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Appendix-II

(2023 - 2024)

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INTRUSION DETECTION SYSTEM (IDS) FOR BLOCKCHAIN SECURITY

Feroz Ahmed[1*], Kriti Sharma[2], Meenakshi Gupta[3], Rinky Ahuja[4]

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Abstract:

Block chain is basically an open, distributed, decentralized, publicly available digital ledger containing all the blocks in a chain having a hash-linked data structure where hashing is enabled by public – key cryptography. It is a concept based on which we are having the protocol of Bit coin; the widely known cryptocurrency. This work discusses the implementation of intrusion detection mechanism on Blockchain's model of information security. The job of the Intrusion detection software or systems typically called IDS is to monitor for the suspicious activity in a network and raise an alarm on discovery of either thus, acting like a firewall. Besides, exploring on implementation the work also shed light on existing details of Blockchain's principles, applications and security as well as on the existing mechanisms of Intrusion Detection Systems.

Index Terms: Blockchain, Intrusion Detection, Internet of Things, Information Security, Multivariate Model, Classification

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South India Journal of Social Sciences, Vol. XXI No. 1

A REVIEW ON MANAGEMENT AND IMPLICATIONS OF E-WASTE IN INDIA

Osheen Kumar Sharma * Yash Gupta ** and Monika Khurana ***

1.0 Introduction

The transition from mechanical to digital electronics, or the Third Industrial Revolution, started in the second part of the 20th century and is more commonly referred to as the Digital Revolution (Byjus, 2021). People started adopting this modern technology and through online publishing platforms, network intelligence and day to day devices, it transformed the way we interact with electronics cand caused a shift in human communication that we face to this day. This came with many positive and negative factors. Positive aspects being greater interconnectedness with one another, easier communication from far off distances, and exposure of information while the negative effects were information overload, on children and adults alike, social isolation, especially among young adults media saturation which hampers development etc. We anticipated a modernized future with technology at its source but what we did not anticipate was the disastrous implications it had on our health and on our beloved environment, from landslides affecting mountain sides to acid rain directly impacting our precious monuments. The amount of electronic waste generated in 2021 alone, which will total 57.4Mt in 2023, is increasing by an average of 2 metric tonnes annually and is being dumped in numerous vacant environmental sites. On top of that there was 347 Mt of unrecycled e-waste on Earth calculated this year which continues to damage our environment and its surrounding flora and fauna as well as the people working and living in and around these areas. The most devastating fact was that China, India and the United States of America produced the most electronic waste in the entire world being 10129Kt, 6918Kt and 3230Kt respectively(The Roundup, 2023). Due to the high population density in these countries, a larger amount of electronic waste is generated and disposed, mainly through the informal sector which also affects everyone involved by causing a myriad of health issues such as respiratory problems, skin irritations etc. Electronic garbage is mostly an informal sector activity in India, with tens of thousands of families making a living by scavenging goods from waste dumps. Computers, printers, mainframes, calculators,

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A Comprehensive Understanding of Model Lipid Membranes: Concepts to Applications

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(Received November 14, 2022; Accepted March 10, 2023)

ABSTRACT. The cell membrane, also known as the biological membrane, surrounds every living cell. The main components of cell membranes are lipids and therefore called as lipid membranes. These membranes are mainly made up of a two-dimensional lipid bilayer along with integral and peripheral proteins. The complex nature of lipid membranes makes it difficult to study and hence artificial lipid membranes are prepared which mimic the original lipid membranes. These artificial lipid membranes are prepared from phospholipid vesicles (liposomes). The liposomes are formed when self-forming phospholipid bilayer comes in contact with water. Liposomes can be unilamellar or multilamellar vesicles which comprises of phospholipids that can be produced naturally or synthetically. The phospholipids are non-toxic, biodegradable and are readily produced on a large scale. These liposomes are mostly used in the drug delivery systems. This paper offers comprehensive literature with insights on developing basic understanding of lipid membranes from its structure, organization, and phase behavior to its potential use in biomedical applications. The progress in the field of artificial membrane models considering methods of preparation of liposomes for mimicking lipid membranes, interactions between the lipid membranes, and characterizing techniques such as UV-visible, FTIR, Calorimetry and X-ray diffraction are explained in a concise manner.

Key words: Liposomes, Phospholipids, Bilayers, Fluidity, Lipid membrane

INTRODUCTION

Cell membrane is mainly formed of lipids and proteins.[1] The relative proportions of proteins and lipids in it vary with the type of membrane, and for well characterized functional membranes, their ratio by weight (proteins to lipids) ranges from about 1.5 to 4.[3] The lipids in the cell membrane are arranged themselves as bilayer called lipid membrane, *Fig.* 1. The biological lipid membrane is essential for maintaining cell physiology and architecture. It is flexible, dynamic, fluid like, self-healing A, B, C, and D, and selectively permeable to polar solutes.[1] Lipid membranes are essential for physiological activities like cell protection and cell-to-cell communication.[4]

Morphology of lipid membrane is due to their fluidity i.e., ability to move laterally along membranes. With changes in temperature, lipid membrane undergoes thermally excited bending undulations or shape fluctuations. Whether lipids present in the lipid bilayer exist in a fluid, liquid-crystalline phase or an ordered gel phase, depend upon the type of lipids involved and the temperature. The temperature at which a lipid changes its phase from the gel to liquid-crystalline is known as melting temperature. Above this temperature, the hydrocarbon chains are tilted in a nearly all-trans conformation and disordered, and they acquire a gauche conformation which weakens the van der Waals chain interactions and it also affects the polar interaction and hydration of the phospholipid head groups.[5]

Classification of Membrane Lipids

Cell membranes mainly consist of phospholipids (in abundance, ~50%), sterol (cholesterol, ~5%) and glycolipids (~2%) as represented in *Fig.* 2.[6]

Phospholipids

Phospholipids contain phosphoglycerides (PG) or glycerophospholipids which are most abundantly found phospholipids in cell membranes. Glycerophospholipids are made up of a phosphate-containing head group and saturated or unsaturated hydrocarbon chains that are linked to a glycerol through ester bonds.[5]

Phospholipids are classified depending on the head group present; if head group is choline, then lipid is phosphatidyl choline as shown in *Fig.* 3(a), if head group is ethanolamine, then lipids is phosphatidyl ethanolamine as in *Fig.* 3(b), if head group is serine group, then lipids is phosphatidyl serine as shown in *Fig.* 3(c). Phosphatidylcholine (PC) phospholipids are mostly present abundantly in cell membranes.

