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ABOUT THE PROGRESS JOURNALS

‘The Progress Journals’ is a flagship initiative of The Progress, which belongs to one of the verticals of Sri Aurobindo Yoga & Knowledge Foundation with a mission of Sustainable & Holistic Development. Begun in 2023, the vision behind this publication is to create an international, cross-disciplinary, peer-reviewed and open-access journal that deals with issues of social, cultural, economic and ecological importance. This bilingual journal (with papers in English and Hindi) seeks to provide a platform for people engaged in innovative studies on subjects related to sustainability and sustainable development.

The journal also aims to highlight the significance of the Sustainable Development Goals (SDGs), also known as the Global Goals, which were set up by the United Nations in 2015. These goals were designed to be a "blueprint to achieve a better and more sustainable future for all." They comprise a universal call to action to promote individual and social well-being on a global scale. The 17 SDGs are (1) No Poverty, (2) Zero Hunger, (3) Good Health and Well-being, (4) Quality Education, (5) Gender Equality, (6) Clean Water and Sanitation, (7) Affordable and Clean Energy, (8) Decent Work and Economic Growth, (9) Industry, Innovation and Infrastructure, (10) Reducing Inequality, (11) Sustainable Cities and Communities, (12) Responsible Consumption and Production, (13) Climate Action, (14) Life Below Water, (15) Life On Land, (16) Peace, Justice, and Strong Institutions, (17) Partnerships for the Goals.

This journal, which shall be published quarterly, will allow researchers from various backgrounds to share their opinions and findings on topics related to these goals. Through this exchange of knowledge, we hope to better understand how to implement these principles for the development of our communities, our nation and the world.

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भोपालपरिसरः

EDITOR'S NOTE

THE PROGRESS, established in 2020, is one of four recent initiatives of Sri Aurobindo Yoga and Knowledge Foundation. The core objective of our organization is the transformation of consciousness in higher education. The inspiration for this goal is the philosophy of Sri Aurobindo and the Mother, especially the principles of Integral Yoga. We believe that true progress requires consciousness of one's role in one's family, community, nation and the world. We seek to create this distinctive awareness, especially among students, professors, researchers and other key stakeholders in the field of education. At present, we are associated with more than 28 higher education institutions, including IIT Delhi.

In Integral Yoga, it is written that there are five layers of the mind: Physical, Vital, Mental, Psychic, and Spiritual. In higher education institutes today, the teaching-learning process is such that it functions till the Vital layer. There is no formal curriculum for anything beyond that. That kind of learning only comes through community, social and spiritual initiatives. Most higher education institutions have already started different types of developmental projects, social work, etc. Our objective is to create an organization that can connect all these other institutions and then collectively, we can be a force for universal transformation. To the broad vision of progress, we each bring our own unique perspective. Together, we can refine our approach and make a difference globally, while being rooted in our regional heritage.

In 2023, we launched a new initiative, 'The Progress Journals' with a mission to highlight scholarly work on Sustainable Development in general and the significance of the Sustainable Development Goals (SDGs) proposed by the UN, specifically. This is our first issue and we are very grateful to all our contributors and supporters. We aim to release this bilingual journal on a quarterly basis and provide a space for new voices and fresh perspectives.

- *Dr. Samarendra Mohan Ghosh*

Editor-in-Chief



Exploring The Role Of Fungal Endophytes For The Production Of Anti-Cancerous Compound Podophyllotoxin From Podophyllum Hexandrum

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Abstract:

In an effort to discover new therapeutic compounds, research on the secondary metabolites of endophytic microbes colonising plant bodies is currently focusing on the medicinal qualities of those products. A non-alkaloid lignin of plant origin, podophyllotoxin is present in various species of Podophyllum as well as several other genera, including Juniperus, Sinopodophyllum, Dysosma, Linum, and others. A few endophytic fungi that generate podophyllotoxin as a secondary metabolite have been studied and documented in the literature that is now available. Specific endophytic fungal strains can be isolated and their metabolites extracted using conventional methods. Nowadays by utilising industrial fermentation technologies for growing fungal endophytes there is a trend to produce secondary metabolites to meet industrial demands. The present study aimed to optimise the culture conditions for isolated endophytes for the rhizosphere and phyllosphere of Podophyllum hexandrum plants grown in the in the green house of JUIT and some plants purchased from Jagatsukh nursery of Himalayan Forest Research Institute (HFRI). Phytochemical screening was carried out in mother plant extracts and isolated fungal endophytes extracts and we found significant amounts of phenols, alkaloids, glycoside and flavonoids. Experiments are under process for the enrichment of podophyllotoxin production. So the present study would provide enriched microbial resources for podophyllotoxin production which will contribute to anticancer drug development.

Keywords: Endophytes, Podophyllotoxin, Secondary metabolites.

Introduction

Podophyllotoxin, a lignan derived from Podophyllum species, is commonly extracted from the rhizomes of Sinopodophyllum hexandrum and Podophyllum peltatum, which are native to Western China and the Himalayan region. Extracts of podophyllotoxin have been found to be effective in treating conditions such as syphilis, psoriasis, gonorrhoea, tuberculosis, and venereal warts. Additionally, the podophyllotoxin family exhibits various

therapeutic properties, including immunosuppressive, neurotoxic, antibacterial, and anti-inflammatory effects. The demand for podophyllotoxin has risen due to the challenges in cultivating P. hexandrum, which has limited availability. Endophytic fungi, known to inhabit the healthy tissues of numerous plant species, have emerged as a potential source of valuable phytochemicals, offering an alternative method of obtaining podophyllotoxin. These fungi are known to produce compounds such as flavonoids, terpenoids, alkaloids, and

phenols, which may hold promise for developing effective therapeutic agents.[1] In traditional medical systems like Ayurveda, Unani, and Siddha, the podophyllum plant has considerable promise for treating a wide range of maladies. Because podophyllum is neither cultivated or extensively collected, there is a shortage of podophyllotoxin, which has increased demand for the material on the global market. Because organic synthesis is not feasible, plant rhizomes of *P. peltatum* and *P. hexandrum* are used to isolate podophyllotoxin. Due to a combination of aggressive harvesting and a lack of culture, *P. hexandrum* rhizomes—which have a dry weight basis potential of 5% podophyllotoxin—are becoming more and more difficult to find. Endophytes are often part of the microbial colony that resides inside of a plant's healthy tissues [3]. Most plant species, both dicotyledonous and monocotyledonous, include microbial endophytes. Endophytic fungus have been shown to be a varied source of phytochemical components with a broad spectrum of biological activity. Numerous experts have found that a vast array of medicinal plants naturally harbor over a million species of endophytic fungi. Flavonoids, terpenoids, alkaloids, phenols, tannins, steroids, amines, organic acids, myoinositol, volatile ester, spectrum of fatty acids, etc. are abundant in endophytic fungus. The cost and difficulty of screening biological products has increased, and the majority of endophytes contain special compounds that are going extinct faster. Numerous techniques are being employed to find new and effective antibacterial compounds. Research organizations are investing funds.

Methodology: [2]

Collection of plant materials

The leaves of podophyllum hexandrum were collected from Green House of JUIT.

Isolation of Endophytic Fungi

The gathered leaves were surface sterilized, and the isolation process was carried out with minor adjustments in accordance with Petrini's (1986) standard protocol.

Surface Sterilization

Once the samples were rinsed, they were surface sterilized in 70% ethanol for 1 minute, in 3% sodium hypochlorite for 4 minutes, and then in 70% ethanol again for thirty seconds. After that, they were given three 60-second showers using double-distilled water.

Incubation

Following sterilization, the leaves were cut into 5 mm by 2 mm pieces, which were then aseptically deposited onto Petriplates that were filled with Potato Dextrose Agar (PDA) media. The PDA was treated with 100 µg/ml of tetracycline to stop the growth of bacteria. Next, the plates were incubated for five to seven days at room temperature. After counting the number of distinct fungal colonies found on the PDA plates, each colony was separated and subcultured on a different PDA plate to produce pure cultures.

Identification of endophytic fungi

Identification of the endophytic fungus was done by observation of morphological and cultural traits. Endophytic fungi have been recognized macroscopically through the use of culture features such as pigmentation, surface roughness, colony morphology, and mycelium development on PDA. Using LPCB dye, a section of the mycelium was teased and examined under a 45X magnification for the microscopic examination of endophytic fungi. The fungus species has been identified based on the morphology of the hyphae, spores, and fruiting bodies such as conidia, mycelia growth, and conidiophores.

