school students. This is one of the major new education policy drawbacks as this will increase the number of students uncomfortable in communicating in English thus widening the gap between sections of the society.



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CONCLUSION :- We know that a well-defined, well-designed and comprehensive education policy is essential for a country at school, college, and university levels due to the reason that education leads to economic and social progress. Even today, adoption of appropriate education system is necessary in consideration of the prevailing conditions. Thus, to be precise, it is well accepted fact that a good education policy always leads to good and quality education in a country. National Education Policy 2020 (NEP 2020) is a welcome and ambitious re-imagination of India's education system into a modern, progressive and equitable one. Built on the foundational pillars of Access, Equity, Quality, Affordability and Accountability, NEP 2020 is aligned to the 2030 Agenda for Sustainable Development. It aims to transform India into a vibrant knowledge society and global knowledge superpower by making both school and college education more holistic, flexible, multi-disciplinary, suited to 21st century needs. The policy calls for a large-scale implementation of a magnitude never before attempted anywhere in the world. The actual transformations will start from the academic year 2021-22 and will continue until the year 2030, where the first level of transformation is expected to visible. The mission is aspirational but the successful implementation depends upon how would implementers understand the challenges and try to overcome it. It requires great deal of acceptance, commitment, optimism, change in attitude, and mind-set. No doubt, the Government of India took a giant leap forward by announcing its new education policy i.e. the National Education Policy 2020 (NEP 2020), almost three decades after the last major revision was made to the policy in 1986. Even, the drafting committee of NEP 2020 has made a great attempt to design the policy that considers diverse viewpoints, global best practices in education, field experiences and stakeholders' feedback. The mission is aspirational but the implementation roadmap will decide if this will truly foster an all-inclusive education that makes learners industry and future ready. Summing up, the authors wants to convey the message that the policy has come at the right time and the objective is very noble. But, there lies a world of difference between laying down a policy on paper and following it in spirit. The success of NEP 2020 and the pace of its implementation depend to a large extent on how successfully the government, universities and schools can tide over the practical challenges facing it. To realize the dreams it contains, we Indians must overcome substantial execution challenges in a sustained manner for years and decades to come. Lastly, to say, "National Education Policy (NEP 2020) brings in ambitious changes that could transform the education system. But the key here is good implementation and execution".

#### **REFERENCES :-**

- 1. Kumar, K. (2005). Quality of Education at the Beginning of the 21st Century: Lessons from
- 2. India. Indian Educational Review, 40(1), 3-28.
- 3. Draft National Education Policy 2019, https://innovate.mygov.in/wpcontent/
- 4. NEP\_Final\_English.pdf referred on 10/08/2020
- 5. [4] Jha, P., & Parvati, P. (2020). National Education Policy, 2020. (2020). *Governance at Banks*, Economic & Political



- Aithal, P. S. & Aithal, Shubhrajyotsna (2020). Implementation Strategies of Higher Education Part of National Education Policy 2020 of India towards Achieving its Objectives. International Journal of Management, Technology, and Social Sciences (IJMTS), 5(2), 283-325. DOI: <u>http://doi.org/10.5281/zenodo.4301906</u>..
- 7. Nandini, ed. (29 July 2020). "New Education Policy 2020 Highlights. School and Higher
- 8. Education to see major changes". Hindustan Times.
- 9. Final National Education Policy 2020 (PDF) (Report). Ministry of Human Resource Development
- 10. Amar Ujala 31 July 2020; now studying till 5th, an examination for admission in mother tongue till graduation.
- 11. Dainik Jagran 30 July 2020; Let us know why a new national education policy was needed to change the education system of the country. <u>https://www.education.gov.in/sites/upload\_files/mhrd/files/Draft</u> NEP 2019 EN Revised.pdf
- 12. Draft National Education Policy 2019. Committee for Draft National Education Policy, Ministry of Human Resource Development, Government of India. <u>https://www.education.gov.in/sites/upload\_files/mhrd/files/Draft</u> NEP 2019 EN Revised.pdf
- 13. Govt. of India (1968). National Policy on Education,1968 <u>https://www.education.gov.in/sites/upload\_files/mhrd/files/docu</u> ment-reports/NPE-1968.pdf
- 14. Govt. of India (1986). National Policy on Education, 1986
- 15. Govt. of India (2020).National Education Policy 2020. https://www.education.gov.in/sites/upload\_files/mhrd/files/NEP\_Final\_English\_0.pdf



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# An Exploration Of The Impact Of Yoga On The Soccer Skill Of The College

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**Abstract:** The current study has been undertaken with the purpose of studying the impact of yoga training on the Soccer skill of the college level female players and to find out whether yoga training can bring about changes in the Soccer skill of the female college level players. For this purpose the researcher has opted both primary and secondary sources of data for the study. First of all a sample of 75 college level female soccer players have been identified for the study by following random sampling method. The selected samples are given six month yoga training on a regular basis for six months. Before the training they were tested with **MacDonald Soccer Skill Test.** Again after the completion of the training they were tested with the same test. Their performance were recorded before and after training. it has been found that the six months yoga training has improved the soccer skill ability of the selected players which clearly proves that the yoga training may be very useful for the soccer players that may ultimately be beneficial for the coaches as well as for the players.

Key words: Soccer, yoga training, Exercise, physical etc.

**Introduction:** Due of the wide range of skill combinations used, soccer is popular across the world (fake, stopping, sudden movement, sprint, jump shot). A range of physical and physiological abilities are needed for soccer, and these abilities are all measured, analysed, and improved via various exercises.

All technical, physiological, physical, and tactical needs are met by soccer. In addition to these responsibilities, soccer players need also be emotionally and mentally prepared. Before competitions, athletes try out different strategies to maximise both their physical and psychological capabilities.

In this sense, yoga is very important for making soccer players psychologically and physically ready for practise and competition. Yoga is one of the first methods for gaining both physical stamina and mental peace.

Yoga exercises are a set of physical activities that were developed in ancient India and spread to the rest of the world to train the human body and mind. Yoga positions, which have their roots in ancient India and have spread around the world, are now used by sports teams as supporting stances. By physically impacting balance and flexibility as well as bringing about beneficial



mental changes, yoga is said to have a favourable effect on improving physical performance when practised regularly.

Yoga is very important to athletes since it influences mental focus, physical strength, and balance, as well as how to create movements with the widest angles. Several studies found that it has an impact on heart rate, blood pressure, and strength. Yoga activities are prescribed for the development of the motor qualities already existing in the body and the preservation of technique since yoga is crucial for developing not only flexibility and strength but also technical and physical characteristics. This is so that players may showcase their greatest physical qualities while participating in team sports like soccer. Yoga practitioners may be able to play soccer at a high level and be injury-free. Soccer players could benefit from yoga by being more flexible, powerful, and robust.

**Statement of the Problem:** The use of yoga poses, or asanas, stretches the body's muscles and joints while also gently massaging its important interior organs. Thus, it improves the flexibility and the physiologically free and smooth circulation of blood throughout the body. The developed training regimen is thorough and has helped to improve the soccer player's ability to execute skills after the scientific benefits of certain yogic practises were shown. Therefore the researcher has choosen his topic entitled "An Exploration of the Impact of Yoga on the Soccer Skill of the College Level Female Players".

Objectives: The current study has been undertaken with the following objectives-

- > To study the impact of yoga training on the Soccer skill of the college level female players.
- To find out whether yoga training can bring about changes in the Soccer skill of the female college level players.

**Methodology:** Considering the objectives of the current study the researcher has opted both primary and secondary sources of data for the study. First of all a sample of 75 college level female soccer players have been identified for the study by following random sampling method. The selected samples are given six month yoga training on a regular basis for six months. Before the training they were tested with **MacDonald Soccer Skill Test.** Again after the completion of the training they were tested with the same test. Their performance were recorded before and after training. <u>MC DONALD SOCCER SKILL TEST</u>

Purpose:-To measure the general soccer ability.

Age and Sex:-College men and women.

**Equipments:**-A wall or backboard 30ft wide and  $11^1$  ft high will be required.

Football-3 pcs, A stop watch

Collected data were analyzed with statistical analysis with the help of t test and descriptive statistics.

# DATA ANALYSIS & PRESENTATION:

 Table – 1, Before Training, Female frequency distribution



	Age	Weight	Soccer
N	75	75	75
Mean	19.43	42.92	11.48
S.E. MeanMedianMode	.18	.29	.16
Std DevVarianceKurtosis	11.50	11.50	11.50
S.E. KurtSkewness	.1.53	43	11.00
S.E.SkewRangeMinimumMaximu	2.33	2.48	1.40
m	10	6.13	1.96
Sum	.55	.21	13
	.53	.55	.55
	.28	.38	18
	6.00	.28	.28
	17	12.00	7.00
	23	38	8.00
	1457.00	50	15.00
		3219.00	861.00

The above table shows that total 75 female were enlisted for training. Of which mean age is 19.43,. Their mean score in McDonald soccer skill test is 11.48. SD for age is 1.53, where as Macdonald soccer skill test SD is 1.40.Skewness value for fitness and Macdonal soccer skill test has negative value i.e -.15 and -.18 respectively. Kurtosis value for soccer skill test have negative values i.e -.13. If we look into the variance, there is a little variance in the age but it is a little high in case of weight. The total sample belongs to the age group 17-23yrs, weight 38-50kg.