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IMPROVED HEURISTIC FRAMEWORK FOR CYBER SECURITY SYSTEM ON DDOS ATTACK

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Abstract:

Nowadays, networks have adopted the always-connected concept and as time goes on, technology makes gadgets smaller and cheaper. This revolution lays the foundations for the next Internet iteration by enabling straightforward two-way communication between devices. The term "Internet of Things" (IoT) describes the emerging paradigm of the next generation of the web. Infrared sensors, laser scanners, gas indicators, RFIDs, and GPS systems are just a few examples of the many information-sensing objects and services that make up the IoT, which allows them to exchange data and coordinate their operations. Furthermore, with the recent developments in IP addressing methods and the decreasing cost of micro-controllers and CPU power, several devices and gadgets now have robust Internet connectivity.As a result, over 20 billion Internet-enabled gadgets are anticipated to increase over the next several years.

I. Introduction:

Meanwhile, the IoT isn't only for mundane uses around the home. Instead, its uses are broad and varied, including fields disparate as agriculture and industry. Manufacturers and IoT providers are rushing to get their products to market as demand for this kind of technology soars, putting users' privacy and safety at risk. Many IoT devices have security issues due to this behaviour at various implementation levels. For example, one of the largest distributed denial of service (DDoS) assaults in Internet history was initiated by the Miraibot because of weak security measures in these gadgets. The target network device's ability to function may be severely hampered by a distributed denial of service (DDoS) assault, resulting in lost revenue, data, and even increased danger to human life. While this may seem like an excessive solution in search of a problem,it is conceivable to halt the healthcare IoT system if an attack were to be started against hospitals and healthcare organizations. Message tampering, eavesdropping, and even more complex assaults like Sybil and node cloning are all possible against IoT devices and networks. And it doesn't even account for the many security holes that have persisted in the original Internet architecture. The IoT is a network with constrained resources that makes it difficult to provide the same level of security used in more traditional networks. Because of the complex and varied nature of IoT networks and the inherent restrictions and constraints of the devices themselves, a new security model is required to adequately handle security issues at all levels of the IoT paradigm. While there are undoubtedly many security difficulties and challenges, addressing concerns about trust, privacy, confidentiality, and integrity is a necessary first step in constructing a safe and resilient IoT

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In Press, Corrected Proof What's this?

Global trends in waste materials: A bibliometric analysis

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Abstract

This study conducts a comprehensive analysis of international waste management trends through bibliometric and scientific investigation, with the goal of identifying the most significant and productive authors, works, sources, and countries. The analysis utilized tools such as Biblioshiny with R Studio and VoSviewer software. A carefully designed methodology, involving keyword search, exclusion and inclusion criteria, and relevance and validity tests, was employed to select and analyse 162 articles using content analysis method.

The most relevant authors, articles, journals and countries impacting waste management studies are identified. The intellectual structure of the research emphasizes the significance of efficient waste management techniques, circular economy ideas, environmental laws, and sustainable development, particularly in underdeveloped nations. Research on certain topics like "Biodiversity," "Air Pollution," and "Drinking Water" were consistently popular over time, while others like "Plutonium" and "Acidification" had intermittent spikes in interest. Thematic mapping analysis reveals three distinct themes: motor theme focuses on human-environment interactions for sustainable development, niche theme centres on monitoring plastic pollution's impact on non-human environments, and basic theme highlights recycling and waste management for a circular economy. A theoretical framework of waste management which encompasses environmental studies, the circular economy, environmental regulations, and sustainable development is developed based on the themes identified from the study. Conclusions are drawn and Future research directions are proposed.

Introduction

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Recent development in bimetallic metal organic frameworks as photocatalytic material

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ABSTRACT

The augmented global energy demand has always motivated substantial research activities on the efficient use of solar power. In that respect, photocatalysis which is a distinctive, heterogonous catalysis has received considerable attention to transform solar energy into chemical energy. Bimetallic metal organic frameworks (BMOFs) have emerged as a class of hybrid crystalline materials contributing significantly to the field of photocatalysis. Numerous techniques have been established to prepare BMOFs with rational design and structures. The property that stands out in case of BMOFs is their huge structural tunability usually not seen in many semiconductors based photocatalysts. BMOFs show synergistic effect between the two metal species resulting in improved properties as compared to either of the two monometallic counterparts. As a result, BMOFs have a wide domain of application in catalysis, sensing, supercapacitors, batteries, solar cells, gas adsorption, drug delivery, etc. They are being utilized for photocatalytic reactions, including hydrogen evolution reaction, photocatalytic reduction of CO_2, pollutant degradation as well as organic synthesis due to their inherent flexibility to optimize their visible light photocatalytic activity. Hence, this review aims at providing an overview of the advancement made towards developing bimetallic MOFs, their derivatives, and their applications with emphasis on the photocatalytic applications.

1. 1. Introduction

In today's world the demand for energy consumption is growing gradually. The global energy crisis has led to concentrated research for developing sustainable energy conversion systems that can produce and convert solar energy into functional energy resources for various types of applications. In the context, the process of photocatalysis is effectively used for harvesting light to promote chemical reactions. Honda-Fujishima had first discovered the phenomenon of photocatalysis, which was based on photo-induced electrochemical water splitting by using titania [1]. When the photocatalytic material is irradiated by the solar radiation, electron-hole pairs are generated, and these electron-hole pairs contribute to the chemical reaction. The valence band consisting of holes and conduction band consisting of electrons are responsible for oxidation and reduction reaction on the surface of photocatalysts [2].

An excellent photocatalyst should have optimum sunlight absorption, appropriate band gap, a large excited state lifetime, high production of charge-separated states, a decent charge mobility, surface area, and stability. The photocatalytic materials such as metal oxides, metal sulfides, ternary compounds and non-metal semiconductors are used extensively from the past few decades [2,3]. However, the major bottleneck in the development of photocatalysts is their efficiency and stability. Certain photocatalysts get dissolved upon irradiation. Also, some of the semiconductor materials get corroded in aqueous medium. Titanium dioxide (TiO_2) has been attracting researchers due to its suitable properties as photocatalyst and successful conversions. However, because of its high band gap of 3.0 to 3.2 eV only UV radiation can be used to activate TiO_2. Due to this the effective use of visible light region, which is the highest percentage region of the whole electromagnetic spectra becomes impossible. Hence, there is requirement for developing visible light-responsive photocatalysts, which possess high activity and stability [4].