Inoculation of endophytic fungi

By inoculating fungal mycelia and spores in 250 ml sterile flasks containing PDB and incubating for seven days while shaking them at 200 rpm, a fungal spore suspension was created.

Extraction of crude extract

The culture was then given 100 milliliters of ethyl acetate following the incubation period, and it was kept at room temperature for the entire night. Using a Buchner funnel, the unrefined ethyl acetate fungus combination was filtered through muslin fabric.

To get crude fungal extract, the collected supernatant was dried under vacuum on a rotary evaporator at 40 C.

Phytochemical analysis: [4]

Alkaloids

One milliliter of crude extract and two milliliters of HCl were mixed in a test tube, which was then submerged in water. Mayer's reagent (0.1 ml) was then added. There are alkaloids present when a yellow precipitate appears.

Terpenoids

After taking one milliliter of fungal extract, a few drops of sulfuric acid solution were added. Terpenoids are indicated by the formation of a reddish-brown precipitate.

Flavonoids

A few drops of diluted sodium hydroxide were added to 1 milliliter of crude extract. This produced a bright tint that eventually became colorless when a few drops of HCl were added.

Quinones

When 1 ml of 10% sodium hydroxide was added to 0.5 ml of crude extract, the mixture became blue-green or red, signifying the presence of quinones.

Phenols

A solution of 0.5 ml FeCl and 0.5 ml crude extract was mixed together. The development of phenols is indicated by the presence of a reddish tint.

Findings:

During these studies we isolated fungal specie, which were identified using fluorescent microscopy LPCB (lacto phenol cotton blue) stain.



Figure no. 1: microscopic view of endophytic fungus

Screening of phytochemicals

The phytochemical analysis was carried out using ethyl acetate crude extracts of endophytic fungi. In this process, phenols, terpenoids, alkaloids, flavonoids were screened

Secondary metabolites	Presence and absence
Terpenoids	+
Alkaloids	-
Flavanoids	+
Quinines	-
Phenols	+

Qualitative screening is done till now, we are yet to perform molecular analysis of these metabolites which shows prominent hints for the availability of podophyllotoxin.

Conclusion:

In conclusion, we found that endophytes can be a potential alternative for the production of podophyllotoxin. This research not only highlights the importance of fungal endophytes as promising sources of bioactive compounds but also suggests avenues for further exploration in harnessing their biotechnological potential. As we continue to unravel the complexities of plant-fungal interactions, the future holds promise for developing sustainable and innovative approaches in drug discovery and production.

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Sustainable Practices in Teaching-Learning Environments

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Abstract:

Technology, innovations and entrepreneurial ventures have started revolutionizing every industry in continuum and shaping the global economy. This paper delves into the transformative impact of innovation and entrepreneurship focusing on the convergence of entrepreneurial schemes offered by ruling ministries with innovative ideas from technopreneurs and innovators in almost all service sectors including teaching-learning environments. For this sustainable stories have been captured from self-financed higher-educational institutions from Indian academia. Careful analyses can be undertaken in these case studies in order to elucidate strategies for educationalists and associated external stakeholder-entrepreneurs to thrive in a climate enveloped with technological disruption and unprecedented opportunities of the Era.

Keywords: *Indian Higher Education, Self-financed Higher Educational Institutions, Evaluation Criteria, Stakeholder Hierarchy, Uprising Bottlenecks.*

Introduction

The core as well as higher educational setup in India does not have a very organized governance structure involving different regulatory bodies as can be seen evidently from one of the web page that introduces National Network of Education to have covered all the existing Apex Educational Bodies of India like NAAC, UGC, NCERT and AICTE. (<https://testbook.com/ugc-net-paper-1/apex-level-bodies#:~:text=Apex%20Level%20Bodies%3A%20NAAC%2C%20NCTE,%2C%20NCERT%2C%20AICTE%20and%20RUSA!>)

However, this is not reflected in the organization structure of All India Council for Technical Education (AICTE). Instead, it functions with a conglomeration of bureaus: Training & Learning, Regulation, Policy and Academic Planning,

Scholarships & Grants, Administration and Finance, also cells like NEAT, Innovation Cell, Vigilance Cell, Internal Audit and Indian Knowledge Systems. However, this could have been better reflected in the form of a well-drafted organogram for easy understanding nationwide. As on date, a handful number of the higher educational institutions do get government aid in the name of R&D, travelling grants while 79% of the institutions are still sustaining themselves as self-financed (private-unaided) or semi-financed (private-aided) institutions tagged in 2-tier category. Specially, those who are offering technical courses are also wrapped in the same assessment strata as government-aided institutions by Ministry of Education with the help of an intermediary monitoring layer of AICTE, its bureaus and cells. For instance, if Policy & Academic Planning is formulated, why doesn't holistic education

(refer to <https://www.aicte-india.org/bureaus/policy-academic-planning>) become its prime responsibility? Also, the responsibilities of these boards, committees, councils and cells are not coherent to set of precise objectives laid under NEP. This has resulted in disparate set of accreditation requirements towards 2-tier institutions in contrast to those asked for 1-tier institutions [1] [2]. This has become a cause of concern and a cumbersome task to suffice by 2-tier Universities and institutions.

Background

Imparting education is the most adorable and a white-collared profession all over the globe. However, a blog report from www.edumilestones.com ranks the academician career as last option chosen by youth in India. In spite hard core efforts being put up by statutory bodies at the apex of Indian Government such as Ministry of Education & Ministry of Human Resources, what makes this white collared profession of teaching as their last choice of the able professionals? What causes the job dissatisfaction whilst teaching is the only profession which can be dwindled with flavors of research, innovation, field surveys, entrepreneurship and indefinite interactions with today's youth – the future HR capital of tomorrow? Case studies are covered amidst the sections where the inevitable issues are discussed that need dire attention to keep in pace the quality teaching-learning environments of very vast Indian Academia.

Assessment Methodology in HEIs – A Survey

The preparation of accreditation process by each institution begins with fetching of non-uniform course curricula approved by different sets of Universities where the

syllabi are ill-crafted with missing 'course objectives' for some courses and missing 'course outcomes' for the other as can be referred in criterion 2. Eventually, the question arises as to how to reflect mapping of syllabi to Program Outcomes and Program Specific Outcomes as prescribed in NAAC / NBA accreditation manual by regulatory bodies of Indian Academia. Thus, many-year old Universities who themselves are yet to undergo their own accreditation evaluation processes and are still running the voluminous clusters of institutions under dilution of quality monitoring [3] [4]. In another sub-criterion 2.1.2, it is nowhere described in the manual: the confined definition of Content Beyond Syllabus so that its significance should be realized in fulfilling attainment gaps, that is supposed to be the most difficult portion handled by institutes and Universities. Teaching-Learning Processes in Criterion 2 also demands systematic dissemination of instructional pedagogies in classrooms and laboratories, examination paper setting and conduction of internal assessment, handling students' projects, undergoing industry-institute interactions and supervising students' inter-semester internships. Criterion 3 which is supposed to carry along with it: voluminous documentation task that reflects the program outcome and program specific outcome attainment scores in a comparative mode. This is supposed to be the most crisply defined criteria in the accreditation manual. Criterion 4 deals with students' performance statistics along with placement, pursuing higher study and entrepreneurial counts in comparative mode during stipulated time of course completion in higher educational institute. Criterion 5 asks for detailed academic and research profiles of faculty, student-faculty ratios, faculty-cadre ratios and also their innovative research contributions. Sub

criteria 5.6 and 5.9 if carefully planned and monitored eventually escalates the repute and ranking of the academic institution. Criteria 6 and 7 are relevant up to what degree are quality and environmental concerns is the institute beholds as its social responsibility.

Findings - Uprising Bottlenecks

Any systematic phenomenon carries with it systematic set of observations. However, if we take case studies from self-financed institutions, there, the semesters are commenced without any systematic overview, action-taken documentation on past semesters' feedback from stakeholders or action-taken on result analyses of past academic semesters. Also, enormous pending work of past semester in form of answer script evaluation in digital mode by affiliating Universities causes delay in running of scheduled calendar timelines.