	Frequency	Percent	ValidPercent	CumulativePercent
Valid 17	6	8.0%	8.0%	8.0%
18	17	22.7%	22.7%	30.7%
19	18	24.0%	24.0%	54.7%
20	18	24.0%	24.0%	78.7%
21	9	12.0%	12.0%	90.7%
22	3	4.0%	4.0%	94.7%
23	4	5.3%	5.3%	100.0%
Total	75	100.0%		

 Table – 2, Before Training Female Age(frequency distribution)

Table shows that the age groups 19-20yrs were most in number in participating in the training. But the age group below 18 yrs and age group above 21 is small in number as compared to the other group participating in the training. It indicates that the age group 19-21yrs is very vital for the purpose.



Fig. 1 Showing age group frequency distribution in Histogram for female players



Fig. 2 Showing age group frequency distribution in Pie chart for female players **Table-3,Before Training Female Weight frequency distribution** 

	Frequency	Percent	ValidPercent	CumulativePercent
Valid 38	2	2.7%	2.7%	2.7%
39	3	4.0%	4.0%	6.7%



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40	9	12.0%	12.0%	18.7%
41	8	10.7%	10.7%	29.3%
42	8	10.7%	10.7%	40.0%
43	17	22.7%	22.7%	62.7%
44	11	14.7%	14.7%	77.3%
45	8	10.7%	10.7%	88.0%
46	3	4.0%	4.0%	92.0%
47	1	1.3%	1.3%	93.3%
48	4	5.3%	5.3%	98.7%
50	1	1.3%	1.3%	100.0%
Total	75	100.0%		

It is evident from the above table that those who weigh 43-45 kg are much interested for the training and also in playing soccer. Those who belong to the weight below 40kg are less interested as compared to the weight range 43-45. 43kg weight participants are most in the study.



Fig. 3 showing female weight frequency distribution in Histogram

	Frequency	Percent	ValidPercent	CumulativePercent
Valid 8.00	1	1.3%	1.3%	1.3%
9.00	7	9.3%	9.3%	10.7%
10.00	7	9.3%	9.3%	20.0%
10.50	3	4.0%	4.0%	24.0%
11.00	16	21.3%	21.3%	45.3%



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11.50	6	8.0%	8.0%	53.3%
12.00	14	18.7%	18.7%	72.0%
12.50	6	8.0%	8.0%	80.0%
13.00	9	12.0%	12.0%	92.0%
13.50	3	4.0%	4.0%	96.0%
14.00	2	2.7%	2.7%	98.7%
15.00	1	1.3%	1.3%	100.0%
Total	75	100.0%		

The table shows that maximum candidates score MacDonald Soccer Skill Test between 11 to 13 out of 20. The candidates who score above 13 are 6 out of total female N(75). 18 candidates score below 11. It proves that who score average should be trained and their score can be improved by training.





Table –	5,One Sample	t Test for	Female	Macdonald	Soccer	Skill test.	
							_

	TestValue=0.5									
	95%ConfidenceIntervaloftheDifferen									
			Sig (2-	MeanDiff	ce					
	t	df	tailed)	erence	Lower	Upper				
Age	107.40	74	.000	18.93	18.58	19.28				



Weig ht	148.39	74	.000	42.42	41.85	42.99
Socce r	67.88	74	.000	10.98	10.66	11.30

It is evident from the above table that 't' value for Macdonald Soccer Skill test is 67.88 at 74 df for each variable. On the other hand 't' value for tactics is higher than Technic and fitness. 't value for Soccer skill test is 67.88 and mean difference for Macdonald Soccer skill Test is 10.98.

ble -	– 6,Female, MacD	onald Soccer S	Skill after T	raining (frequen	cy test)
	Valid	Frequency	Percent	ValidPercent	CumulativePercent
	13.00	3	4.0%	4.0%	4.0%
	13.50	2	2.7%	2.7%	6.7%
	14.00	5	6.7%	6.7%	13.3%
	14.50	3	4.0%	4.0%	17.3%
	15.00	12	16.0%	16.0%	33.3%
	15.50	4	5.3%	5.3%	38.7%
	16.00	15	20.0%	20.0%	58.7%
	16.50	6	8.0%	8.0%	66.7%
	17.00	11	14.7%	14.7%	81.3%
	17.50	6	8.0%	8.0%	89.3%
	18.00	8	10.7%	10.7%	100.0%
	Total	75	100.0%		

The table shows that maximum candidates score MacDonald Soccer Skill Test between 15 to 18out of 20. The candidates who score above 16 are 26 out of total female N (75).13 candidates score below 15. It proves that most of the candidates got much improvement through the training process. They have developed their skills in the training.



Fig. 5 showing Macdonald Soccer Skill frequency distribution in Histogram after training

Table – 7,One sample	t test Female	MacDonald	<b>Soccer Skill Test</b>
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	TestValue=0.5								
			Sig (2-	MeanDifferen	95%Confidence eDiffere	eIntervalofth ence			
	t	df	tailed)	ce	Lower	Upper			
Soccer	98.33	74	.000	15.45	15.14	15.77			

It is evident from the above table that't' value for Macdonald Soccer Skill test is 98.33 respectively at 74 df. It clearly indicated that the score after the training has increased i.e yoga training has improved the soccer skill ability of the players.

**Findings:** From the data analysis it has been found that the six months yoga training has improved the soccer skill ability of the selected players which clearly proves that the yoga training may be very useful for the soccer players that may ultimately be beneficial for the coaches as well as for the players.

#### **Recommendation for future studies**

♦ A larger sample size of players should be utilised in order to determine the effects of yoga on the overall performance of rugby players. It is well understood that a larger sample size provides less variation, and helps to identify the outliers that could skew the data compared to a smaller sample. A large sample size also provides more reliable results with greater precision and power. Furthermore, a sample including players from both genders will provide greater generalisation.



A longitudinal study investigating the use of yoga should be conducted in order to see the long-term effects of yoga on athletes.

**Conclusion:** yoga is the backbone of professional athletes and teams. Further and more people are discovering the countless ways that yoga can be used to improve athletic performance—from increasing mental concentration and enhancing flexibility and balance to preventing common injuries and sharpening skills. Soccer players can benefit from yoga to help improve flexibility, strength, and endurance. Soccer players who practice yoga are more likely to be more focused and less likely to be injured during a game. Yoga loosens and prepares your muscles for the strenuous exercise of a soccer game, which can prevent muscle strains and joint stress.

#### **Reference:**

- 1. Aagaard P and Anderson J.(2010), Effects of strength training on endurance capacity in top-level endurance athletes, *Scandinavian Journal of Medicine & Science in Sports*. 20(2): 39-47.
- 2. Arora, S., & Bhattacharjee, J. (2008). Modulation of immune responses in stress by Yoga. *International Journal of Yoga*, 1(2), 45–55.
- 3. **Balsom, P.** (1994) Evaluation of physical performance. In: *Football (Soccer)*. Ed: Ekblom, B. London: Blackwell Scientific Pub. 102-123.
- 4. Guar, B.P. and Anshuman, Sharma (2000). Effect of Preksha Meditation on Personality Variables and Psycholmatic Health. Psycho-Liguq, 33(1) 87-92.
- 5. Kauts.A, Sharma.N, (2009) Effect of Yoga on Academic Performance in Relation to Stress, International Journal of Yoga.; 2(1):39-43.
- 6. Morison, Ibrahim H. Self-actualisation and Self-concept Among Athletes, Research Quarterly. 1981; (68):47-49
- 7. Rowat, O., Fenner, J., & Unnithan, V. (2017). Technical and physical determinants of soccer match-play performance in elite youth soccer players. *The Journal of sports medicine and physical fitness*, 57(4), 369-379.
- 8. 10. Styles, W. J., Matthews, M. J., & Comfort, P. (2016). Effects of strength training on squat and sprint performance in soccer players. *The Journal of Strength & Conditioning Research*, 30(6), 1534-1539.



# स्वच्छतेतून सामाजिक विकास

#### प्रा.संजय सी.गीर्हेपुंजे

अर्थशास्त्र विभाग प्रमुख विदर्भ कला व वाणिज्य महाविद्यालय लाखणी जिभंडारा. मो - .न.9403417914 Email:-sanjaygirhepunje@gmail.com

#### प्रस्तावनाः-

समाजसुधारणेचा ध्यास घेतलेले,सामाजिक अनिष्ट रुढी परंपरांविरुध्द लढा देणारे व संपूर्ण मानवजातीला स्वच्छतेचे पाठ देणारे संत गाडगे बाबा खेडोपाडी फिरुन लोकांना किर्तनाच्या माध्यमातून अशिक्षित.बाबांनी तब्बल अर्धशतकभर लोकसेवा केली. समाजाला अधर्माच्या अंधकारातून:,कुपध्दतीच्या धुक्यातून,विषमतेच्या पुरातून आणि जातियतेच्या व अंधश्रध्देच्या भोवऱ्यातून वर काढण्याचा प्रयत्न केलास्वच्छतेचे पाठ जनाजनाच्या मनात बिंबवून .त्यांच्या महान कार्याची आजही समाजाला नितांत गरज आहे. त्यांचे राहणीमान,त्यांचे आरोग्य,त्यांची साक्षरता वाढविणे ही काळाची गरज आहेसंत गाडगेबाबांचे कार्य एका क्षेत्रापुरते मर्यादित . नाही,तर सर्व क्षेत्रात पसरलेले आहेमनांची स्वच्छता.,माणुसकी पाळण्याची स्वच्छता,शैक्षणिक स्वच्छता,परिसर स्वच्छता,ही फार मोठी देणगी बाबांनी उभ्या जगाला दिली.