Recently, Metal Organic Frameworks (MOFs) are attracting attention

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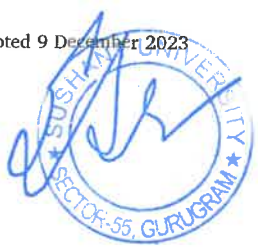

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Research Article

Tailoring MOF-5 Photocatalysts: Low-Temperature Synthesis and Solvent Variations for Enhanced Performance in Dye Degradation

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Abstract

Metal-organic frameworks (MOFs) are emerging as pivotal porous crystalline materials with diverse applications. Typically, MOFs are synthesized using solvothermal techniques at high temperatures and pressures. In this study, a novel approach was employed to synthesize zinc-based MOFs, specifically MOF-5, at low temperatures (up to 50 °C) via chemical mixing at standard pressures. Varying the temperature and solvents, N-methyl-2-pyrrolidone (NMP) and N,N-dimethylformamide (DMF), in the chemical mixing process, the highest yield of the material was observed with DMF at 50 °C (M1). Two additional samples, M2 and M3, are synthesized at room temperature using DMF and NMP, respectively. Despite similarities in XRD, Raman, and FTIR analyses confirming successful MOF-5 formation, noticeable differences in sample morphology arise due to distinct synthesis conditions, particularly solvent and temperature variations. The MOF-5 samples exhibit UV absorption with varying band gaps. Notably, when employed as photocatalysts for organic dye (methylene blue) degradation, M2 outperforms others, achieving an impressive 85% degradation under simulated solar light irradiation. This work underscores the significance of tuning MOF photocatalyst properties through tailored synthesis routes, recognizing the profound impact of morphology and elemental composition on enhancing photocatalytic dye degradation performance.

Keywords: Photocatalysis; MOF-5; organic dye degradation; synthesis parameters; water treatment

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1. Introduction

Industrial waste like synthetic dyes, solvents, and germicides are discharged directly into water bodies causing severe water pollution and health hazards to the living organisms. Organic dyes are major pollutants due to their abundant use in textile, plastic, food and paper printing industries [1]. Worldwide production of synthetic dyes is estimated to be 700,000 tons per year and about 10-15% of dyestuff is discharged into water bodies [2–4]. Therefore, removal of dye pollutants from water is a prime concern and methods like adsorption [5,6] and photocatalysis [7], are applied for water purification. Yet the effective removal of dyes from

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Fabrication of MOF5-GO Nanocomposites by Tailoring Graphene Oxide

Meena Yadav[1], Isha Saini[2,*], Sita Ram[3], Tanuj Kumar[4]

Abstract

The present paper focusses on the synthesis of graphene oxide and its nanocomposite with metal organic framework (MOF-5). Graphene oxide (GO) was prepared using modified hummer's method with different concentrations of oxidizing agent to vary the presence of functional group on the surface of GO. The presence of functional group plays a crucial role in determining the interactions between GO and MOFs. To confirm the presence of different functional groups on the surface of GO, structural and optical characterization were performed. The GO samples were used to successfully synthesize MOF5-GO nanocomposite which were studied for their structural, morphological and optical properties. FTIR and XRD analysis were performed to confirm the formation of nanocomposite. SEM was done to morphologically analyse the nanocomposite. UV-Visible spectroscopy was used to study the variation in the bandgap of samples. TGA was used to depict the thermal behaviour of GO and its nanocomposites with MOF5.

Keywords: Nanocomposites, metal organic frameworks, graphene oxide, characterization, properties.

INTRODUCTION

In the past several decades, nanomaterials and nanotechnologies have become the backbone in the material science breakthrough expansion. Carbonaceous materials have been at the forefront of this extraordinary advancement [1]. Graphene which is a single-atomic layer, 2-dimensional allotrope of carbon atom is one of its most popular isotopes in scientific community. It shows remarkable electrical conductivity, stability, thermal, mechanical properties including ultimate tensile strength, high surface area to volume ratio and high elastic properties [2, 3]. Physicists are highly interested in graphene due to its extraordinary electronic structure with linearly dispersed dirac electrons. Despite of the remarkable properties, aggregation between monolayers of graphene because of strong π-π interaction between graphene layers makes it difficult to handle and its availability limits its application. Numerous researchers suggested various derivatives of graphene to address the issue. One such derivative is graphene oxide (GO) which is an oxidized form of graphene highly rich in oxygen containing groups. GO has hydroxyl and epoxide groups at the basal lattice and carbonyl and carboxylic groups are majorly present at the edges [4, 5]. GO display high electrical conductivity, excellent chemical tolerance and large surface to volume ratio which makes it an excellent base material for fabrication of nanocomposites for numerous practical applications. Due to their excellent and impressive characteristic they are an appropriate candidate to be hybridized with polymer, metal oxides, and metal oxide frameworks (MOFs).

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Original Research Paper

Horse Race Results Prediction Using Machine Learning Algorithms With Feature Selection

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Abstract— People's interest in horse racing has skyrocketed along with its rapid expansion. Some experts and academics have studied the best practices for managing decisions and making predictions in horse racing. In the areas of categorization and prediction, applying the machine learning (ML) paradigms has demonstrated hopeful results. Betting on sports is big business, making accurate predictions in this field increasingly important. In addition, club executives are looking for classification models to better comprehend the game and develop winning plans. Research has shown that Machine Learning algorithms offer a good answer to the categorization and prediction problem in horse racing, where traditional prediction algorithms have failed. In this study, we present several ML approaches for predicting the outcome of horse races, including K-nearest-neighbor (KNN), Linear-regression (LR), Randomforest(RF), Gaussian NaiveBayes (NB), ADA Boost (BAG), along with Bagging. These models take into account several aspects of the games, including past match outcomes, player and horse statistics, information about the competition, and more. The results of the massive-scale studies showed that the RF approach produced more accurate predictions than any of the other models tested. We believe that researchers who delve into this field in the future will find our work both enlightening and useful.