Examination Reforms Manual is still being overlooked by the management or administrating bodies in academic institutes due to acute dearth of faculty or avoiding long-checking times per manuscript during digital evaluation. Moreover, faculty are tuned to fabricate question papers in the interest of students so as to reflect good scores in result analysis as students' feedback. Also, projects are a method of making student-teacher clusters so as to carry forward faculty's doctoral or post-doctoral research in accelerated mode. This calls of plentiful breaching of authoring and publishing ethics in various ways by faculty community.

In general, it is observed that the most sincere and the most senior faculty groups are assigned to drive criterion 3 meticulously, However, faculty resignation, deliberate faculty transfer among sister

units under group of institutions make this documentation a challenging task.

Although, Indian Government and its apex bodies have been campaigning around diversified entrepreneurial initiatives, yet majority of the institutes have not realized how to incorporate this as strength into their academics and research [5].

Handling Fast Learners vs. Slow Learners: It is usually observed that students with exceptional profiles are seen indulged in grooming themselves in research and innovation by exploring newer dimensions apart from achieving their academic credits. These pitiful souls are tagged as attendance defaulters and are asked to accomplish various requirements of fulfilling criterion 3 assessments. This could otherwise have been intelligently handled by giving shared access of profiles of these students across departments, library, training & placement, internship coordinators and management and providing due academic credits at absolutely no cost. In fact, innovative frameworks can be called for from the apex bodies to have drafted uniform set of database-cum-reporting tools regarding all assessment criteria set by the apex bodies for the institutes and Universities nationwide.

Non-uniform Appraisal Systems and Reporting: The major bottleneck rises in documenting criterion 4 when students do not turn up into academic campuses for learning their courses. The author would not go into the reasons but is rather interested in discussing on how to accomplish their physical appearance in the classroom and laboratory environment. Now, the intellects can undertake this issue as a topic of doctoral work on studying the psychology of student communities. The need of the hour is to cater to these students

something different apart from what course ware and digital content available on internet. This decides the niche on their performance statistics as no performance can be measured without sufficient levels of live student-faculty interactions. In this context, different institutes and Universities are adopting their own students' appraisal systems now operational as software tools having report-delivery capabilities. Cannot these long-running robust student and faculty appraisal portals be recognized or made uniform by apex bodies at national level?

Faculty Retention Levels in HEIs

A grave cause of concern is to sustain faculty in self-financing institutions all-round the country. For this reason, the contribution of faculty stake holders was studied in detail with an exemplary case study of a higher educational institution where just before an accreditation visit, a peculiar phenomenon happened: mass resignation of many moderately senior and very senior employees (mostly males) in lieu of prolonged demotivation levels at work place. Whilst, for preparing the records in subsequent accreditation visits, the majority of female employees were left behind busy preparing loads of (unattended) documentation task of past academic sessions may be because of ill-management or dilution in the management in the recent past. The bitter part of the same is that feminine components were neither given recognition in committees nor as academic departmental heads in spite their enormous efforts in preparing voluminous documentation tasks.

A sample survey taken among resigned but very sincere employees revealed that they left the organization because of loads of work without getting awarded with any annual increments or due-long promotions

to higher cadres as a mark of motivation to work with greater commitments. The most inhuman reason of resigning from such a long-serving period was that most of class-2 staff who were already eligible to teach in capacity of teaching faculty were not promoted to faculty positions nor were they provided no-objection to pursue higher (post-graduate or doctoral) studies by the managerial layer of the work place. This has caused resignation of more number of male employees as they got better opportunities for their career growth whilst the female employees stay back contributing to faculty retention ratio as they cannot switch over due to their genuine domestic reasons and stable family setups in local vicinity. If perceived from another angle, this was seen as a serious breaching of faculty promotion policies that are mandatory to be implemented in any reputed academic institution or University [8].

Graving the above situation, resignation of this able faculty is usually filled by the authorized local management layer (without the intervention of apex managing layer) by recruiting part-time faculty and lesser number of full-time faculties with regular salary scales. This has become the part of work culture in some academic institutions of the country in order to sustain their classroom-teaching with substantial amount of part-time faculty. Female faculty outnumbers the male faculty in this category. In cases where ample part-time faculty are hired, organizations have started tagging them as regular faculty whilst the volume of task assigned to them is disproportionate to the salary received to them at hand.

Had there been a direct-systematic (transparent) identification-cum-tracking process (at periodic intervals) by vigilance or grievance redressal cells of the apex

bodies upon the count and details of recruited faculty for each academic institution, it would have given better sustainability opportunities to the most laborious layer of academia – the teaching and non-teaching faculty. This would have increased chances of getting promoted to higher cadres and retaining seniority for the most eligible ones in an organization. This is only possible if NBA-NAAC assessment criteria include extra scores to organizations who value and favour retention of ablest of their faculty [9]. If initiated, majority institutions shall come forward to develop and test such database-tracking portals.

Sustainable Infrastructure and Maintenance

Another deeply inter-related issue is responsible handling of organization's building infrastructure, Central Library, laboratories, their equipments and also human resources. As a consequence of frequent switch-overs made by teaching faculty, regular updation and maintenance of stock registers, library book accession tools for all, writing-off the unutilized books laboratory manuals, ICT gadgets surveillance systems and many more infrastructure is also affected the most. An alternative to such a grave issue will be call for machine-assisted academic governance tools that shall give periodic updating reminders on integrated documentation framework (say ERP) of the academic institutes during faculty switch overs, newer nominations and increased admission intakes and as a part of action-taken reports to various resource-utilization statistics. Huge scope of innovation lay in these realms to be exhibited in national level contests and exhibitions.

Conclusion

The parents and guardians of students (external stake-holders) are no more ignorant and come from well-learned classes of society and so form the crowd that decides the fate of admissions in any academic institution or University. Everything in today's world rests upon quality of work than the quantity of work done. So, those administrators who have established academic clusters a.k.a. group of institutions just for the purpose of ancillary revenue generation and know nothing about the academic governance simply rely on the local management layers that majorly come from superannuated from reputed government institutions or from industry. In either case, if they do not appear to take responsibility for sustainability of the quality academia then this layer becomes responsible for reputation and ranking of the institutions. For an instance, if an apex level or local management layer has not called a meeting even once in an academic semester in an attempt to call for and resolve quality concerns then it is the time to change this layer [10]. Now that if a non-reputed institute or University is compelled to declare its closure down from 'n' number of academic semesters from the on-going semester then who will be responsible for mass lay-offs of the already recruited staff and faculty? Who bears the responsibility of making the staff, faculty and students aware about quality-governance in academic matters?

Acknowledgement

The author is she-intrapreneur working within associated organizations for resolving quality-issues in Indian academic teaching-learning environments. The author expresses her heart-felt gratitude to team-Sustainable India for having

identified her innovation, research & entrepreneurial potential which make her continue to work with higher degree of confidence levels.

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The Viksit Bharat@2047 In Different Realm Paradigm

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Abstract:

The current piece of work is a survey that highlights some issues related to the vision of a Viksit Bharat @2047, the opinion of some people regarding the mission of developed India was collected and finally a conclusion was drawn that what the thinking of a group of people on the policy of Viksit Bharat @2047. The idea is to achieve significant economic growth while also ensuring that it is sustainable, all-encompassing, and equally dispersed throughout all societal segments and geographical regions of the country.

Keywords – Economic reforms, sustainability, empowerment

Introduction

Viksit Bharat @ 2047 is the vision of the Government of India to make India a developed nation by 2047, the year it celebrates its 100th anniversary of independence. The vision encompasses various aspects of development including economic growth social progress environmental sustainability and good governance. It emphasizes how crucial inclusive growth, sustainable development, and technology breakthroughs are to determining our country's destiny. In addition, it highlights the necessity of teamwork, creativity, and adaptability to successfully negotiate the challenges of the twenty-first century.[2] (Placeholder1) (Gaur et al., 2024) "Viksit Bharat @2047: is a call to action for all Indians, not only a scholarly endeavor. It inspires us to work toward achieving this common goal and

challenges us to consider our part in creating a flourishing India.

This vision calls for India to become a \$30 trillion economy, provide every citizen with piped water and a pucca dwelling, equip women farmers with drones, expand the supply of reasonably priced medications through Jan Aushadhi Kendras, and implement green and sustainable economic policies. In addition, Viksit Bharat 2047 seeks to improve India's diplomatic ties with other nations, fortify India's geopolitical position, and overcome the legacy of colonization.

Objective

The following goals are intended to be accomplished by this research paper:

- Examine the Viksit Bharat conceptual framework and its

relevance to India's development narrative.