संत गाडगेबाबा यांचे स्वच्छतेचे महान कार्याची प्रेरणा घेऊन महाराष्ट्र सरकारने 2000 ऑक्टोंबर 2 पासून महाराष्ट्रात संत गाडगेबाबा ग्रामस्वच्छता अभियान तसेच राष्ट्रसंत तुकडोजी महाराज स्वच्छ ग्राम स्पर्धा घेण्यात आल्या आहेतया ग्रामस्वच् .छता अभियानाच्या अभिनव उपक्रमातून व लोकसहभागातून महाराष्ट्रातील लाखो खेडी स्वच्छ होऊ लागली आहेतसार्वजनिक aृक्षारोपण .पिण्याच्या पाण्याची शुद्धता लोक पाळू लागले आहेत.स्ते निर्माण कार्य होत आहेत.स्वच्छतागृह उभी राहिली आहेत,वृक्ष संवर्धन तसेच उज्जल पुनर्भरणासारखे उपक्रम सहकार्यातून होऊ लागले आहेतघरातील.,गल्लीतील कचऱ्याची विल्हेवाट योग्य प्रकारे होऊ लागली आहे6 गावात शिक्षणाचे महत्त्व पटले . ते 14 वयोगटातील मुलंमुली आनंदाने शाळेत जाऊ लागली- आहेतसमाजमंदिर व धर्मशाळा उभ्या राहिल्या लोक सुखी समृद्धी व.आरोग्यसंपन्न दिसू लागलीसहकार्य.,सदभावना व विधायक दृष्टी प्रत्येकाच्या ठायी दिसू लागली व लोकांच्या विचारात व आचारात एककी दिसू लागलीएक चांगले दृश्य ग्रामीण भागात दिसू लागल्यामुळे हे . .अभियान शहरी भागातही राबविण्यास सुरुवात झाली झाली14 नोव्हेंबर 2002 पासून राज्यातील नगरपालिका,महानगरपालिका व नगरपंचायती या शहरी भागात स्वच्छता अभियान सुरु झालेआणि ग्रामीण भागासारखेच उपक्रम नागरिकांच्या सहकार्याने. राबवून विधायक व रचनात्मक कामे करण्यात येत आहे.

संत गाडगेबाबा स्वच्छता अभियान म्हणजे केवळ घर -दार-गल्ली आणि परिसराची स्वच्छता नव्हे- केवळ काडी . कचरा,धुळे कागद जमा करून स्वच्छता व टापटीप राखणे नव्हे,तर तन - आचार - विचार- मन - वर्तन - व्यवहार यांची स्वच्छता होयपाणी स्वच्छता.,सार्वजनिक स्वच्छता,सामाजिक स्वच्छता,आरोग्य स्वच्छता,सांडपाणी गटारे व मलनिसारण : व*्*यवस्थापन,व्यसनमुक्ती,वृक्षारोपण,पाणी पुनर्भरण अशा कितीतरी उपक्रमांची अंमलबजावणी सहर व खेड्यातील सर्व नागरिकांनी करणे यासाठी सामूहिक प्रयत्न करणे होयआपल्या .या सर्व प्रकारच्या स्वच्छतेची सुरुवात प्रत्येकाने आपल्या घरातून करायला हवी . घरातील प्रत्येक सदस्यांच्या सहकार्य व सहभागातून घराची आणि आचार विचारांची स्वच्छता सुरू केल्यास इतर सर्व त्यांचे -अनुकरण करतील आणि सत्यम शिवम सुंदरम चे चित्र दिसू लागेल,ग्रामपंचायत किंवा नगरपालिका,महानगरपालिकांच्या सदस्यांनी,लोकप्रतिनिधींनी किंवा कर्मचाऱ्यांनी स्वच्छता अभियानाचे उपक्रम राबविणे हे तर त्यांचे कर्तव्यच आहेपरंतु सामाजिक . बांधिलकीच्या भावनेतून कार्य करणाऱ्या सेवाभावी संस्था व नागरिकांच्या खांद्याला खांदा लावून,एकमेका साहाय्य करू अवघे धरू सुपंध या उक्तीप्रमाणे कार्य केल्यास समाजाचा कायापलट झाल्याशिवाय राहणार नाही.



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मागील काही वर्षांमध्ये कचऱ्याचे वाढते प्रमाण ही भारतातील सर्वात मोठी समस्या निर्माण झाली आहेआणि त्याचे . कचरा जमिनीवर पडून राहिल्यामुळे .त्यामुळे अनेक समस्या निर्माण होत आहेत.मुख्य कारण झपाट्याने वाढत जाणारी लोकसंख्या होय तसेच घाणीच.ती जमीन निरुपयोगी होत आहेे साम्राज्य वाढल्यामुळे अनेक आजार वाढत आहेतया कचऱ्याच्या वाढत्या . म्हणून केंद्र सरकारने.भस्मासुराला जर वेळीच थांबविले नाही तर तो रुद्र रूप धारण करेल त्याचे दुष्परिणाम आता दिसून येत आहेत2 ऑक्टोंबर 2014 रोजी महात्मा गांधी जयंतीचे औचित्य साधून संपूर्ण देशभरामध्ये "स्वच्छ भारत अभियान" हा कार्यक्रम सुरू केलावी जयंती वर्ष असून संपूर्ण देशात स्वच्छता कार्यक्रमाची 150 हे महात्मा गांधी यांचे 2019 सन. अंमलबजावणी करून गांधीजींना श्रद्धांजली अर्पण करावयाची असा मनोदय केंद्र सरकारने हा कार्यक्रम सुरू करताना व्यक्त केला आहे.

#### स्वच्छतेतून सामाजिक विकास घडवून आणणारे घटक

स्वच्छतेच्याबाबतीत महात्मा गांधीजी नेहमी म्हणत असत की स्वच्छता ही स्वातंत्र्यापेक्षा जास्त महत्वपूर्ण आहे.स्वच्छतेच्या बाबतीत भारतीय समाजाला समजून घेणे सहज सोपे नाही. कारण भारतात वेगवेगळे जातीचे ,धर्माचे, पंथाचे,संस्कृतीचे,रुडी,परंपरा व चालीरीती यांचे मिश्रण आहे.या घटकांचा प्रभाव समाजावर दिसून येतो.भारतात हजारो वर्षापासून वर्णपद्धती अस्तित्वात आहे.आजच्या आधुनिक काळातही या पद्धतीची जाणीव होते.या पद्धतीनुसार देशात ब्राह्मण,क्षत्रिय,वैश्य किवा दास अशी वर्णव्यवस्था अस्तित्वात होती.यात क्षुद्र किवा दास ही तुच्छ असलेली कामे करीत असे.म्हणजे अस्वच्छतेची कामे हा क्षुद्र वर्ग करत असल्यामुळे देशात सामाजिक बदल घडवून आणावे लागेल.सामाजिक बदल ही निरंतर चालणारी वैश्विक प्रक्रिया आहे. सामाजिक परिस्थिती,समाजाची फेररचना करणे म्हणजे सामाजिक बदल होय.सामाजिक बदल हे मुल्ये,संरचना,आर्थिक हितसंबं यात बदल घडवून समाजात आधुनिक समाजरचना निर्माण करुन सामाजिक विकास घडवून आणने होय.

#### स्वच्छतेच्या माध्यमातून सामाजिक बदल व विकास -

स्वच्छतेतून सामाजिक विकास साधण्यासाठी लोकांना स्वच्छतेच्या सवयी लावणे आवश्यक आहे. सामाजिक विकासामध्ये स्त्री-पुरुष समानता,शिक्षण प्रसार,दारिद्रय निर्मूलन,सामुदायिक विकास ह्या सर्व प्रमुखबाबी आहेत.सामाजिक बदलासाठीचे उत्तम उदाहरण म्हणजे ऐतिहासिक बदल.जगाचा आणि देशाच्या इतिहासाचा अभ्यास केल्यास सामाजिक बदलाची जाणीव होते.भारतात ब्रिटिशांची सत्ता होती त्यांच्याकडून होणारे अन्याय,अत्याचारापासून मुक्त होण्यासाठी भारतीयांना चळवळी,क्रांती करून समाजाला जागे करून लढा द्यावा लागला.भारतीय स्वातंत्र्यसैनिक व भारतीय नेत्यांना प्रथम भारतीय समाजाला जागरूक करावे लागेल.त्यानंतर ब्रिटिश सत्तेविरुद्ध लढा द्यावा लागला आणि त्यातून देशाला स्वातंत्र्यप्राप्ती झाली.जगात दुसरे महायुद्ध झाल्यानंतर जगाला शांततेची जाणीव झाली.अनेक देश एकत्रित येऊन जगाच्या कल्याणासाठ,गरीब राष्ट्रांच्या उत्थानासाठी मदतीचा प्रयत्न केले पाहिजे याची त्यांना जाणीव झाली. त्यातून संयुक्त राष्ट्र संघाची स्थापना झाली. म्हणजेच सामाजिक बदल होण्यासाठी हे दोन ऐतिहासिक दाखले पुरेशी आहे.