Keywords— *Machine Learning, Random forest, Horse race results prediction, feature selection*

1. Introduction

Predictions in sports are typically viewed as a one-class problem (win, loss, or draw). The topic of predicting a numerical value, such as the size of a victory margin, has also been studied by a number of scholars. Predicting the outcome of a sporting event requires collecting a vast number of variables, such as past performance, match outcomes, and player information, to let various parties assess their chances of success. Bookies, fan-audiences, and punters are all concerned in guessing the results of a racing ahead of the start owing to the monetary stakes involved in making a prediction about which team is most likely to prevail [1]. After a match prediction has been made, there is still the issue of whether or not to bet on a particular horse given the odds offered by the bookmaker [2]. Sport management are also trying to develop effective ways for sizing up a possible opponent before a match. Therefore, the difficulty of forecasting sports outcomes has long piqued the interest of various parties, including the media. More and more sports-related data is being collected and stored digitally, making it possible to create sophisticated models and prediction systems to anticipate the outcomes of games [3].

Nowadays, people from all walks of life enjoy going to outdoor horse races. This sector encompasses a wide range of activities, from sports to entertainment to gambling to commerce. Every year there are 3.2M races, and the total-prize pool is worth 360 billion yuan. More than 70 countries and areas throughout the world are actively cultivating horse racing right now. Horse racing has flourished and become a major industry in many countries [4]. Horse racing serves as a catalyst for other industries, a backbone for social services and nonprofits, and a major source of revenue for the government. It facilitates social interaction and serves as a major source of amusement for most people. People today often use their membership in equestrian organizations and their own of horses as a means of displaying their individuality and social standing [5].

As people's standard of living rises dramatically, so do efforts to improve the horse racing industry. The horse racing lottery, as a subset of the wider horse racing industry, has attracted widespread interest and financial backing from the general public. The horse racing lottery has attracted a growing number of casual fans. In the United Kingdom, for instance, horse racing now generates over a billion pounds annually and is the country's second-largest sports sector, behind only football [6]. About 130 million people worldwide guess the results of horse races each year as a result of the growing popularity of the industry. People started compiling general laws across the several sorts of horse racing, looking for ways to increase the accuracy of their predictions. More academics and the general public are interested in learning how to construct a management model for making decisions in horse racing and how to use scientific methods to address issues with forecasting [7].

Artificial intelligence (AI) is an emerging field that combines the theory, methods, techniques, models, systems, and applications of human intelligence with the fast advancements in computer science. Machine learning (ML)

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Predicting Outcomes of Horse Racing using Machine Learning

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Abstract: Machine learning with its vast framework is making its way into every aspect of modern society. The segment of betting sports particularly horse racing calls for the attention from a large spectrum of research community owing to its value to the stakeholders and the amount of money involved. Horse racing prediction is a complex problem as there are a large number of influencing variables. The present study aims to contribute in this domain by training machine learning algorithms for predicting horse racing results or outcomes. For this, data for a whole racing season from 2017 to 2019 of races conducted by Turf Club of India was considered which amounts to over 14,700 races. Six algorithms namely Logistic Regression, Random Forest, Naive Bayes, and k-Nearest Neighbors) k-NN were used to predict the winning horse for each race. Synthetic Minority Oversampling Technique (SMOTE) technique was applied to the imbalanced horse racing data set and the attributes of the horse race repository were analyzed. The results were compared with other sampling methods to evaluate the relative effectiveness of this method. The proposed framework is able to give an accuracy of 97.6% which is substantially higher when compared to other similar studies. The research can be beneficial to the stakeholders as well as researchers in the same area to do further analysis and experiments.

Keywords: Machine learning, imbalanced data, SMOTE, prediction, classification model, sports betting, horse racing.

I. INTRODUCTION

Due to the betting aspect and the volatility of racing, horse racing has been one of the most exciting and entertaining sports. The 2022 Grand National (UK) recorded 21% increase in betting volume from 2019 to reach a total trading sum of £92.8 million with over 50 million bets placed through its online platform[1] .For the 2023 Grand National event, over £1,000,000 is allocated in prizes alone at United Kingdom with 600 million people watching in over 140 countries and more than 3.5 billion US dollars in the United States [2]. The global online gambling market size was valued at USD 57.54 billion in 2021 and is expected to expand at a compound annual growth rate (CAGR) of 11.7% % from 2022 to 2030 [3]. Horse racing is a business that is primarily supported by betting on horses. Prediction in horse racing has long been considered as one of the research problem. It is a challenging problem because of numerous qualitative and quantitative variables. In the present research study, it is proposed to use Machine Learning (ML) algorithms to forecast the outcome of the horse races. In their study Allinson and Merritt[4]discussed horse racing prediction using neural networks based on multilayer perceptrons. Their model considered 200 horses of two years of age only,so there is a scope for more work in this direction by taking other age groups as well. In another study Hei et al[5] used two methods namely, Hope and Resheff[6]suggested a combined method of TensorFlow with Voting system to predict winner of the races accurately. The accuracy of their predictive model was 49% which shows a scope for improvement in this area. Schumaker and Johnson[7] used Support Vector Regression using sequential minimal optimization function in Weka to assess accuracy, precision, and nature of betting in Grey Hound racing which is quiet similar to horse racing as both involve similar uncertainties. Their methodology was adapted for discrete numeric prediction instead of classification and included a dataset of 1953 races that spanned 31 different race tracks. Another study by Williams and Li[8] applied four neural network algorithms and gave the best accuracy of 74% with Back-Propagation algorithm but it needed a longer training time and more parameter selections in predicting horse races in Jamaica using a dataset of 143 Jamaican horse races. Slightly better results were obtained by Davoodi and Khanteymoori[9] as they applied five different supervised neural network algorithms and gave an average prediction accuracy of 77% on a dataset of 100 races with a trade-off between more training time and higher accuracy. In his study Silverman[10] has performed a hierarchical Bayesian study of thoroughbred horse racing and identified which horses had the greatest speed. An analysis of the 36,006 observations from the 2973 different horse races on horse tracks in Hong Kong using Bayesian modeling was done and all of the horses' running speeds were estimated and the accuracy of 21.6% was achieved. However, machine learning approaches are more efficient when compared to this methodology of finding the greatest speed and predicting the winner of the race. The authors Padurath et al[11]

SET-75

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Internet of things with artificial intelligence detection and blockchains of crop availability for supply chain management

R. Anitha and Dinesh Rai

Published Online: 5 Feb 2023

Abstract

Supply chain management is a competitive advantage for logistic companies. Before giving a product to a consumer, confirm availability. In this study, we use internet of things (IoT) input-gathering methods to check crop availability. This technology-enabled service inputs weather, moisture, temperature, and soil fertility data and outputs crop availability. Machine learning monitors and predicts crop availability by predicting weed, water, insect, and animal infiltration and crop growth. The paper suggests blockchain-based AI. Energy savings are shown. Decentralized data storage enhances supply chain visibility and quality, boosting farmer participation. Blockchain enhances supply chain security and provenance. Blockchain protects supply chain data transfers. The simulation compares existing approaches and the proposed machine learning-based blockchain. Crop feature extraction and classification are simulated. The proposed ML model is more accurate, exact, and recalled. By 2050, 70% of food will come from agriculture. On a 9-billion-person planet, manufacturers must be more efficient. This newspaper offers IoT and blockchain to tackle these issues.