Examine the body of research on Indian development plans and programs, paying particular attention to how they relate to Viksit Bharat.

- Examine many avenues for achieving developmental achievement, taking into account aspects related to the economy, society, environment, and governance.
- Determine the main obstacles and chances in the quest for Viksit Bharat, utilizing data from case studies and practical research.

Methodology

The survey was conducted on 100 people in which answers to questions related to the success of Viksit Bharat and which part should be given first attention were collected. Electronic media was used to collect data. The collected data was analyzed based on age and profession. Hypothesis of subject h0(null hypothesis): India will be transformed into a developed nation by 2047 under a Viksit Bharat @ 2047 and H1(alternate hypothesis)- India will not be transformed into a developed Nation by 2047 under Viksit Bharat @ 2047.

Result Analysis and Findings

All stakeholders must work together to realize Viksit Bharat @ 2047, with academia leading the way in promoting advancement, creativity, and inclusive development. The key to realizing India's potential and bringing about a better future for all is in academia, with its unrelenting dedication to excellence, social responsibility, and transformative change. Here are a few excerpts from our research.

Table 1 Describes the Age of respondents

	Below 20	21-30	31-40	Above 40
No of respondents	19	49	23	9
Percentage	19	49	23	9

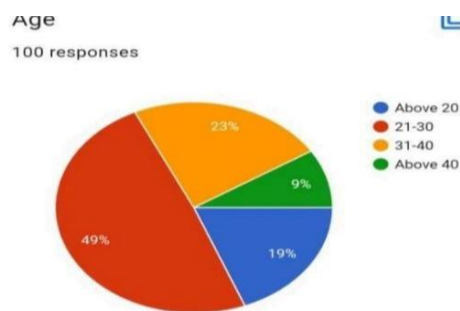


Figure 1 Graphical representation of data

Interpretation

According to the figure, 19% of respondents are under the age of 20. The age range of 49% of responders is 21–30. Of those surveyed, 23% are between the ages of 31 and 40. The fact that 9% of respondents are older than 40 indicates that those who fall within the age range of 21 and 40 (49 + 23 = 72%) are more likely to have visited Bharat 2047.

Table 2 shows the respondent's sex category

	Male	Female
Response	37	63
Percentage	37	63

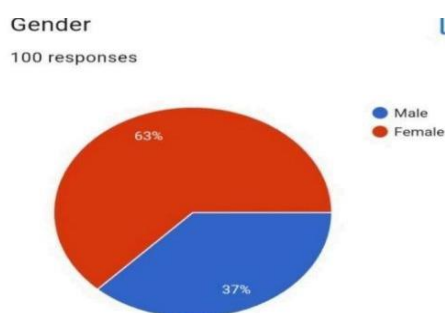


Figure 2: Shows graphical representation of data

Conclusion

The study of Viksit Bharat @ 2047 aims to explore the potential of India to become a developed nation by 2047. This ambitious vision encompasses economic prosperity, technological advancement, and social inclusivity. The study delves into various aspects of India's development journey, including economic growth prospects, technological prowess, and social development initiatives. government's commitment to achieving gender equality and empowering women will further enhance social progress. The study identifies several key areas for future Roadmap and Future Study. Ongoing research is crucial to identify and address these issues, ensuring India's successful journey towards becoming a developed nation by 2047.

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आधुनिकार्थशास्त्रनीतिशास्त्रनियमेकौटिल्यतत्त्वप्रतिपादनविमर

श्री आदर्श विनायक भट्टः

सहायकाचार्यः(संविदा) वेदाङ्ग-वेदभाष्यविद्याशाखा, केन्द्रीयसंस्कृतविश्वविद्यालयः

श्रीराराजीवगान्धीपरिसरःशृङ्गेरी

विशुद्धज्ञानदेहाय त्रिवेदी दिव्यचक्षुषे ।
श्रेयः प्राप्तिनिमित्ताय नमः सोमार्दधारिणे ॥

प्रस्तावना -

इह खलु जगति शरीरभृतां मानवानां धर्मार्थकाममोक्षाख्येषु चतुर्विधपुरुषार्थेषु प्रवृत्तिः सर्वसाधारणी एव । तत्र पुरुषार्थेषु आद्यो धर्मः । तादृशधर्मानुष्ठानेन पुरुषा इहामुत्र च लोके सुखमनुभवन्ति । तादृशपुरुषार्थे अन्यतमः अर्थार्थः । स च अर्थः धर्मानुष्ठानाय, तद्धर्मानुष्ठानेन च पुरुषाः चरमं मोक्षाख्यं आत्यन्तिकदुःखध्वंसरूपं सुखमनुभवन्तीति अर्थस्यापि मोक्षोपकारकत्वं प्रसिद्ध्यति । परमवैष्णवचणकमहर्षेः पुत्रत्वेन वा चणकगोत्रे वा समुत्पन्नस्य कौटिल्यस्य विष्णुगुप्तेति नामाङ्कितस्य 'अर्थशास्त्र'ग्रन्थः भारतीयसनातनपरम्परायाम् अत्यन्तं वैशिष्ट्यं भजते । तत्रापि विशिष्य इदानींतनकालेऽपि तस्मिन्ग्रन्थे उद्धृतस्य विहितस्य वा विषयस्य सांविधानिकक्षेत्रे परिपालनम्, तत्सांविधानिकपुनारचनायाम् आधारत्वेन स्वीकरणं वा सामान्येन उत्पश्यामः । अनेनैव ज्ञायते अत्यन्ततीक्ष्णमतिना महात्मना कौटिल्येन विरचितग्रन्थच्छाया अस्माकं संविधाने स्फुटं भासत इति । तादृशानां ग्रन्थानाम् अध्ययनेन अवलोकनेन विवेचनेन च आर्थिकसमस्यापरिहारं, आर्थिकदृढतां कालान्तरे च आर्थिकव्यवस्थां वा अवगन्तुं शक्नुमः । तत्र प्रश्नाः भवेयुः, इदानीं कुतः अत्यन्तप्राचीनस्य ग्रन्थस्य अध्ययनम् ? अथवा तेन को लाभः? किं वा तस्य प्रयोजनम्? इति । परम् इदानीमपि प्राचीनपद्धतिः कुत्र उपयोक्ष्यमाण एव वर्तते, कुत्र अस्मीभिः विपरिणमितम्, कुत्र इदानीमपि प्राचीनपद्धत्यनुसारेण निर्णयः दीयते चेदेव उचितमित्यादि प्रश्नानां समाधानम् एतादृशविमर्शात्मकेन अध्ययनेनैव जायते । अतः तत्साधकानि नैकान्युदाहरणानि उद्देशनिर्देशमात्ररूपाणि सङ्गृह्य मया अत्र शोधप्रबन्धस्य सारांशभूते लेखनेऽस्मिन् विनिबद्ध्यन्ते ।

कुञ्चिकापदानि – अर्थशास्त्रम्, भारतीयसंविधानम्, कौटिल्यतत्वानि ।

उद्देश्यम् -

- इदानींतनकाले अपि अत्यन्तप्राचीनस्य ग्रन्थस्य प्रामाण्यता प्रतिपादनम् ।
- अस्माकं सनातनपरम्परायाः प्रतिपादनम् ।
- परम्पराध्ययनेन आधुनिककाले प्रयोजनप्रतिपादनम् ।

- आधुनिकव्यवस्थापेक्षया प्राचीनव्यवस्थानाम् उपेक्षणीयत्वनिरासः ।
- आधुनिकविषयाणामपि अर्थशास्त्रादिग्रन्थमूलकत्वप्रतिपादनम् ।
- भारतीयसंविधाननियमानाम् अर्थशास्त्रमूलकत्वप्रतिपादनम् ।