भारतासारख्या विकसनशीलतेतून विकसित होऊ पाहत असलेल्या राष्ट्राची आजची लढाई हि देशातील अस्वच्छता,रोगराई,कुपोषण,दारिद्र्य,भ्रष्टाचार यांच्याशी आहे. देशाच्या अस्वच्छतेच्या विरोधात लढाई लढण्यासाठी साठी देशात सामाजिक बदलाची चळवळ उभी करावी लागेल. त्यासाठी सामाजिक बदल कसा होतो किंवा त्याचे स्वरूप काय हे पाहणे गरजेचे आहे. मानव समाजाचा केंद्रबिंदू आहे. मानवाच्या वर्तनात बदल झाल्यास सहाजिकच समाजात बदल होऊ शकत नाही.सामाजिक बदल ही एक प्रक्रिया आहे, मानवी जीवन ही बदलती जीवनशैली आहे. लहान मुलांची शारीरिक वाढ होणे,लहानपणी बोलणारी भाषा मोठेपणी बदलून जाते हा बदल सहज लक्षात घेण्यासारखा आहे. बदल कीवा परिवर्तन ही मोठी प्रक्रिया आहे. मानव हा समाज केंद्रबिंदू असल्याने व व्यक्तीनिहाय बदलत्या मानवी स्वभावातून सामाजिकस्तर दिसून येतात.सामाजिक बदल घडविण्यासाठी वातावरण निर्मिती होणे गरजेचे आहे. म्हणजेच सरकारच्या योजनांची माहिती जनतेपर्यंत पोहोचविली याशिवाय त्यांचे फायदे पटवून दिल्यास जनतेच्या



वर्तनात बदल होऊन.सामाजिक बदल होण्यास सुरुवात होऊ शकते.मानवाचा समाजातील दर्जा,त्याची मुल्ये,त्यांची प्रेरणास्थाने यावर आधारित दृष्टिकोन तयार होत असतो.

#### सामाजिक सहयोगाच्या माध्यमातून स्वच्छत

जेव्हा एक कुटुंब स्वच्छतेच्या अभावी प्रभावित होत असेल तेव्हा त्याचा परिणाम संपूर्ण समाजावर पडत असतो.त्यामुळे सामाजिक सह्योगा च्या माध्यमातून व सहकार्यातून स्वच्छता वृद्धिंगत होऊ शकते.ग्रामीण व नागरी जीवन सुधारण्यासाठी सर्वांनाच स्वच्छतेच्या सवयी लागणे व लावणे आवश्यक आहे.ग्रामीण भागाबरोबरच शहरी भागातील गलिच्छ वस्त्यांमध्ये स्वच्छते विषयी जनजागृती करून लोकांना स्वच्छते विषयी प्रेरित करणे व स्वच्छतेचे महत्त्व पटवून देण्यासाठी सामाजिक सहयोग व सहकार्य होणे आवश्यक आहे. तेव्हाच स्वच्छतेतून सामाजिक विकास होऊ शकतो. त्यासाठी गावागावातून स्वच्छतेच्या सवयी लागणे आवश्यक आहे. सामाजिक सहयोगाच्या माध्यमातून ज्या गावी शौचालये नाहीत त्या गावांमध्ये मुली न देणे, प्रत्येक घरी शौचालय यासारख्या बाबी सामाजिक सहयोगाच्या माध्यमातून ज्या गावी शौचालये वाहीत त्या गावांमध्ये मुली न देणे, प्रत्येक घरी शौचालय यासारख्या बाबी सामाजिक सहयोगाच्या माध्यमातूनच होऊ शकतात.जर एखादे कुटुंब प्रमुखाकडून मंदिरा ऐवजी चर्चमध्ये प्रार्थनेला जावे,असे मुलांवर संस्कार होत असतील तर ते मूल मोठेपणी व पुढील आयुष्य भर चर्चमध्ये जाऊन प्रार्थना करेल. तसेच जर एखादे कुटुंबीय उघड्यावर शौचालयास जात असेल आणि त्या लहान मुलांवरही. असेच संस्कार केले जात असतील तर ते नेहमीच उघड्यावर शौचालयास जाणे पसंत करतील.कारण व्यक्तीवर सामाजिक जडण घडणीचा अथवा सामाजिक दबाव कसा आहे,यावर सामाजिक बदलाची गतिमानता अवलंबून असते.

### महिलांचा आत्मसन्मान व सुरक्षिततेची जाणीव

स्वच्छतेच्या मूलभूत सुविधेमुळे घरातील महिलांना व मुलींना आत्मसन्मान व सुरक्षितता प्राप्त होते. शौचालयाच्या अभावी त्यांना सुरक्षितता व आत्मसन्मानासाठी अंधाराची किंवा पहाटेपर्यंतची वाट पहावी लागते.अंधारामध्ये त्यांना सुरक्षिततेची खात्री मिळत नसते. त्यातून त्यांच्यावर बलात्कार किवा लैंगिक अत्याचार यासारखे प्रसंग त्यांच्यावर ओढवतात. म्हणून शौचालयाची स्थापना होणे हे महिलांकरिता व मुलींकरिता खूप गरजेचे झाले आहे. त्यामुळे स्वच्छता ही सामाजिक विकासाशी संबंधित आहे आणि लैंगिक समानते करिता स्वच्छता आवश्यक आहे. त्यासाठी महिलांकरिता शौचालयाची स्थापना होणे अत्यंत गरजेचे आहे. तसेच सामूहिक,सार्वजनिक व प्रत्येक घरी शौचालयाची निर्मिती करण्यासाठी लोकांना आर्थिक मदत करून स्वच्छतेची जाणीव निर्माण करून देणे हेही तेवढेच महत्त्वाचे आहे.

#### सामाजिक स्तरात वाढ करणे

सामाजिक स्तरात वाढ करण्यासाठी स्वच्छतेला फार महत्व प्राप्त झाले आहे स्वच्छतेच्या .माध्यमातून सामाजिक स्तरात वाढ करता येतेसामाजिक विकासाच्या दृष्टीने विचार केल्यास शौचालय .जसे समाजात स्वच्छतेच्या बाबतीत दोन स्तर आहेत . म्हणजेच समाजातील लोकांचा सामाजिक स्तर बदलावा .नसलेल्या समाजाला शौचालय असलेल्या समूह गटात घेऊन जावे लागेल व्यक्ती .लागेलविकासातच समाजाचा विकास अंतर्भूत असतोसामाजिक .सामाजिक अभिसरण ही सातत्याने चालणारी प्रक्रिया आहे . .अभिसरण म्हणजे व्यक्तीची एका सामाजिक स्तरातून दुसऱ्या सामाजिक स्तरात जाण्याची क्षमता म्हणजेच सामाजिक अभिसरण होय स्वच्छतेबाबत सामाजिक अभिसरणाला गतिमानता देण्यादेण्यासाठी माहिती तंत्रज्ञान या साधनांचा मोठ्या प्रमाणात वापर होणे आवश्यक ठरतेदूरचित्रवाणी.सध्या भारतात आधुनिकीकरणाचे वारे वाहत आहेत .,मोबाईल, इंटरनेट,सोशल मीडिया अशा तंत्रज्ञानाचा वापर व प्रसार वेगाने होत आहे सन.2011 च्या जनगणनेनुसार देशात 63 टक्के लोकांकडे मोबाईल आहेपरंतु देशात स्वच्छतेची . मूलभूत सुविधा असणारे फक्त47 टक्के लोक आहेयाचा अर्थ आपल्या देशात प्रथम सुविधा कोणती असावी.,याबाबतचा प्राधान्यक्रम चुकीचा आहेमोबाईल व शौचालय या दोन सुविधांपैकी कोणत्या सुविधांना प्रथम . प्राधान्य द्यावे याची अचूक निर्णय घेण्याइतपत परिपक्वता भारतीय समाजात अजूनही निर्माण झालेली नाहीम्हणून समाजातील शौचालय नसलेल्या समुहाला शौचालय असलेल्या .



समूहात घेऊन जाण्यासाठी म्हणजेच सामाजिक अभिसरणासाठी जागरूकता निर्माण करावी लागेलत्यासाठी स्वच्छतेचे प्रबोधन,स्वच्छतेची चळवळ,जनजागृती करावी लागेल.