Keywords

IoT, internet of things, artificial intelligence, detection, supply chain management, crop availability, blockchain, food ecosystem, food supply chain, circular supply chain management, smart applications

SET - 76

Restricted access | Research article | First published online May 23, 2024

Real-time Vital Signs Monitoring and Data Management Using a Low-Cost IoT-based Health Monitoring System

Aman Dev Mishra, Bindu Thakral, and Nitin Sharma (+1) View all authors and affiliations

OnlineFirst https://doi.org/10.1177/09720584241246926

Abstract

This study describes the creation and evaluation of a low-cost internet of things (IoT)-based health monitoring system for the continuous monitoring of vital signs such as temperature, pulse rate, oxygen saturation (SpO_2) and blood pressure (BP) (both systolic and diastolic). Along with an organic light-emitting diode (OLED) display and an ESP8266 microcontroller, the system includes BP, non-contact temperature, SpO_2 and electrocardiogram (ECG) sensors. Using the visual programming tool, Node-RED, the data from these sensors are gathered, processed and transmitted to the Google Cloud platform for archival and visualisation. The process involved mounting the sensors and microcontrollers on a special printed circuit board and designing the circuit with EasyEDA. The device measures systolic, diastolic and pulse rates from the BP sensor, as well as temperature, ECG and SpO_2 values. The system works by using three push switches

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Title

Energy-Efficient Prevention of Black Hole Attacks in Heterogeneous Wireless Sensor Networks: A Review

Abstract

Wireless Sensor Networks (WSNs) play a pivotal role in various applications, ranging from environmental monitoring to healthcare and industrial automation. However, their vulnerability to security threats, such as Black Hole Attacks, presents a significant challenge in ensuring the reliability and integrity of data transmission. Black Hole Attacks involve malicious nodes that falsely claim to have data but drop packets, leading to data loss and network disruption. As energy efficiency is a critical concern in WSNs, mitigating these attacks while conserving sensor node energy resources remains a pressing research area. Heterogeneous WSNs are characterized by the coexistence of sensor nodes with varying capabilities and energy levels, making them more challenging to secure against attacks. This review paper comprehensively explores the various strategies for the energy-efficient prevention of Black Hole Attacks in heterogeneous Wireless Sensor Networks. The paper provides a detailed introduction to Black Hole Attacks, discussing their potential consequences on network performance, and highlighting the unique challenges posed by heterogeneous WSNs. Special attention is given to techniques that balance security with energy efficiency, as maintaining a prolonged network lifetime is crucial in resource-constrained environments. This paper offers insights into energy-efficient routing protocols by investigating through routing algorithms like Node placement, Cluster formation, and black hole attack discovery and avoidance algorithm that optimize energy consumption while minimizing vulnerability to Black Hole Attacks.

Keywords

Wireless sensor networks, Heterogeneous networks, Black hole attack, Clustering, Cluster head

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SET-78

Performance Analysis of MIMO Heterogeneous Wireless Sensor Networks

Saurabh Mishra, Rakesh Ranjan, Sonika Singh, Gagan Singh

Abstract: *Wireless Sensor Networks (WSN) are widely used in remote applications related to defence and healthcare. A network with nodes having different capabilities like sensing, various computational capabilities, power-efficient communication, and a varied sensing range is called a heterogeneous wireless sensor network. Heterogeneous wireless sensor networks using MIMO wireless channels are more useful for energy-efficient multi-channel communication. MIMO applications in wireless sensor networks have the potential to enhance throughput, reduce End-to-End Delay, improve packet delivery ratios, and conserve energy in wireless sensor networks. Its implementation needs to be carefully considered in light of the specific deployment conditions and resource constraints of the network, considering proper antenna design, synchronisation mechanisms, and energy-efficient algorithms. This paper presents a comparative performance analysis of MIMO wireless sensor networks and traditional wireless sensor networks without MIMO for various Quality of Service parameters like Packet Delivery Ratio, End to End Delay, Throughput and Residual energy. The research work shows that the application of MIMO in Wireless Sensor Networks enables sensor nodes to collaborate effectively, leading to improved reliability and coverage, and also increases the network's lifetime by conserving energy in resource-constrained sensor nodes through the preservation of Residual Energy.*

Keywords: *Wireless Sensor Networks; Heterogeneous Networks; Throughput, End to End delay; packet delivery ratio; residual energy, MIMO*

I. INTRODUCTION

Energy-constrained Wireless Sensor Networks have gained considerable research attention in recent years. In such sensor networks, battery-operated sensors are expected to work for months or even years without replacing or renewing their energy, rendering energy optimisation a critical issue in system design. Multiple-input-multiple-output (MIMO), or multiple antenna communication, is one of the techniques that has gained considerable importance in wireless systems in recent years.

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MIMO technology enhances the performance of WSNs by exploiting multiple antennas on both the transmitter and receiver sides, thus improving data throughput, increasing reliability, and enhancing the coverage of wireless communication in WSNs [2]. Hence, MIMO can be applied in various WSN scenarios, including environmental monitoring, industrial automation, and healthcare applications [2], [13]. The various benefits of MIMO in WSNs are as follows: Improved Spatial Diversity: MIMO enables better reception of signals by exploiting multiple spatial paths, reducing signal fading, and improving link reliability. Increased Data Rate: MIMO allows for higher data rates by transmitting multiple data streams simultaneously over the same channel. Enhanced Coverage: MIMO can extend the coverage area of WSNs, making them suitable for larger deployment areas. At the same time, the application of MIMO in WSN faces huge challenges that need to be considered while designing a WSN with MIMO [2], [8].

1. Channel Estimation: Accurate channel estimation is crucial in MIMO systems, especially in dynamic WSN environments.
2. Hardware Constraints: Implementing MIMO in resource-constrained sensor nodes can be challenging due to power and size limitations.