प्रयोजनम् –

- अर्थशास्त्रे प्रपञ्चितस्य विषयस्य नानोदाहरणपुरस्सराध्ययनेन इतोऽप्यधिकतमं सुस्पष्टज्ञानमुपलभ्यत इत्यतः अवश्यम् उदाहरणान्वेषणं कर्तव्यम् । तच्च उदाहरणम् अस्माकं संविधानग्रन्थे (साविधानिकक्षेत्रे) उपलभ्यत इति तत्रैव समन्वयः कर्तव्यः । तथा च अर्थशास्त्रस्य यत्र यत्र प्रयोजनं वर्तते, तच्च कथमित्यादि स्पष्टज्ञानं भविष्यति ।
- क्वचित्सन्दिग्दसन्दर्भे सन्देहनिवारकमपि भवति इदं विमर्शात्मकमध्ययनम् ।
- एतादृशतुलनात्मकाध्ययनं राजनीति-अर्थशास्त्राद्यध्येतृणामपि अत्यन्तम् उपकारं परिकल्पयिष्यति ।
- विशिष्य इदानींतनानां राजनीतिज्ञानां अर्थशास्त्रज्ञानां वा पुराणेषु ग्रन्थेषु आस्थां परिकल्पयितुं सहकारी भविष्यति ।
- समस्यायाः परिमार्जने, समस्या एव यथा नोदेति तथा राज्यपरिपालने वा प्राचीनप्रकाराः अवगन्तुं शक्याः ।

औचित्यम् -

भारतीयन्यायालयादिषु भारतीयसंविधानपद्धत्या एव निर्णयाः उद्घोष्यन्ते । तत्रापि यत् परमं प्रमाणभूतं डा.वि.आर्.अम्बेड्करमहाशयैः विनिर्मितं च

ग्रन्थविशेषम् आहत्यैव निर्णयित इति विदितमेव । एवमेव बहुपूर्वकाले कथं राजकीयव्यवस्था, न्यायव्यवस्था वा आसीदित्यपि प्राचीनग्रन्थाद्यवलोकनेन अवगच्छामः । तत्र तदानीं ये अपूर्वाः नियमाः, निर्णयाः, व्यवस्था वा तत्कालानुरोधेन विचिन्त्य परिरक्षिताः ते सर्वेऽपि इदानीं परिपालयितुं योग्याः न भवन्तीत्यपि स्पष्टमेव । परं तु केचन विषयाः सर्वदा समानाः, तदानींतनैरपि अनुसृताः, इदानींतनैरपि परिपाल्यमानाश्च अवलोक्यन्ते । तादृशेषु अस्माभिः भेदः, सामान्यं, वेशिष्ठं वा द्रष्टव्यं चेत् अवश्यम् एतादृशानां कौटिल्यार्थशास्त्रादीनां ग्रन्थानाम् अवलोकनं, तुलनात्मकाध्ययनं विमर्शात्मकं वा अध्ययनं कार्यमेव । तेषां प्रभावाः यावदस्ति इदानींतनकाले संविधाने वा, तैः प्रतिपादिततत्त्वानां परिपालनं कथं वर्तते? इत्यादि विषये ज्ञानाभिवृद्धर्थं विधातव्य एव एतादृशशोधप्रबन्ध इति औचित्यं भजते ।

शोधपद्धतिः -

- **Article 74. Council of Ministers to aid and advise President, 75. Other provisions as to Ministers”** इत्यस्मिन्छीर्षकोपेतेयोः संविधाननियमयोः अयमर्थः प्रधानमन्त्री एव राष्ट्रपतिसूचनाय मन्त्रिमण्डलस्य रचनां कुर्यात् । अर्थशास्त्रसम्मतमन्त्रिमण्डलरचना सर्वप्रथमा मन्त्रिणां कार्यविषयसाम्यं चेति कौटिल्यशास्त्रप्रभावम् अवलोकयितुं शक्यामहे ।
- एवमेव कोषाधिकारिविषयेऽपि **Article 150. Form of accounts of the Union and of the States, and Article 151. Audit reports:** इत्यस्मिन्छीर्षके कोषाधिकारिणः सर्वेषाम् आयव्ययानां पट्टिकां दद्युरिति नियमः प्रकल्पितः । तदादौ तदन्ते च क्वचिन्नियमाः दृश्यन्ते ये च –

“बाह्यमाभ्यन्तरं चायं विद्याद्वर्षशतादपि ।
यथा पृष्ठो न सज्जेत व्ययशेषं च दर्शयेत्”।¹

¹ कौटिल्यार्थशास्त्रे २३ प्रकरणे ५८ तमः श्लोकः ।

इतियादिभिः श्लोकैः अर्थशास्त्रग्रन्थे एव उपवर्णिताः ।
अस्यायमर्थः प्रगतानां शतवर्षाणामपि आयव्ययानाम्
आवलिः (प्रमाणपत्राणि वा) कोशाध्यक्षस्य हस्ते
भवेदिति ।

- आनुशासनिकपत्रविषयेऽपि शास्त्रे पाठः दृश्यते यथा-

“प्रज्ञापनाज्ञा परिदानलेखाः तथा परीहारनिसृष्टिलेखौ ।
प्रावृत्तिकश्च प्रतिलेख एव सर्वत्रगश्चेति हि शालनानि
॥”²

इत्यादिभिः श्लोकैः अष्टौ अनुशासनपत्रभेदाः
(Varity's Of Order Letters) “विशेषेण तु भृत्येषु
तदाज्ञालेखलक्षणम्” इत्यादिभिश्च पत्रलक्ष्म च निर्दिष्टं
यत् अस्माभिः अद्यत्वेऽपि परिगृह्यमानं च वर्तते ।

- सचिवसम्पुटविषये आचार्यैः कोषाध्यक्षः(Finance Minister), आयुधगाराध्यक्षः(Defence Minister), कोष्ठगाराध्यक्षः(Revenue Minister) इतियादिपदानि निर्दिष्टानि तान्येव अद्यापि अनुवर्तामहे इति विश्वः ।
- अर्थशास्त्रस्य विंशतितमे प्रकरणे भूमिच्छिद्रविधानमिति (N.A, Agricultural Land) विषये उल्लेखं पश्यामः । तत्रापि विशिष्य कृषिकार्यार्थम् अयोग्यप्रदेशे किं किं निर्मातव्यमित्यादिकमपि विहितमेव ।
- वैवाहिकजीवने अपि विच्छेदनादीनां विषये “नीचत्वं परदेशं वा प्रस्थिते” इति श्लोके हेतुनिर्देशश्च प्रपञ्चितो परिदृश्यते ।
- एवमेव क्वचिद्विरोधप्रतिपादकानि वाक्यानि च उपलब्धन्ते यथा विवाहकाले वरदक्षिणाप्रदानम् इत्यादीनि ।

- तथैव शास्त्रे विहितानि परन्तु इदानीं अपरिगृह्यमाणानि च वाक्यान्पि बहुशो परिलोक्यन्ते तद्यथा मन्त्रिविषये विद्यायाः अनियमः, जातिभेदेन प्रतिशतविधिः(आरक्षणम्), सर्वत्र विद्यापुरस्कारस्थाने, साक्षात्कारसन्दर्भे वा जातिग्रहणेन क्वचित् प्रतिशतविधानेन आरक्षणम् च ।

- यत् प्राथम्येन विरचितं नीतिशास्त्रम् अर्थशास्त्रं वा तस्य इदानींतनकाले उपयोगानुगुणं विपरिवर्त्यमाने कौटिल्यार्थशास्त्रस्य विचारमन्तरेण करणे पुष्कलप्रयोजनाभावमपि परिगणयितुं प्रवर्तामहे ।

- **Article 273. Grants in lieu of export duty on jute and jute products** इत्यत्र भाङ्गस्य विषये शुल्कस्वूकारः नैव कर्तव्यः, परं तेषामेव अनुदानादिकं दातव्यमिति नियमः कृतः । अस्साम् राज्यादिषु उत्पद्यमानस्य विशेषस्य सेरक्षणाय एतादृशी व्यवस्था परिकल्पिता । एषा च व्यवस्था अर्थशास्त्रेऽपि दृश्यत एव यथा -

“राष्ट्रपीडाकरं भाण्डम् उच्छिद्यात् अफलं च यत् ।
महोपकारमुच्छुल्कं कुर्यात् बीजं तु दुर्लभम् ॥”³

इति । अस्यायमभिप्रायः राज्यस्य वा देशस्य वा नष्टदायकं यत् शुल्कं तत् न स्वीकार्यम् एवमेव राज्ये देशे वा यत् अत्यन्तं दुर्लभं द्रव्यं धान्यं वा तस्यापि शुल्कं न स्वीकार्यं तत् स्थाने प्रोत्साहनं देयमिति । अयमेव अंशः भारतसंविधाने अपि शोभत इति स्पष्टमेव कौटिल्यस्य अर्थशास्त्रे प्रतिपादितत्वानां प्रतीतिः ।