#### शाळेतील उपस्थिती वाढविण्यासाठी स्वच्छता

आज भारतामधील ग्रामीण भागातील किंवा शहरी भागातील कित्येक शाळांमध्ये शौचालयांचा अभाव दिसून येतो.शैक्षणिक विकास हा स्वच्छतेच्या विकासाशिवाय होऊ शकत नाही.शाळांमध्ये स्वच्छतेच्या सोयींच्या अभावामुळे कित्येक पालक आपल्या मुला-मुलींना शाळेत पाठवीत नाही. यात मुलींचे प्रमाण हे सर्वाधीक प्रमाणात दिसून येते.कारण शाळांमध्ये शौचालय व स्वच्छतागृह यांचा अभाव असल्यामुळे मुलींची शाळेतील अनुपस्थिती सर्वात जास्त राहते.शाळेत स्वच्छतेच्या सवयी लावण्यासाठी तेथे स्वच्छतेच्या सोयीअसणे तेवढेच आवश्यक आहे.म्हणून मुलींची शाळेतील उपस्थिती वाढविण्यासाठी शाळेमध्ये स्वच्छतेच्या सोयीसुविधा असणे आवश्यक ठरते

#### स्वच्छतेतून आरोग्य संपन्नता

जगातील 5 वर्षाखालील लहान मुलांच्या मृत्यू मध्ये डायरिया या आजाराचे प्रमाण सर्वाधिक जास्त आहेभारतासारख्या . दरवर्षी.विकसनशील देशांमध्ये स्वच्छतेच्या अभावामुळे हे प्रमाण जास्त आहे5 वर्षाखालील 8 लाख मुलांचा मृत्यू डायरिया मुळे होतोउघड्यावर शौचालयास जाणे.,हात साबणाने व्यवस्थित न धूने व लहान मुलांच्या विष्ठेचे योग्य व्यवस्थापन न करणे अशा प्रसंगाने असे मृत्यू ओढवीत आहे सन .2004-2005 मध्ये भारत सरकारच्या वतीने हागणदारी मुक्त गाव केल्यास त्या गावांना निर्मल ग्राम पुरस्कार देण्यास सुरुवात केली भारताचे राष्ट्रपती यांच्या हस्ते रोख बक्षीस व .सत्कार असे पुरस्काराचे स्वरूप होतेअनेक गावांना हा .

पुरस्कार प्राप्त झाला. परंतु पुरस्कार प्राप्त गावांमध्ये स्वच्छतेचे सातत्य आहे का त्याचा सखोल अभ्यास करण्यात आलायावरून असे . दिसून आले की पुरस्कार प्राप्त गावांमध्ये अजूनही काही लोक उघड्यावर शौचालयास जातात आणि काही लोक शौचालय असून सुद्धा त्याचा वापर करत नाही असे निदर्शनास आलेही स्वच्छतागृहे .देशात अजूनही स्वच्छते कडे पाहण्याचा दृष्टिकोन स्वच्छ नाही . प्रामीण भागातील सार्वजनिक स्वच्छता गृहांची ची सुविधेची .म्हणजेच अस्वच्छता करण्याचे केंद्र आहे आहे दयनीय स्थिती दिसून येतेदुरुस्ती केली जात नाही .त्यांची स्वच्छता होत नाही.,पाण्याची सुविधा नाही,वापरणाऱ्या कडून सरकारी शौचालय माझ्यासाठी आहेत,हीभावना नाहीत्यातून त्यांच्याकडून . त्याचा वापर व्यवस्थित होत नाही,अशी ही विदारक परिस्थिती बदलली पाहिजे . गावातील किंवा शहरातील सार्वजनिक ठिकाणी स्वच्छता दिसत नाही अशा ठिकाणी अस्वच्छतेचे साम्राज्य पाहायला मिळते यासाठी . .सामाजिक परिवर्तन होईल असा प्रचार व प्रसार होणे गरजेचे आहे

#### स्वच्छतेतून आर्थिक विकास साध्य करणे

स्वच्छतेची मूलभूत सुविधा नसल्याने अनेक देशांना आर्थिक खर्चाचा बोजा सहन करावा लागतोत्यामुळे त्याचा आर्थिक . संयुक्त राष्ट्राच्या जागतिक बँकेच्या पाणी व स्वच्छता विभागाच्या अहवालानुसार भारताला मोठ्या प्रमाणात .विकासावर परिणाम होतो .आर्थिक भार अस्वच्छतेमुळे सहन करावा लागत आहे सहाजिकच त्याचा परिणाम देशाच्या राष्ट्रीय उत्पन्नावर व दरडोई उत्पन्नावर होतोम्हणून स्वच्छतेच्या सुविधांची पूर्तता केल्यास देशाच्या आर्थिक विकासाला चालना . मिळून देश जलद गतीने विकास साध्य करेल.

#### संदर्भ -

- 1. विकास आणि पंचायतराज : यशवंतराव चव्हाण विकास प्रकाशन प्रभोधिनी, पुणे 7 पुस्तक 1 ले,प्रकाशन वर्ष 2004
- 2. भारताची सामाजिक रूपरेषा व बदल, के.एल. शर्मा, रावत पब्लिकेशन जयपुर, पुन: प्रकाशित 2008
- 3. कुरुक्षेत्र, स्वच्छ भारत मिशन ,ऑक्टोंबर 2014
- 4. महाराष्ट्राची आर्थिक पाहणी ( 2012 -13 ) अर्थ व सांखिकी संचालनालय, नियोजन विभाग, महाराष्ट्र शास, मुंबई
- 5. लोकराज्य (नोव्हेंबर 2014) माहिती व जनसंपर्क महासंचालनालय मंत्रालय, महाराष्ट्र शासन, मुंबई



- 6. संदेशवहन तंत्रज्ञान व मानवी विकास. अविक घोष, सेज पब्लिकेशन,नवी दिल्ली 2006
- 7. सामाजिक अभिसरण : यशवंतराव चव्हाण विकास प्रकाशन प्रबोधिनी, पुणे 7,पुस्तक 3 रे ,प्रकाशन वर्ष 2004
- 8. www.un. org/en/events/toiletday
- 9. www.mdws.nic.sbm



#### ICT's Effect on Students' Academic Achievement Mr. Amit Adhikari

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#### Abstract:

The current period is the era of online learning, and the physical limitations of time and location are being replaced by the digital world, where education is accessible to everyone. The purpose of the study is to investigate. The current period is the era of online learning, and the physical limitations of time and location are being replaced by the digital world, where education is accessible to everyone. The purpose of the study is to determine whether elementary school teachers are prepared to use ICT in the classroom. The sample included 316 teachers who were chosen at random from secondary schools. a tool called the ICT Performance Survey (ICTPS). The outcomes showed that female teachers performed better when they used technology in their lessons. Male instructors were found to have a more positive attitude about using technology and to be more skilled at doing so than were female teachers. The difficulties that teachers face when using technology have a big influence. For improved performance and integration with the modern era, it is advised that teachers be given access to ICT. Teachers' level of preparedness for using ICT in the classroom at the primary level. The sample included 400 teachers who were chosen at random from secondary schools. a tool called the ICT Performance Survey (ICTPS). The outcomes showed that female teachers performed better when they used technology in their lessons. Male instructors were found to have a more positive attitude about using technology and to be more skilled at doing so than were female teachers. The difficulties that teachers face when using technology have a big influence. For improved performance and integration with the modern era, it is advised that teachers be given access to ICT.

Keywords: ICT, Students' achievement, Integration with digital world

#### Introduction:

To ensure that institutions receive urgent information necessary for globalisation, all nations attempt to prepare their teachers to use ICT in the classroom. According to Alazam, Bakar, Hamah, and Asmiran's (2012a) research, the use of ICT in the classroom has a significant impact on a variety of learning aspects, including teachers' willingness to teach, attitudes toward providing instruction, administrative support, effective use of software and hardware, maintenance, and infrastructure. Teachers' qualifications, ICT training, and teaching experience all contribute to how valuable their ICT skills are. ICT plays a crucial role in the electronic storage, retrieval, manipulation, and transfer of digitally formatted information. Formally, they are known as personal computers, digital televisions, email systems, and Android devices (Scholten, Velde, &Manen, 2009). Computer technology has changed how students around the world learn new things (Cuban, 2001). In the past, the intention to integrate computer technology in classes was more expensive and teachers and institutions use cheaper and accessible resources for information sharing and technological communication problems were common due to lack of