The work presented in the paper has been emphasized on the implementation of the MIMO in the sensors as a hardware unit to provide energy efficient transmission.

II. MIMO IN WIRELESS SENSOR NETWORKS

MIMO is a valuable technique for enhancing the performance of wireless sensor networks. Multiple-Input Multiple-Output or sometimes referred as Cooperative MIMO is a specialized application of MIMO technology in wireless sensor networks (WSNs) which works efficiently, particularly in challenging and resource-constrained environments [4]. It enables sensor nodes to collaborate effectively, leading to improved reliability, coverage, and energy efficiency in WSN deployments [6]. It is an effective approach to increase throughput and energy efficiency through the collaboration of individual antennas working together as a virtual multi-antenna system. Multiple-input multiple-output (MIMO) has been proved as a key technology to reduce the energy consumption in communication systems [12][16][17][18]. Similar to wireless sensor networks, MIMO wireless sensor networks only have one antenna per node, and nodes are dispersed throughout the network. In order to obtain higher spatial diversity gain, also known as cooperative diversity gain, these scattered nodes create a virtual antenna array [2].

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International Journal of Computer Science & Information Technology (IJCSIT) Vol 16, No 2, April 2024

LATENCY AND RESIDUAL ENERGY ANALYSIS OF MIMO HETEROGENEOUS WIRELESS SENSOR NETWORKS

Saurabh Mishra[1], Rakesh Ranjan[2], Sonika Singh[3], Gagan Singh[4]

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ABSTRACT

Energy-constrained Wireless Sensor Networks (WSNs) have garnered significant research interest in recent years. Multiple-Input Multiple-Output (MIMO), or Cooperative MIMO, represents a specialized application of MIMO technology within WSNs. This approach operates effectively, especially in challenging and resource-constrained environments. By facilitating collaboration among sensor nodes, Cooperative MIMO enhances reliability, coverage, and energy efficiency in WSN deployments. Consequently, MIMO finds application in diverse WSN scenarios, spanning environmental monitoring, industrial automation, and healthcare applications.

This research paper presents a comparative performance analysis of MIMO wireless sensor networks and traditional wireless sensor networks without MIMO using Network Simulator NS2.35 for analysis of End to End Delay for packet transmission and Residual energy of nodes. The research work shows application of MIMO in Wireless Sensor Networks with considerable improvements in Quality of Service parameters which is achieved through Spatial Multiplexing and Diversity Gain.

MIMO enables multiple spatial streams, allowing several data streams to be transmitted simultaneously on the same channel. This increases the overall throughput as multiple sensors can transmit their data concurrently without interference. MIMO systems also provide diversity gain by transmitting multiple copies of the same data over different antennas which helps in mitigating the effects of fading and interference, resulting in a more reliable and higher-throughput communication link as compared to a SISO channel. Another advantage of employing MIMO in WSN is reduction in End-to-End delays in data transmission.

Last but not the least, MIMO can be configured to optimize the power consumption of individual sensors by adjusting the number of antennas used and transmission power levels based on channel conditions. Hence, MIMO can help to extend the network's lifetime by conserving energy in resource-constrained sensor nodes by preservation of Residual Energy.

KEYWORDS

Wireless Sensor Networks; Heterogeneous Networks; End to End delay; Residual energy; MIMO.

1. INTRODUCTION

Multiple-input-multiple-output (MIMO), or multiple antenna communication, has become increasingly significant in wireless systems in recent years. MIMO technology enhances the

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SET - 80

Sentiment Analysis on Online Social Networking Data for the Identification of Depression Using Several AI Techniques: A Literature Review

Parveen Kumari ; Alpana Jijja All Authors

Abstract:
Emotional analysis is a growing trend today to recognize the feelings of people in many circumstances in life. Data from online platforms will be used throughout the whol... **View more**

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Abstract:
Emotional analysis is a growing trend today to recognize the feelings of people in many circumstances in life. Data from online platforms will be used throughout the whole procedure, which involves an analytical and classification-based processes, and is composed of textual data, emoticons, and other types of data. In previous studies, multi-class classification offers more correct information than both ternary and binary classification. In a multiclass classification, information separated in to numerous subcategories depending on polarities. Techniques such as deep learning and algorithms of machine learning will be utilized in the process of categorization. Social media can be used for monitoring and exploring emotional states. This study presents a description of emotional analysis of publicly available data by applying different artificial intelligence approaches to identify anxiety or frustration. The study optically demonstrated that emoticons, social media texts, and data including emoticons were used to determine emotions using various intelligent approaches. Analysis results with multiclass classification using a deep learning techniques or models are more accurate.

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Awareness and Attitude towards Refractive Error Correction in Gwalior Population

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ASTRACT

Purpose: This study was designed to determine the level of awareness and attitude toward refractive error correction in Gwalior population.

Methods: A random sampling method was applied to choose subjects aged various optometry courses. A structured questionnaire with open-ended and closed ended questions was designed to gather the participants 'demographic data as well as their awareness and attitude toward refractive correction method (spectacles, contact lenses and refractive surgery).

Results: overall, 26.2% of the participants had a clear idea of them 'ophthalmologist' and 'optometrist'. 71.4%, 58.8% and 71% of respondents had no information about contact lens side effects, respectively. 68.6% of participants were not aware of the possibility of refractive surgery for improving the sight. Awareness about refractive surgery's adverse effects was only 12%.

Conclusion: Developing Gwalior with a huge population with refractive error putting a burden on overall health care. Awareness and attitude towards refractive correctionmethods was moderately low among the participants of this study. Although, ophthalmologists were the first source of consultation

SHS -20

Section A-Research paper

EVALUATION OF THE VISUAL OUTCOME IN PHACOEMULSIFICATION CATARACT SURGERY AND MANUAL SMALL INCISION CATARACT SURGERY"

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Evaluation of the Visual Outcome in Phacoemulsification Cataract Surgery and Manual Small Incision Cataract Surgery

ABSTRACT

Purpose: To compare and evaluate of visual acuity and surgically induced astigmatism in Phacoemulsification cataract surgery and manual small incision cataract surgery.

Methods: The study group included patients above 50 years undergoing cataract surgery at the hospital either by Phacoemulsification technique or manual small incision cataract surgery. Group 1 included patients who underwent Phacoemulsification with a rigid posterior chamber intra ocular lens implantation with a single temporal suture. Group 2 included patients who underwent suture less manual small incision cataract surgery with a rigid posterior chamber IOL implantation. All patients were followed up post operatively at the end of the first day, 1 week, 4th week and 6th week.