अर्थशास्त्रे गूढचारविषये अपि प्रस्तावः कृतः । तत्र “गृहीतपुत्रदारांश्च कुर्यादुभयवेतनान् । तांश्चारिप्रहितान् विद्यात्तेषां शौचं च तद्विधैः ॥

अन्तर्गृहचरास्तेषाम् कुब्जवामनशण्डकाः । शिल्पवत्यः स्त्रियो मूकाश्चित्राश्च म्लेच्छजातयः ॥

दुर्गोषु वणिजस्संस्थाः दुर्गान्ते सिद्धतापसाः ।
कर्षकोदास्थिता राष्ट्रे राष्ट्रान्ते ब्रजवासिनः ॥”⁴

वने वनचरैः कार्याः श्रमणाटविकादयः ।
परप्रवृत्तिज्ञानार्थाः शीघ्राश्चारपरम्पराः ॥² इत्यादिभिः
शेलोकैः गूढाचाराः राज्ये राजाभावे
समस्तक्रियाजातविषये ज्ञानार्थं, राज्यान्तरविषये वा
ज्ञानार्थं गूढाचारव्यवस्था, तत्रापि के नियोजनीयाः, ते च
नियोजिताः कुत्र भवेयुः इत्यादिव्यवस्था च आचार्यैः
निर्दिष्टमेव । इयं च व्यवस्था न केवलं भारतदेशे
विश्वस्मिन् सर्वत्र (RAW, Private agency) द्वारा
परिपाल्यमाना एव वर्तते ।

एवमेव क्रयादिविषये, Tax विषये च आचार्यैः
देशक्षेमार्थं सुविचाराः अर्थशास्त्राख्यग्रन्थे सुविचारिताः ।
यथा स्वीकारे जनानामपि लाभाय भवति, देशस्यापि
हिताय भवति कस्यापि हानिः नैव सञ्जायते इति च स्पष्टं
प्रतिपादितमेव ।

शोधसारः -

ज्ञात्वा अज्ञात्वा वा वयं सर्वे प्राचीनपरम्परामेव
अनुसृत्य व्यवहरामः । परं तद्विषयकज्ञान सत्वे व्यवहारे
विवेकः जागरूकता प्राचीनपरम्परायाम् आस्था च
अभिवर्धते । इदानींतन काले अत्यन्तं वेगेन
आधुनिकतन्त्रज्ञानेन च परिवर्त्यमाने जगति नास्तिकता
पुराणेषु अप्रामाणिकता एव आधिक्यान परिभासते ।
तद्वारणाय इदानींतनैः विज्ञानद्वारा यद्यत् आविष्कृतमिति
बुद्ध्या तादृशव्यवहारः व्यवहियमाणो वर्तते तस्य निरसनार्थं
अस्माकं पूर्वजैः एव एते सर्वेऽपि विषयाः ग्रन्थे ग्रथिताः
एव प्रतिपादनम् अत्यावश्यकम् । एवमेव पूर्वस्मिन् काले
अत्यन्तम् अराजकता आसीत्, इदानीमेव सुव्यवस्था
वर्तते इत्यादिकं मन्यमानानामपि समाधानार्थम्
अर्थशास्त्रप्रभृतीनां प्राचीनग्रन्थानां
विमर्शात्मकमध्ययनम् अवश्यम् । तेन पूर्वोक्तरीत्या
भ्रमनिरसनं, प्राचीनपरम्परायाम् आस्था च सञ्जायत इति
अयं प्रयासः । अतः शोधप्रकृतौ निर्दिष्टान् केचन विषयान्

स्वीकृत्य आधुनिकनियमेषु योजनाय यत्नः अवश्यं
करणीय इति मया प्रयासोऽयं विधीयमानो वर्तते इति
अत्यन्तं संक्षेपेण शोधपत्रसारः प्रदत्तः । इति शम् ।

अनुशीलितग्रन्थाः -

१. चाणक्य-सम्पुट (सञ्जयप्रकाशन दिल्ली), सम्पादकाः -

डा. जगदेव कुमार शर्मा, २०१६ ।

२. THE CONSTITUTION OF INDIA
(Karnataka Official Language (Legislative)
Commission and Directorate of
Translations, Government of Karnataka.)
२०१९

² चाणक्यार्थशास्त्रे १२ अध्याये ८ प्रकरणे

१९, २१, २२, २३ श्लोकाः ।



आधुनिक अर्थव्यवस्था के वृद्धि हेतु रामायण तथा कौटिल्य-अर्थशास्त्र के आदर्श तत्त्व : एक चिन्तन

डॉ. शैलेश डि. पवार

सहायक प्राध्यापक - योग (सं), केन्द्रीय संस्कृत विश्वविद्यालय, श्री राजीव गान्धी परिसर, शृंगेरी

शोध निबन्ध सारांश :

प्रस्तावना-

धर्मादर्थः प्रभवति धर्मात्प्रभवते सुखम्। धर्मेण लभते सर्वं धर्मसारमिदं जगत्।³

(धर्म से अर्थ प्राप्त होता है, धर्म से सुख का उदय होता है और धर्म से ही मनुष्य को सब कुछ प्राप्त होता है। इस संसार में धर्म ही सार है।)

आज संपूर्ण संसार अर्थशास्त्र का विचार कर रहा है। “पहले माँग बाद में पूर्ति” (Supply must be the function of demand) यह अर्थशास्त्र का नियम है परन्तु आज सर्वत्र इसके विपरीत आचरण हो रहा है। इसी के कारण आधुनिक अर्थशास्त्रज्ञों के सामने कुछ जटिल प्रश्न उपस्थित हैं- 1) माँग पूरी करने के लिए उत्पादन 2) उत्पादनोपयोगी कर्मचरों की पूर्ति 3) उत्पादित वस्तुओं का विभाजन तथा विनिमय आदि। अर्थशास्त्र संबंधित इन समस्याओं का निवारण आदिकाव्य अर्थात् रामायण तथा कौटिल्य के काल में किया गया था।

संकेत शब्द- रामायण, कौटिल्य अर्थशास्त्र, अर्थव्यवस्था, आदर्श तत्त्व

विषय का औचित्य एवं महत्त्व-

रामायण के अध्ययन से तत्कालीन अर्थव्यवस्था की कुछ विशेषताएँ उन्मुख होती हैं, जो निम्न हैं:

1. अर्थशास्त्र से नियंत्रण- अर्थशास्त्र में केवल रोटी का ही नहीं अपि तु मानवी भावना, वासना तथा उनके नियमन का भी विचार होना चाहिए।
2. अर्थव्यवस्था से आत्मविश्वास – रामायणकालीन लोगों का निश्चित व्यवसाय होने से उन्हें मजदूरी के विषय में आत्मविश्वास

था क्योंकि उस समय सुव्यवस्थित जातिव्यवस्था थी। मनुष्य के जन्म के साथ ही उसका व्यवसाय निश्चित होता था। इससे व्यक्ति को घर में ही व्यवसाय का प्रशिक्षण मुफ्त में मिलता था और अनुचित स्पर्धा का प्रश्न ही उपस्थित नहीं होता था।⁴ अतः रामराज्य में कोई कार्यार्थी (काम माँगने वाला) दिखाई नहीं

³ -रामायण अरण्यकांड 9.30

⁴ श्री वाल्मीकि रामायण दर्शन, पृष्ठ 21

- देता था, ऐसा लक्ष्मण ने हाथ जोड़कर राम को निवेदन किया था।⁵
3. **वितरण** – रामकालीन लोग उत्पादित वस्तुएँ समाज को देते थे और समाज उनकी अन्य आवश्यकताओं को पूर्ण करता था।
 4. **विनियोग** – ‘अपने पास आए हुए धन का विनियोग करना ही चाहिए’ ऐसा नैतिक बंधन उस समय था।⁶ अतः प्राचीन वाङ्मय में यज्ञादि इष्टापूर्त कर्म का उल्लेख मिलता है।
 5. **नीतिशास्त्र का विचार** – लोग स्वयं अपनी आय का $\frac{1}{6}$ भाग राजसत्ता को देते थे और राजसत्ता उसमें से $\frac{3}{4}$ भाग प्रजा के हितार्थ उपयोग करती थी।
 6. **नीतिनिपुण मंत्रिगण** – रामराज्य के सभी मंत्री सर्वगुण संपन्न, सत्परामर्श देने में निपुण, यशस्वी, ईमानदार और नित्य राज्यकार्य में निरत रहने वाले थे।⁷