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expertise and resources. Lack of planning, less funding and academic appreciation are major extrinsic factors that minimize ICT use in classrooms. Many developing nations like India facing ICT challenges to achieve the Millennium Development Goals and Education for All (EFA). To enhance the accessibility of quality instruction and education, India is striving its best to equip the technology in building a knowledge-sharing society. Earle (2002) connected ICT incorporation with an idea of totality to expedite all elements of education system connect together in a single domain. India has articulated the vast education sector to implement plan for technology that will deliver quality educations tools, assessments and cooperative learning environment. To achieve those plans, the learning barriers should be identified to overcome the situation. Many barriers still exist in real practice in the institutions. Information and communication technology (ICT) has unlocked wider opportunities for teachers to use technology-supported tools in the learning and teaching in improving the students' performance (Jonassen, 1995). Using of computer-assisted technology in classrooms will sure provide teachers opportunities and resources in completing instructional tasks with great effort and purposeful determination for pupils. The use of ICT has become a part and parcel in the subjects of mathematics and sciences. The studies of Stockdill and Moreshouse (1992) explored multiple technological reflections to effect ICT use and its integration with learning and teaching. ICT use has made the society a dynamic living place. It has effected almost every field of life with more innovative and speedy way. One cannot find any filed in the world that is now working without the use of ICT. Sherry and Gibson (2002) claimed that personal, technical, organizational, and social factors may be kept in mind in probing ICT integration and use. Neyland (2011), identified that factors like institutional support, learners' attitude as well as teachers' competence influence online learning in classrooms. According to Tinio (2002), ICTs have the ability to increase access to education in underdeveloped nations while also enhancing its relevance and quality. The majority of education experts identified the use of ICT in education as a method of teaching and learning that is effective and efficient and incorporates curriculum, infrastructure, and learning and teaching environments in classrooms. The resources that the institutions and learning organisations have on hand are the foundation for the instructors' use of ICT in teaching and learning (Balanskat, Blamire, &Kefalla, 2007; Chen, 2008; Clausen, 2007; Lim & Chai, 2008; Tondeur; van Braak, & Valcke, 2008).

ICT has provided many opportunities for teachers in supported learning material for teaching students in classrooms and improved the achievements of the scholars. It is observed that teachers are not ready to use ICT effectively in classrooms. They are not making its use effectively in learning and teaching process. So, focus of the study is to find the causes due to which our teachers are not able to use ICT in classroom effectively and how the teachers can use ICT in classrooms effectively. Hawkins (2004) and Inwent (2004), current education reforms stress on the quality and equal access of educational resources that emphasizes the significant initiative and innovation in the field of education while using ICT with better services. As part of its present educational policy, the Indian government has mandated the use of computers in elementary and secondary schools (NEP, 2020). For educated professionals who use ICT extensively, Indian teachers and students need to develop their computer literacy.



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We need an ICT literate society to compete the rest of the world. This objective can only be achieved if we provide computer-based education, reserve incentives for students and teachers and constant training. The leadership capabilities may improve the organizations' capacity in an innovative way (Hallinger& Heck, 1998), and adopt capacity building learning environment for school (Leithwood, 1994). The notion of collaborative learning environment is the basic theme of modern technologies that help in building learning relationship among students and with other potential stakeholders (Senge, 1990; Fullan, 1993). Ertmer (2005) planned three approaches for endorsing revolution in teachers' beliefs for integration of technology. First is about the Personal experiences: self-efficacy belief (Schunk, 2000) highlighted to improve teachers' confidence under successful involvement from personal to combined beliefs. The developing nations have many problems of integration of ICT in education. India being a developing country is facing many complications in all sectors especially in education as it is far behind to fulfill the dream of developed nations. The literacy level in ICT is near zero. ICT integration policy is missing in learning and teaching. The rest of the world uses modern tools and techniques of teaching and learning but unfortunately here situation is not very good.

With funding from the United States Agency, UNESCO, and India, the review of ICT integration in education was started. The board established to assess the quality of teachers' education examined the curriculum, teachers' methods of instruction, and resources available to teachers' education institutions (Jamil, 2004; UNESCO, 2003). The study led to changes in the teacher education curricula, the national preparation of teacher educators, and the provision of funding for teacher educational departments and institutes. A set of guidelines for teacher educators instructing pre-service teachers' education courses at the college or university level was proposed by the review committee as National Professional Standards for Teachers in India. The role of ICT is to coordinate skills and knowledge with better leadership positions in all educational institutions. It is suggested that instructor with full-time availability and has expertise in ICT skills must be available in school for the help of students (Lai & Pratt, 2004). ICT use and performance of Students According to Chandra and Lloyed (2008), ICT enhances the students' achievement when teachers apply excessive use of technology. Youssef and Dhamani (2008) explored that ICT had an impact on teaching and learning process when empowered to students and teachers with ICT resources.

#### **Objective of the Study:**

The current study has following objectives:

- To find out the performance when teachers use of ICTs in classroom.
- To explore the teachers' attitude when they use ICTs in secondary school classrooms.
- To trace out the impact of teachers' experience on the challenges in using of information technology.

#### Hypotheses of the Study:

The null hypotheses are as under:

Ho1: There is no significant difference between male and female teachers' performance when use information technology in classes.



Ho2: There is no significant difference between male and female teachers' attitude regarding the use of information technology.

Ho3: There is no significant impact of teachers' experience on the challenges in using of information technology.

#### **Research design:**

It was survey study with and descriptive research design was used for the completion of the study.

#### **Population and Sample:**

The population of the study, secondary school teachers from a district in Paschim Medinipur, was chosen for the current study. Four hundred teachers from secondary schools were included in the sample. Equal numbers of teachers from each categories participated in the study's sample. There were 200 teachers chosen for each group.

#### Instrument:

ICT and Performance Survey [ICTPS] was the tool utilised to collect the data. Research professionals verified the instrument. On the sample of 40 teachers who were left out of the final sample, the reliability was examined. For forty items, the Cronbach Alpha reliability was estimated to be.95, which was excellent for carrying out the educational research. After that, the device was prepared for data collection. The researchers personally interviewed the teachers and also mailed the surveys to them. Teachers completed the questionnaires and then gave them back to researchers. The teachers' individual class results were compiled to determine their performance.

#### **Data Analysis**

The acquisition of raw data alone is useless. It must be in a presentable format so that inferences can be drawn from it (Khan, 2007). The data were analyzed through computer software SPSS-20. Quantitative data was analyzed through various statistical techniques like mean, sd, t-test and ANOVA.

#### **RESULTS OF THE ANALYSIS OF DATA**

Ho1: There is no significant difference between male and female teachers' performance when use information technology in classes.

#### Table 1

Comparison between Male and Female Teachers' Performance under use of Information Technology

Gender	Ν	Mean	S.D	t-Value	Sig.
Male	200	64.86	12.62	2.298	.022
Female	200	67.98	11.53		

#### \*p<0.05

The performance of male and female teachers when they use information technology was compared using the t-test, as shown in table 1. It is obvious that there is a sizable gap between how male and female teachers perform in the classroom when it comes to the application of information technology. The average accomplishment score for male instructors was 64.86, while the average for female teachers was 67.98, with a standard deviation of 11.53. When using



information technology in their classes, female teachers performed better, according to the mean accomplishment score. The nave theory was disproved.

Ho2: There is no significant difference between male and female teachers' attitude regarding the use of information technology.

#### Table 2

Comparison between Male and Female Teachers' Attitude in using of Information Technology

Gender	Ν	Mean	S.D	t-Value	Sig.
Male	200	3.77	.67	4.820	.000
Female	200	3.33	.91		

\*\*p<0.01

Table 2 shows that a t-test was used to examine the attitudinal differences between male and female teachers about the usage of technology. It is clear that there is a big attitude gap between male and female teachers when it comes to using technology. Male teachers' mean accomplishment scores were 3.77 and 3.33 and female teachers' was 3.33 and.91 (t (314), 4.820 and p=0.01), respectively. The mean achievement score showed that male teachers were more enthusiastic about using technology than female teachers were. The proposed hypothesis was disproved since there was a difference in teachers' attitudes.

Ho3: There is no significant impact of teachers' experience on the challenges in using of information technology.

#### Table 3

Impact of Teachers' Experience towards Challenges of the Information Technology

	Sum Squares	of	d.f	Mean Square	F	Sig.
Between Groups	59.104		2	29.552		
Within Groups	155.974		313	.498	59.304	.000
Total	2315.079		315			

\*\*p<0.01

Table 3 shows that an ANOVA was conducted to investigate the significant influence of instructors' experience on the difficulties they encounter when using technology. The findings F (2, 29.552) = 59.304, p0.01, show that instructors' experience has a considerable impact on the difficulties they encounter when using information technology.

### CONCLUSION AND DISCUSSION:

The present study investigated the views of the teachers towards the usage of ICT in the classroom. It is clear that there are major differences between how well male and female teachers use technology in the classroom. When using information technology in their classes, female teachers performed better, according to the mean accomplishment score. According to Almekhlafi and Almeqdadi (2010), the use of ICT in the classroom is constrained by unsupportive management, a lack of technical expertise, and the absence of computer labs.



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Unfortunately, it is common to see this condition in Indian government and private institutions, where there are still some essential necessities missing. What do you think about the use of ICT? It is clear that there is a big attitude gap between male and female teachers when it comes to using technology. The mean achievement score showed that male teachers were more enthusiastic about using technology than female teachers were. The proposed hypothesis was disproved since there was a difference in teachers' attitudes. The study by Tondeur, Van Braak, and Valcke (2006) looked into teachers' attitudes toward adopting ICT based on their level of knowledge and expertise. It was shown that instructors' experience has a big influence on the difficulties they face when using technology. Chandra and Lloyed (2008) claim that when teachers employ excessive amounts of technology, ICT improves student achievement. When students and teachers were given access to ICT resources, Youssef and Dhamani (2008) investigated how this affected the teaching and learning process. The use of ICT and students' achievement are positively correlated. Aristovnik (2012) looked into how ICT could affect academic performance with a strong likelihood of effective and superior research results.