Results: Maximum number of cases in group I i.e. twenty four (80%) and twenty six (86.67%) cases in group II had post-operative best corrected visual acuity 6/9 or better than 6/9. The difference was statistically non-significant between both the groups. At the end of study i.e at 6 weeks, the mean surgically induced astigmatism was 0.966 D in group I patients and 0.82 D in group II patients. The difference in mean surgically induced astigmatism between both the groups was statistically non-significant.

Conclusion: Both Phacoemulsification and manual small incision cataract surgery are equally effective with respect to post-operative astigmatism and best corrected visual acuity if the incision size is same. Although manual small incision cataract surgery induced slightly less post-operative astigmatism

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INSIGHT INTO THE IMPACT OF VISION THERAPY ON ACADEMIC PERFORMANCE OF CHILDREN WITH LEARNING DISABILITIES AND BINOCULAR VISION ANOMALIES: A COMPREHENSIVE REVIEW

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Abstract :

BACKGROUND: In India, the frequency of learning difficulties in 8-11-year-olds is roughly 15%, with reading being the key area of concern. There is a severe lack of data on visual abilities in children with learning disabilities in Asian nations. According to the literature, 80% of children with learning disabilities have accommodation and vergence abnormalities, which interfere with reading speed, accuracy, and efficiency. The effectiveness of vision therapy in treating binocular vision anomalies is not well-established in children with learning disabilities.

SCOPE AND APPROACH: A literature search was conducted on the following online catalogs: Science Direct, PubMed, and GCU library. The total search included 2,10,759 articles of which: 1,73,276 articles were from the GCU library, 36,748 articles from Science Direct, and 735 articles from PubMed. Then excluding the articles (61) not directly related to binocular vision or learning disability resulted in a total of 34 articles in PubMed.

The focus of this review is centered on five factors related to academics in learning disability: (1) the Effect of NSBVA on reading, (2) NSBVA in children with SLD, (3) Reading problems in LD, (4) Vision-related quality of life (VR-QOL) in SLD and, (5) Efficacy of VT in BV parameters and reading performance.

KEY FINDINGS AND CONCLUSION: It is seen to have a significant impact on the vergence and accommodation group of data in these children, as well as impaired oculomotor processes, resulting in poor reading abilities.

Early diagnosis and effective care can improve the quality of life of the pediatric population, so a complete binocular vision assessment should be an obligatory practice in vision screening for the SLD group.

SHS-22

A COMPARISON OF EXTRACELLULAR TYPE OF CARDIOPLEGIA (MODIFIED del Nido) AND AN INTRACELLULAR TYPE OF CARDIOPLEGIA ((BRETSCHNEIDER) IN PAEDIATRIC PATIENTS UNDERGOING CARDIOPULMONARY BYPASS

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SHS-23

Variant Methodologies and Techniques Adopted to Determine Pyrethroids in Biological Matrices: a Critical Review

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Volume 9, pages 155–166, (2023) Cite this article

Current Pharmacology Reports

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Apoorva Sharma, Sunil Kumar, Nidhi Sharma & Monu Yadav

Abstract

Many scientists and researchers have published their work on the analysis of pesticides in biological as well as, non-biological matrices and their toxicokinetics using different separation techniques and detection procedures but no study gives a direct indication towards any "one" method or technique to carry out the procedure more effectively and efficiently. This review provides comprehensive information regarding variant bioanalytical techniques, their sensitivity, precision, and accuracy to determine the most efficient bioanalysis method for multiple pyrethroids. Since, these insecticides are extensively used in various sectors that lead to an extravagant exposure to humans, animals, and aquatic life, necessarily be showing some toxicities. These toxicities raise the need to monitor their toxicokinetics and assess the risks caused by cumulative as well

SHS-24

ASSESSMENT OF BINOCULAR MOTOR ANOMALIES AND VISUAL PERCEPTUALSKILLS IN SCHOOL GOING CHILDREN AND SPECIAL POPULATION

Yadav Kumar Roshan*[1], Sah Kumar Sunil[2], Kumar Prashant[3], Shaikh Massihuzzaman Md[4], Ali Akram[5], Chauhan Himani[6]

Article History: Received: 18.02.2023 **Revised:** 07.04.2023 **Accepted:** 23.05.2023

Abstract

Purpose: To report the frequency of binocular motor anomalies & visual perceptual skills in normal school going children & special population

Method: The study was carried out at Sarswati school, at Little Heart Special school & Nistha Special school New Delhi. Comprehensive eye examination, binocular vision assessment & visual perceptual skills with TVPS-R was carried out for 45 children in normal school & for 45 children at special schools. BV assessment was done for children with best corrected visual acuity of ≥6/9 :N6, cooperative for examination as well as free from any ocular pathologies

Result: A total of 64% have normal binocular vision, 29% have AI (accommodative insufficiency). Majority 3% have CI (convergence insufficiency) and 5% have AI with CI in normal population as well as showed that among the participants the majority 51% have AI, 49% have CI in special population. Visual perceptual skills were 37(82%) have good visual perceptual skills and 8(18%) have poor visual perceptual skills in normal population and 22% have good visual perceptual skills and 78% have poor visual perceptual skills in special population. Comparison of binocular motor anomalies and visual perceptual skills in normal &special population shows p – value <0.001 (paired t- test).

Conclusion: Non-strabismic binocular vision anomalies are highly prevalent among school children and the prevalence increases with age. With increasing near visual demands in the higher grades, these anomalies could significantly impact the reading efficiency of children. Thus, it is recommended that screening for anomalies of binocular vision should be integratedinto the conventional vision screening protocol.

Keywords: Converge Insufficiency: Special Population; Visual Perceptual Skill: Non-Strabismic Binocular Vision Anomalies: Accommodation Anomalies

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SOD-6

Interior Lighting Influences Work Efficiency and Human Behaviour

Simar Dhingra
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Abstract

Effective lighting design goes beyond simply installing electrical fixtures and must consider the specific needs and functions of the space, as well as how light interacts with the building's mechanical systems. A well-designed lighting plan can enhance the interior design of a space and create a feeling of warmth and comfort. Since light is a critical component of vision and our perception of the world around us is largely dependent on our vision, it's easy to see why neglecting proper lighting strategies in the workplace can have a significant negative impact on productivity. The negative impact of lighting on worker productivity is not limited to either harsh or dim lighting. Both types can be equally detrimental. However, by choosing natural lighting or effective lighting systems, you can improve productivity while also saving energy. The lighting in a workplace can have a positive impact on the health of employees, increase efficiency, reduce absenteeism, and ultimately lead to greater productivity.