अयोध्या नगरी के वर्णन प्रसंग में महर्षि वाल्मीकि लिखते हैं कि अयोध्यापुरी में सभी लोग सुखी, धर्मात्मा, ज्ञानी, अपने-अपने धन से संतुष्ट, निर्लोभी तथा सत्य बोलने वाले थे।⁸ उस उत्तम अयोध्या नगरी में धनहीन कोई था ही नहीं बल्कि कम धन वाला भी कोई नहीं था, जितने कुटुंब वाले लोग थे उन सब के पास धन, धान्य, गाय, बैल और घोड़े थे।⁹ उसी प्रकार कोसलराज्य के संदर्भ में वाल्मीकि कहते हैं- धन, धान्य तथा गोधन से परिपूर्ण, तालाबों, उद्यानों एवं आम्रवनों से युक्त था।¹⁰ प्रजा तथा राजा के सन्दर्भ में वाल्मीकि महर्षि का स्पष्ट मत है कि जो राजा प्रजा की रक्षा नहीं करता,

वह राजा प्रजा की आय के छोटे भाग का उपभोक्ता नहीं बन सकता।¹¹ इसी तरह के अनेक विचारों से यह कहा जा सकता है कि रामायणकालीन अर्थव्यवस्था एक आदर्श अर्थव्यवस्था थी।

कौटिल्य का ‘अर्थशास्त्र’ मूलतः राज्य प्रबंधन का ग्रंथ है। कौटिल्य आधुनिक समय की माँग और पूर्ति के अर्थशास्त्र की मूल अवधारणाओं और कीमत के निर्धारण पर इसके संयुक्त प्रभाव से बहुत परिचित थे। उनकी राय में, एक राजा को किसी उत्पाद की आपूर्ति और माँग की स्थिति की परवाह किए बिना मनमाने ढंग से कीमत तय नहीं करनी चाहिए। कौटिल्य के अनुसार, राज्य को उत्पादन की लागत, माँग की तुलना में आपूर्ति का अनुपात, लाभ का उचित स्तर आदि पर विचार किए बिना कीमतें निर्धारित नहीं करनी चाहिए। इसी के साथ कौटिल्य कर (Tax) संरचना तथा वैदेशिक व्यापार की अवधारणा अपने ग्रंथ में स्पष्ट करता है।

शोध प्रविधि-

प्रस्तुत संशोधन की पद्धति विश्लेषणात्मक एवं तुलनात्मक है। रामायण में वर्णित लोगों का आर्थिक जीवन विश्लेषणात्मक पद्धति से प्रस्तुत किया गया है। रामायण तथा कौटिल्य अर्थशास्त्र के आधार पर उत्कृष्ट भारतीय अर्थव्यवस्था के आदर्श तत्त्वों का प्रतिपादन तुलनात्मक पद्धति से किया गया है। कुछ स्थानों पर आधुनिक अर्थव्यवस्था का विचार भी प्रस्तुत शोधपत्र में किया गया है।

⁵ दृश्यते न च कार्यार्थी रामे राज्यं प्रशासति । लक्ष्मणः

प्राञ्जलिर्भूत्वा रामायैव न्यवेदयत् ।। रामायण उत्तरकाण्ड प्रक्षिप्त 1.10

⁶ नानाहिताग्निर्नायज्वा न क्षुद्रो वा न तस्करः ।

कश्चिदासीदयोध्यायां न चावृत्तो न तस्करः ।। रायायण बालकाण्ड 6.12

⁷ अष्टौ बभ्रुवर्षीरस्य तस्यामात्या यशस्विनः । शुचयश्चानुरक्ताश्च राजकृत्येषु नित्यशः ।। रायायण बालकाण्ड 7.2

⁸ तस्मिन्पुरवरे हृष्टा धर्मात्मानो बहुश्रुताः । नरास्तुष्टा धनैः स्वैः स्वैरलुब्धा सत्यवादिनः ।। रायायण बालकाण्ड 6.6

⁹ नाल्यसंनिचयः कश्चिदासीत् तस्मिन् पुरोत्तमे । कुटुम्बी यो ह्यसिद्धार्थोऽगवाश्वधनधान्यवान् ।। रायायण बालकाण्ड 6.7

¹⁰ प्राज्यकामा जनपदाः सम्पन्नतरगोरसाः । रामायण अरण्यकाण्ड 16.7

¹¹ षड्भागस्य च भोक्तासौ रक्षते न प्रजाः कथम् । रामायण उत्तराण्ड 74.32

उपसंहार-

इसी प्रकार इस शोध निबंध में आधुनिक अर्थव्यवस्था की वृद्धि हेतु अर्थशास्त्र से नियंत्रण, आत्मविश्वास, विनिमय, नीतिशास्त्र का विचार आदि आदर्श तत्त्व रामायण तथा कौटिल्य के अर्थशास्त्र से उद्धरण पुरस्सर प्रस्तुत किए गए हैं, जिनका विचार आधुनिक परिप्रेक्ष्य में किया जाना चाहिए।

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भारतीयज्ञानसन्दर्भे सततशैक्षिकविकासस्य अवधारणात्मकी सैद्धान्तिकरूपरेखा

नीलाभतिवारी

आचार्यः अध्यक्षश्च, शिक्षाशास्त्रविद्याशाखा, केन्द्रीयसंस्कृतविश्वविद्यालयः, भोपालपरिसरः

प्रस्तावना –

ॐ असतो मा सद्गमय तमसो मा ज्योतिर्गमय मृत्योर्मा अमृतं गमय।ⁱ

असतः सत्त्वं प्रति तमसः प्रकाशं प्रति मृत्यो अमृतं प्रति गमनमेव विकासः यत्र सर्वेषां सुखस्य आरोग्यस्य मङ्गलस्य च कामना। किं सम्प्रति विश्वस्मिन्विश्वे विकासस्य तात्पर्यं परिवर्तितम् ? वृद्धिः, समृद्धिः यशः, कीर्तिः, प्रतिष्ठाः, मुक्तिः, ज्ञानम्, सर्वज्ञता, जयः इत्येते सर्वे वा एतेषु केचन विकासस्य पर्यायाः वा परिणामाः इति चिन्तनीयः विषयः। कस्य विकासः भवति ? व्यक्तेः विकासः, समाजस्य विकासः, देशस्य विकासः वा विश्वस्य विकासः इत्यपि विश्लेषणपूर्वकम् अस्माभिः चर्चणीयः। किं विविधेषु देशेषु विकासस्य संकल्पना पृथक् पृथक् भवति? किं व्यक्तेः विकासेन सह स्वतः देशस्य विश्वस्य वा विकासः भवति ? इत्यपि चिन्तनीयम्। विकासस्य कारकाणि कानि सन्ति? कथं विकासः भवेत् ? विकासस्य आधारः कः? कीदृशः विकासः? संधारणीयः सततविकासः वा ? नैकेषां प्रश्नानाम् उत्तराणि वाञ्छन्ति जनाः। संयुक्तराष्ट्रसंघेन सततविकासविषये सप्तदशलक्ष्याणि अंगीकृतानि। तत्र चतुर्थं लक्ष्यं शिक्षासम्बद्धं वर्तते। तच्च-

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.ⁱⁱ

भारतस्य २०२०-राष्ट्रीयशिक्षानीतौ अपि कथितं यत् लक्ष्यम् इदं २०३० पर्यन्तं पूर्णं भवेत्। एतस्य पूर्तये शिक्षायाः भारतीया संकल्पना अपि अध्येतव्या। 'शिक्षेत्यादि श्रुतेरङ्गम्' इत्युक्ते वेदस्य अङ्गत्वेन शिक्षा वर्तते। सायणाचार्यः कथयति-

स्वरवर्णाद्युच्चारणप्रकारो यत्र शिक्षयते

उपदिश्यते सा शिक्षाⁱⁱⁱ

अर्थात् उच्चारणप्रक्रियापाठनं शिक्षेति। व्याकरणदृष्ट्या विद्योपादाने इत्यर्थे शिक्ष धातुना शब्दोऽयं निष्पद्यते यस्य व्यावहारिकः अर्थः विद्यायाः विनिमयप्रक्रियेति विद्यते। अतः विद्याशिक्षयोः भेदः भारतीयज्ञानपरम्परायां प्रकल्पितः। यदा

शैक्षिकविकासस्य प्राप्तये रूपरेखा निर्धारणीया चेत् विकासः, शिक्षा, विद्या आदयः इत्येताः प्रमुखाः संकल्पनाः विस्तरेण पत्रेऽस्मिन् विवेचिताः।