#### **Recommendations for further study:**

The institutions should have ample facilities of using ICT in classes. ICT labs should be designed and furnished with modern ICT resources. The teachers should have opportunities for training in ICT use. Teachers' ICT training should be based on ICT integration syllabus and curriculum. The access and use of internet should be compulsory for educational institutions.

#### **References:**

- Almekhlafi, A. G., &Almeqdadi, F. A. (2010). Teachers' perceptions of technology integration in the United Arab Emirates school classrooms. Educational Technology & Society, 13(1), 165–175.
- Aristovnik, A. (2012). The impact of ICT on educational performance and its efficiency in selected EU and OECD countries: A non-parametric analysis. The Turkish Online Journal of Educational Technology, 3(11), 144-152.
- Abbas, F., Farid, M. F., Iqbal, A. &Parveen, S. (2020) Impact of using newspapers reading on English reading proficiency: A study of Indiai university students. International Journal of Innovation, Creativity and Change. 14 (10), 223-232.
- Balanskat, A., Blamire, R., &Kafal, S. (2007). A review of studies of ICT impact on schools in Europe. European Schoolnet.
- Chandra, V., & Lloyd, M. (2008). The methodological nettle: ICT and student achievement. British Journal of Educational Technology, 39(6), 1087-1098.
- Chen, C. H. (2008). Why do teachers not practice what they believe regarding technology integration? The Journal of Educational Research, 102(1), 65-75.
- Clausen, J. M. (2007). Beginning teachers' technology use: First-year teacher development and the institutional context's effect on new teachers' instructional technology use with students. Journal of Research on Technology in Education, 39(3), 245–261.



- Computer use in primary education: Teacher and school characteristics. Journal of Computer Assisted Learning, 24, 494–506. A computer- mediated classroom lessons. British Journal of Educational Technology, 39(5), 807–828.
- Cuban, L. (2001). Oversold & underused: Computers in the classroom. Cambridge and London: Harvard University Press.
- Douglas, G. (2001). ICT, Education, and Visual impairment. British Journal of Educational Technology, 32(3), 353-364.
- Earle, R. S. (2002) The integration of instructional technology into public education: Promises and Challenges. ET Magazine, 42(1), 5-13.
- Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. School Effectiveness and School Improvement, 9(2), 157-179.
- Hawkins, R. J. (2004). Ten lessons for ICT and Education in the Developing World.
- Inwent. (2004). eLearning development and implementation: Course information and documentation. Bonn: Inwent
- Iqbal, A. Ali, M.S., Abbas, F Shah, M.A.H. & Anjum, S. (2020). A Study of Work-Family Conflict among Elementary School Teachers.International Journal of Innovation, Creativity and Change. 14 (10), 198-209.
- Leithwood, K. (1994). Leadership for school restructuring. Educational Administration Quarterly, 30(4), 498-518.
- Lim, C. P., & Chai, C. S. (2008). Teachers' pedagogical beliefs and their planning and conduct of
- Mumtaz, S. (2000). Factors affecting teachers' use of Information and Communications Technology: A review of the literature. *Journal of Information Technology for Teacher Education*, 9(3), 319-341.
- National Education Policy (NEP2020) Govt. of India.
- Neyland, E. (2011). Integrating online learning in NSW secondary schools: Three schools' perspectives on ICT adoption. *Australia Journal of Educational Technology*, 27(1), 152-173.
- Scholten, H. J., van de Velde, R. J., & van Manen, N. (2009). *The role of Geo-ICT and Spatial Approaches in Science*.Springer.
- Sherry, L., & Gibson, D. (2002). The path to teacher leadership in educational technology. *Contemporary issues in technology and teacher education*, 2(2), 178-203.



## Synthesis And Characterisation Of Substituted Diaryl Pyrazoline

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#### ABSTRACT

Pyrazoline moieties attracted considerable attention of medicinal chemists as they are endowed with a wide range of diverse biological activities such as anti-inflammatory, analgesic, antimicrobial, anti-oxidant activity etc. The proposed work involves synthesis of some new pyrazoline from substituted flavanone. The substituted flavanone in turn were obtained from substituted chalcone and the chalcone is prepared from acetophenone and variedly substituted aromatic aldehydes in presence of acetic anhydride and anhydrous sodium acetate. Here in the synthesis of pyrazolines reflux time was reduced significantly. The characterization of these compounds was made by chemical properties, elemental analysis as well as spectral analysis (like IR, <sup>1</sup>H-NMR). The purity of the compounds was tested by TLC on a chromatographic paper of 0.3 mm thickness.

*Keyword:- Phenyl Acetate, acetophenone, flavanone, diaryl pyrazoline MATERIALS & METHODS :-*

1) Acetic anhydride

2) 2,4 dichloro phenol

- *3) Sodium acetate*
- 4) Anhydrous AlCl<sub>3</sub>
- 5) 2 hydroxy benzaldehyde
- 6) Hydrazine hydrate & Phenyl hydrazine
- 7) Pipyridine
- 8) DMSO
- 9) NaOH,KOH, NaHCO<sub>3</sub> Ethanol, methenol ETC.

*S d fine, merk and loba companies chemicals are used in the synthesis of diaryl pyrozolines.* **INTRODUCTION** 

Pyrazole refers both to the class of simple aromatic ring organic compounds of the heterocyclic diazole series characterized by a 5-membered ring structure composed of three carbon atoms and two nitrogen atoms in adjacent positions, and to the unsubstituted parent compound. Chincholkar and jamode<sup>1</sup>, have reported the synthesis of some new 4-aroylsubsituted pyrazolines by the condensation of hydrazine hydrate and phenyl hydrazine. Behrooz Maleki<sup>2</sup>, A simple, green and cost-effective protocol was used for the aromatization of 1,3,5-trisubstituted-2-pyrazolines to the corresponding pyrazoles by in situ generation of iodine (I+) from  $H_2O_2/A_COH$  or SSA or oxalic acid /KI or NaI system under thermal condition with moderate to good yields. Baker et al<sup>3</sup> reported the formation of 1-phenyle-(2-hydroxy-4-methox phenyl)-3-methoxyfrom 2-hydroxy-4-methoxy strylmethyle ketone. On treatment with phenyl hydrazine. Govindraju<sup>4</sup> the tetra-substituted pyrazoles were synthesized by 1,3-dipolar cyclo addition of nitrile imines generated in situ by the oxidative dehydrogenation aldehyde hydrazones using chloramine-T as



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mild oxidant with 1, 3-diphenylprop-2-yn-1-one in good yields. The synthesized compounds were tested for their antimicrobial susceptibility activity against different fungi and bacteria species by paper disc diffusion method the structures of the new pyrazoles were confirmed by spectral studies and elemental studies. Wadokar<sup>5</sup> further reported the synthesis of 3,5-diaryle-1phenyle pyrazoline from flavononeand phenyl hydrazinehydrochloride in DMF. Arora<sup>6</sup> Pyrazole belongs to the "diazole" class of heterocycles and is the most important moiety found in large number pharmaceutical agents. One of the earliest methods of pyrazole synthesis is refluxing the contents high yields in a lesser time duration. In the present review, an attempt has been made to describe the various development stages in the synthesis of pyrazole analogues. Jamode<sup>7</sup> reported the formation of 2-hydroxychalcone phenylehydradation of hydrazine hydrochloride of flavonone and its conversion into phenyl pyrazoline. Ayman El sayed Rashad <sup>8</sup>synthesized some biologically active pyrazoles and were tested for antimicrobial activity. The new derivative of pyrazoles some of the synthesized compound shows anti-microbial activity. G. Huang<sup>9</sup>, An easy and efficient copper-catalyzed reaction for the synthesis of polysubstituted pyrazoles from phenyl hydrazones and dialkyl ethylene dicarboxylates tolerates a range of functionalities, and the corresponding adducts can be obtained in moderate to good yields. D. E. Frantz<sup>10</sup>A tandem catalytic cross-coupling/electro cyclization allows the conversion of differentially substituted acyclic and cyclic enoltriflates and an elaborated set of diazoacetates to provide the corresponding 3,4,5-trisubstituted pyrazoles with a high degree of structural complexity. Chincholkar and Jamode<sup>11</sup> reported the synthesis of some new 4-aroylsubstituted pyrazolines by the condensation of hydrazine hydrate and phenyl hydrazine with 3-aroylflavonones in pyridine. Rault<sup>12</sup>, general two-step synthesis of substituted 3- aminoindazoles from 2-bromobenzonitriles involves a palladium-catalyzed arylation of benzophenonehydrazone followed by an acidic deprotection cyclization sequence. This procedure offers a general and efficient alternative to the typical Ar-SN reaction of hydrazine with o-fluorobenzonitriles.