उद्देश्यानि-

अस्य पत्रस्य उद्देश्यं भारतीयज्ञानधारितम् अध्ययनं विधाय सैद्धान्तिकरूपेण सततशैक्षिकविकासविषये अन्तरविषयकसाहित्यस्य संश्लेषणं वर्तते। तदाधारेण व्यापकदृष्ट्या परिणामानां विविधवर्गेषु अभिज्ञानम् वर्तते।

1. भारतीयज्ञानसन्दर्भे शिक्षासंकल्पनायाः सततविकासस्य अवधारणायाः च अध्ययनम्।
2. सततशैक्षिकविकाससन्दर्भे अन्तर्विषयकसाहित्यस्य संश्लेषणम्।
3. सततशैक्षिकविकासस्य अवधारणात्मकी सैद्धान्तिकरूपरेखायाः प्रतिपादनम्।

सम्बद्धसाहित्यम्-

विविधानां सम्बद्धग्रन्थानां समीक्षया ज्ञायते यत् भारतीयज्ञानपरिप्रेक्ष्ये सततविकासस्य तस्य जटिलतानां च अवगमनार्थं प्रासंगिकसैद्धान्तिकरूपरेखायाः आवश्यकता दृश्यते। विशिष्य शिक्षाक्षेत्रे आवश्यकता परिलक्ष्यते। समीक्षा दर्शयति यत् सततविकासस्य भारतीयसन्दर्भाः नितान्तप्रासंगिकाः स्पष्टाश्च सन्ति। शिक्षायाः विद्यायाश्च भारतीया अवधारणा सर्वदा विद्वद्भिः चर्च्यते। शिक्षायाः प्राच्यधारा अद्यापि संस्कृतशिक्षाजगति जीवति, तथापि भारतीये सन्दर्भे शैक्षिकविकासस्य कार्यात्मकपरिभाषायाः निर्माणं कृत्वा तदनु सततशैक्षिकविकासस्य लक्ष्यपूर्तये शिक्षाशास्त्रीणां प्रयत्नानाम् अभावः दरीदृश्यते। भारतीयानां शैक्षिकसंकल्पनानां प्रासंगिकतायाः कार्यात्मकनिरूपणस्य अभावः वर्तते।

शोधप्रश्नाः-

1. भारतीयज्ञानपरम्परायां शिक्षायाः संकल्पना कीदृशी ?
2. किं भारतीयज्ञानपरम्परायां सततविकासस्य संकल्पना वर्तते?
3. भारतीयज्ञानपरम्परादृशा सततशैक्षिकविकासस्य सैद्धान्तिकरूपरेखा कीदृशी ?

शोधविधिः-

अस्मिन् पत्रे सततशैक्षिकविकासविषये बहुविषयकसाहित्यस्य समीक्षायै सम्प्रत्यात्मकविश्लेषणस्य उपयोगः कृतः। अनेन साहित्ये विद्यमानानां समानतानां पद्धतीनां सिद्धान्तानां च अभिज्ञानं क्रियते। तदनन्तरं लब्धसिद्धान्तान् अधिकृत्य विविधपद्धतीनां संश्लेषणं वर्तते। तदनु विकासस्य विविधानाम् अवधारणाणानां स्वातन्त्र्येण प्रतिपादनं विधाय सततशैक्षिकविकासस्य अवधारणात्मकरूपरेखाया भारतीयज्ञानसन्दर्भे स्वरूपं निश्चीयते। एतदर्थं भारतीयं वाङ्मयम् अधीत्य तत्र विद्यमानसततशैक्षिकविकाससम्बद्धविषयस्य तुलनां विश्लेषणं संश्लेषणं च विधाय समीक्षणम् अत्र विहितम्।

विश्लेषणम्-

शिक्ष विद्योपादाने धातुना निष्पद्यते शिक्षाशब्दः। विद्यायाः विनिमयप्रक्रियेति शिक्षा विद् ज्ञाने धातुना निष्पन्नः विद्याशब्दः ज्ञानार्थकः। अतः ज्ञानस्य व्यवस्थातन्त्रत्वेन शिक्षां दृष्टुं शक्यते। ज्ञानं ब्रह्मणः स्वरूपलक्षणं पवित्रतमा सत्ता च वर्तते। आत्मज्ञानम् एव प्रधानज्ञानम्। अध्यात्ममेव शिक्षायाः अधिष्ठानम् अत्र विचारितम् आत्मतत्त्वम् अव्यक्तं वर्तते। अस्य अव्यक्तस्य व्यक्तस्वरूपं सृष्टिरिति। सृष्टिरेव आत्मतत्त्वस्य विश्वरूपम् अपि भवति। सृष्टेः धारणार्थं धर्मः। धर्मः विश्वनियमः, स्वभावः कर्तव्यश्च अस्ति। अतः शिक्षा धर्मानुसारिणी भवेदिति भारतीया संकल्पना। अस्याः शिक्षायाः विकासाय विकासस्य अवधारणा अपि स्पष्टिकर्तव्या।

सम्प्रति विकासनाम्ना यन्त्री वृद्धिः क्रियते। मानवीयभावानां हासः दृश्यते। आत्मीयतायाः अभावः परिलक्ष्यते। संसाधनेषु वृद्धिः विकासः इति जनाः मन्वन्ते। सन्दर्भेऽस्मिन् सततविकासः संधारणीयः विकासो वा तादृशः भवेत् यत्र उपर्युक्ताः विकाराः न स्युः। भारतीयज्ञानदृशा विकासः स्वकेन्द्रितः नैव अपितु स्वस्मात् प्राक् अन्येषां प्राधान्यम् इति विचारकेन्द्रितः वर्तते। अस्य केचन प्रमुखाः सिद्धान्ताः—

- विकासप्रक्रिया अन्तस्तात् आरभते न तु बहिस्तात्।
- विकासः एकरेखीयः नस्ति अपितु चक्रियः अस्ति।
- विकासः समन्वितः वर्तते न तु एकाङ्गी।
- विकासः स्वतः जायते अथ च प्रयत्नैरपि जायते। संयुक्तराष्ट्रदृष्ट्या सततशैक्षिकविकासे त्रयः महत्त्वपूर्णाः अंशाः विद्यन्ते- समानगुणवत्ता, समावेशविचारः, जीवनपर्यन्ताधिगमः अवसराश्च। अत्र त्रयः अपि विवेच्यन्ते।

निष्कर्षाः -

- भारतीयज्ञानसन्दर्भे शिक्षा ज्ञानव्यवस्था तन्त्ररूपेण आत्मतत्त्वनिष्ठा धर्मानुसारिणी च वर्तते।
- भारतीयज्ञानसन्दर्भे विकासः चक्रीयः, समन्वितः, तस्य आन्तरिकारम्भश्च अतः सातत्यम्।

- समानगुणवत्तायै समावेशाय जीवनपर्यन्ताधिगमाय च भारतीयज्ञानपरम्परायां नैके मार्गाः प्रतिपादिताः।

उपसंहारः –

अस्य शोधपत्रस्य लेखनावसरे भारतीयज्ञानसन्दर्भे विविधग्रन्थानाम् अध्ययनं विधाय तत्र वर्णितानां विचाराणां समन्वयस्य संश्लेषणस्य च प्रयत्नः विहितः। तदाधारेण शैक्षिकविकासस्य संकल्पना

विवेचिता। शिक्षा केवलं वृत्तिप्राप्त्यर्थं नैवापितु जीवनस्य परमलक्ष्यावाप्तये व्यवस्थातन्त्रत्वेन कार्यं करोति। अतः जीवनपर्यन्तं शिक्षा अस्मान् अभिप्रेरयति आत्मतत्त्वज्ञानाय। तदङ्गतया परा विद्या अपरा विद्या च अध्येतव्या। ज्ञानार्जनस्य करणानि दृढीकृत्य परमज्ञानावाप्तये सततशैक्षिकविकासस्य निश्चितः क्रमः एव अवधारणात्मकी सैद्धान्तिकरूपरेखारूपेण वर्तते।

ⁱ बृहदारण्यकोपनिषद् 1-3-28, राजारामः(सं) बम्बई पुस्तकालयः, लाहौरम्, 1913

ⁱⁱ Transforming our world: The 2030 Agenda for Sustainable Development. United Nations.

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