#### MATERIAL AND METHODS

#### Step-1:- Preparation of 2,4 - dichloro Phenyl Acetate.

2,4-dichloro phenol (25gm) was mixed with acetic anhydride (30ml) and anhydrous sodium acetate (2.5gm). The mixture was refluxed about 2hrs. It was cooled and poured in cold water. The acetate layer was separated and washed with water several times and finally it was purified by distillation and hence distilled compound (A) was collected at about  $240^{0}$ C.

#### Step-2:- Preparation 2-hydroxy 3,5 dichloro acetophenone.

Take 2,4dichloro Phenyl Acetate layer was mixed with anhydrous  $AlCl_3$  (1:3) and heated at  $120^{0}$  C for 45 min on sand bath. The reaction in mixture was decomposed with ice cold water containing a little HCl to get crude product with constant stirring, A pinkish solid obtained which is compound (B) it can be recrystallized by ethanol.

Melting point-  $91^{\circ}$  C Yield -70%

<u>Step-3:-</u> Preparation of Synthesis of 1(3, 5–dichlaro–2–hydroxylphenyl)–3–(4-methoxy phenyl) prop-2-en –1–one.

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Take 2-hydroxy 3,5 dichloro phenyl acetate (0.01 mole.) was dissolve in ethanol (10ml) with 2-hydroxy benzaldehyde (0.01mole) & added to the solution 1 or 2 drops of pipyridine solution & mixture was heated to boiling to this solution add aq. KOH solution (40%) (10ml) was added drop wise with constant stirring. The mixture was stirred mechanically at room temperature for 30 minutes and kept for overnight and then it was acidified by HCl (50%) solution. The solid product thus separated out was filtered and washed with sodium bicarbonate (10%) followed by water the crude product (c) was recrystallized by ethanol. Melting point= $180^{\circ}$ C

# <u>Step-4:- Preparation Synthesis of 6,8 dichloro-2-6(2-hydroxyphenyle-4H-chromen-4-one from 1-(3,5-dichloro-2-hydroxyphenyle)-3-(-2-hydroxyphenyle)prope-2-en-1-one.</u>

Substituted chalcone (0.001) dissolved in methanol (50 ml) in 200 ml beaker. The resulting solution was made alkaline (pH10) with potassium hydroxide pellets and was allowed to react for 2-3 hours. At room temperature (the reaction time for different chalcones very from 1-3 hours). The reaction mixture was then acidified (using 10%aqueous hydrochloric acid: ice cold) to precipitate the flavonone. The product was filtered with suction on a Buchner funnel, washed with cold water the washing were neutral to litmus and then with 5 ml of ice cold rectified sprite. The dried product was recrystallized from ethanol.

Melting point=106 0c

Yield:66%

IR : 3164cm-1 (Ar,C-H str);3067cm-1(aliph,C-H str);1638cm-1(C=O str);1537(C=N);1432(Ar,C=C str);1297(C-N str);1250(C-O str);692(C-Br str) <sup>1</sup>H-NMR (DMSO):-9.8 (Ar-OH); 7 -7.6(Ar –CH) 6.43(*CH*<sub>2</sub>) 2.2 (*CH*<sub>2</sub>-*CH*)

#### Step-5:- Preparation of 3-(2,-hydroxy-4-,benzyloxyphenyle)-5-phenyle pyrazoline.

2,-hydroxy-4-,benzyloxy chalcone (0.5gm.1.5151 mmoles) was dissolve in 10 ml of DMSO and then hydrazine hydrate (5 ml, [80%solution]) was added drop wise with constant stirring at room temp. The yellow coloured solution turned colourless with the formation of precipitate when crushed ice (20 gm) was added to it. The colourless pr oduct obtained was filtered, washed with water and dried. The crude product was recrystallized from methanol.

<sup>1</sup>H-NMR (DMSO):-9.8 (Ar-OH); 7 -7.6(Ar –CH) 6.43(*CH*<sub>2</sub>) 2.2 (*CH*<sub>2</sub>-*CH*)

#### Step-6:-preparation of 3-(2,-hydroxy-4-benzyloxyphenyle)-5-phenyle pyrazoline.

2,-hydroxy-4-,benzyloxy chalcone (0.5gm.1.5151 mmoles) was dissolve in 10 ml of DMSO and then phenyl hydrazine (5 ml, [80%solution]) was added drop wise with constant stirring at room temp. The yellow coloured solution turned colourless with the formation of precipitate when crushed ice (20 gm) was added to it. The colourless product obtained was filtered, washed with water and dried. The crude product was recrystalised from methanol.

 Melting point=
  $132^{0}$ C
 Yield:=
 55% 

 IR
 :
 3164cm-1
 (Ar,C-H
 str);3067cm-1(aliph,C-H
 str);1638cm-1(C=O

 str);1537(C=N);1432(Ar,C=C str);1297(C-N str);1250(C-O str);692(C-Br str)
 'H-NMR (DMSO):-9.8 (Ar-OH); 7 -7.6(Ar -CH) 6.43(CH\_2)
 2.2 (CH\_2-CH)





2,4-dichloro-6-[3-(2-hydroxyphenyl)-1H-pyrazol-5-yl]phenol



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2,4-dichloro-6-[3-(2-hydroxyphenyl)-1-phenyl-1H-pyrazol-5-yl]phenol

#### **RESULT & DISCUSSION:-**

Physical characterization data of all the compounds are given in Table-1. **TABLE-1** 

Compound	Mol. Formula	M.P. ( <sup>0</sup> C)	Yield (%)	R <sub>f</sub>
А	$C_8H_6O_2Cl_2$	240 <sup>0C</sup>	70	0.75
В	$C_8 H_6 Cl_2 O_2$	91 <sup>0C</sup>	68	0.80
С	$C_{13}H_8Cl_2O_3$	$180^{0C}$	66	0.82
D	$C_{12}H_7Cl_2O_3$	106 <sup>°C</sup>	60	0.80
Е	$C_{12}H_8Cl_2N_2O_2$	138 <sup>0C</sup>	55	0.89
F	$C_{18}H_{13}Cl_2N_2O_2$	132 <sup>0C</sup>	55	0.80

#### CHARACTERIZATION DATA OF NEWLY SYNTHESIZED COMPOUNDS

#### CONCLUSION

Thus it was possible for us to reduce reflux time and increase percent yield of newly synthesized products. The use of DMSO as a solvent afforded rapid synthetic route to pyrazoline and also easy work up of the products. These newly synthesized compounds contain many bioactive substituents and therefore should be screened for their antibacterial activity.

#### REFERENCES

- 1. Liu XR, Wu H, He ZY, Ma ZQ, Feng JT and Zhang X. Design, synthesis and fungicidal activities of some novel pyrazole derivatives. Molecules. 2014; 19(9): 14036-14051.
- Journal of American Chemical Society, Tarun S, Mithilesh RS, Pooja C, Saraf SK, Synthesis and anti-oxidant screening of pyrazole-4-carboxaldehyde derivatives 2012; 2(3): 1-14.
- 3. International Journal of Research and Pharmaceutical Sciences. 2012; 2(3): 81
- 4. Panda N and Jena AK. Fe-Catalyzed One-pot synthesis of 1, 3-di- and 1, 3, 5trisubstituted pyrazoles from hydrazones and vicinal diols. Journal of Organic Chemistry. 2012; 77: 9401-9406.
- 5. P. V. Badadhe, N. M. Chavan, P. G. Mandhane, R. S. Joshi, D. R. Nagargoje and C. H. Gill, Indian J. Chem., 50B, 879 (2011
- 6. Shyam S. Mokle, Archana Y. Vibhute, Sandeep V. Khansole, Sainath B. Zangade, Yeshwant B ,Vibhute, RJPBCS, 2010, 1, 3, 631
- 7. Behrooz Maleki and Hjat veisi 1 8, October 2011



- 8. M. Govindaraju, K. Ajay Kumar 1, august. 2013
- 9. Ma, Y.LI, P. Wen, R. yan, Z. Ren, G.Huang.-Synlett, 2010,1321-1323
- 10. D. J. Babinski, H. R. Agullar, R. Still, D.E. Frantz. J. Org. chem. 2011, 76, 5915-5923.
- 11. Lefebvre, T. Cailly, F. Fabis, S. Rault J. Org. chem.2010, 75,2730-2732
- 12. J. Hu S. chen, Y. Sun, J. Yang, Y.Rao Org. Lett., 2012, 14.5030-5033
- 13. P. Li, C. Wu, J. Zhao, D.C. Rogness, F,Shi. J. Org. chem., 2012, 77,3127-3133
- 14. P. Li, J. Zhao, C. Wu, R. C. Larock, F. shi. -Org. Lett. 2011, 13, 3340-3343
- 15. Q. Sha, Y.wei, Synthesis, 2013, 45, 4
- 16. H. Li, P.Li, L.wang. Org. Lett., 2013 15,620-623.
- 17. L.-L. Wu, Y.-C. G e, T. He L. Zhang, X.-L. Fu, H. -Y. Fu, H. Chen, R.-X, Li Synthesis, 2012 ,44, 1577-1583.