KEYWORDS: Interior Design, Architecture, Office Design, Lighting.

INTRODUCTION

Lighting is crucial for creating a healthy workplace and has a significant impact on how people feel. Poor lighting can lead to eye strain, fatigue, and reduced performance, especially in jobs that require problem-solving and concentration. In modern commercial buildings, proper lighting design is essential for people to carry out their activities comfortably, efficiently, and effectively.

Light that contains a high amount of blue spectral component enhances performance and concentration. Decreasing the amount of blue light leads to a more relaxed state of the body. White/white control has additional benefits on the human biological rhythm and can boost motivation, concentration, and productivity, particularly for intellectual tasks.

1.1 Relation Between Work Efficiency And Light

Veitch, J. A., &Newsham, G. R. (1998)asserted that Work efficiency i.e., ability to complete a task with high-quality results in a minimal amount of time. It is typically used to describe the capacity for achieving a particular outcome. The factors that contribute to efficiency are diverse, including aspects such as temperature, access to nature, lighting, color, noise control, and indoor air quality. Comfortable thermal conditions, access to natural surroundings, and proper lighting, among other factors, are critical for creating an efficient work environment.

Having good lighting in the workplace is crucial for achieving optimal visual task performance, especially for an ageing population. Studies conducted over the past few decades have indicated that enhancing the quality of lighting from a low or moderate level can significantly improve the speed and accuracy with which objects are detected and recognised.

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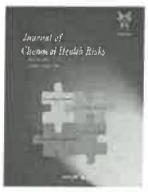

Promotion of Handicrafts and Intellectual Property Rights of the Artisans across the world: The Case for India

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KEYWORDS
Geographical Indication (GI), Intellectual Property Rights (IPR)

ABSTRACT:
The Handicrafts Industry in India is facing stiff competition from semi-handcrafted and machine made duplicates from countries like China. The past two decades have seen a rising consciousness in India to protect the traditional crafts from piracy and unauthorized duplication. This has led the Government of India to realize the importance of Intellectual Property Rights for the Crafts Sector. A nationwide campaign has been initiated to protect India's traditional handicrafts under the Geographical Indications Act. Though the existing Intellectual Property Rights (IPR) regime in India is inadequate to address all the issues involved in protection of handicrafts. The Geographical Indications Protection and Handicraft Mark, even if they are successfully implemented, can probably be powerful tools for creating value for the handicrafts sector. They are expected to bring Monetary gains in terms of increased sales turnover, higher prices and better profitability. However, the biggest obstacle is the artisans themselves. They are neither educated enough not informed enough to boldly step up and own their craft. They shy away from involving themselves in any form of writing. They may have generation of experience in their area of expertise and yet they are unable to boldly make a place exclusively for themselves in the global markets. They are also expected to bring overall socio-economic development and better lifestyle for the artisan sector. To become commercially valuable assets, Intellectual Property Rights must be transformed from mere legal concepts and enforceable rights into marketing tools that create and develop a brand value for the product. It is the contention of this paper that an effective IP based Marketing strategy will help the artisans increase their competitiveness and market value, while minimizing the risks and uncertainties involved. The IP assets must be used creatively, pro-actively and with imagination to reap their commercial benefits.

Introduction

Globalization has brought about enormous challenges to the handicrafts industry in terms of competition from similar crafts of Pakistan, Bangladesh, Srilanka, Indonesia, China and other areas across the world. The worst sufferers are no doubt the producers of unique craft products who lose their markets due to large-scale infringement of the product. Promulgation of Intellectual Property Rights in India after the TRIPS agreement has created an avenue for the protection of these unique products of the country. The use of the Intellectual Property mechanism specially the "Geographical Indications" (GIs) to protect peculiar craft products from particular regions is preventing misuse and exploitation of the 'regional brand name' and providing a "common branding" to these products. Apart from Brand Building and Marketing, IPR protection benefits artisan and crafts persons in many ways. Enhancing value of products, protecting them from piracy and thereby improving the socioeconomic status of the artisans through increased sales and profitability. The benefits accrued to Indian Handicrafts and the Handlooms sector as a result of IP protection are discussed further in this paper.

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"IMPACT OF ARTIFICIAL INTELLIGENCE IN SUPERMARKETS ON CONSUMER BUYING BEHAVIOR"

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Abstract
The research aims to study the application of digital technology in supermarkets, identify gaps between old and new technology, and identify customer needs. It collects data, conducts surveys, and understands the gap between managers' and users' views. This helps suggest suitable options and understand preferences, leading to innovation in digital technologies.
Keywords: *Interior Design, Design shodh, Communication between humans and computers, User-focused design, Digital technology.*

Introduction

Smart cities, with larger populations and sophisticated building management systems, improve urban services, cut costs, and enhance citizen-government engagement. Smart retail, including supermarkets, is a significant part of these cities. India, the world's fifth-largest retail market, contributes to over 10% of GDP and 8% of jobs. The retail sector is rapidly growing, with 15-25% of sales coming from private label brands. The luxury market in India is predicted to grow from $30 billion in 2020 to $200 billion by 2030. Modern contactless technologies are being used to enhance customer experiences.

Literature Review

The challenges faced by traditional grocery stores in competition with Indian supermarkets, placing financial pressure on suppliers and local shops (Liverpool-Tasie, A. W. 2020). The importance among the Sustainable Development Objectives for 2030, highlighting the requirement for the elimination of hunger, food safety, as well as sustainable agriculture (Saweda Lenis O. et al., 2020). The rapid growth of food systems benefits small-scale producers, who interact with various participants in the value chain. The effects of non-contractual interactions on small farmers' livelihoods are not well understood. Modest and moderate enterprises play a crucial role by providing complementary services to small-scale producers, addressing market failures and asset shortages. This, coupled with the acceptance of technology and increased productivity, contributes in relation in the direction of sustainable development objectives (Saweda Lenis O. et al., 2020). The text also notes the lack of stores with architecture and interior design rivalling worldwide supermarkets and the requirement for contactless technologies in flagship stores, especially in light of Covid-19 standards (Kent Anthony, 2011).

Retail Industry: Retailers in India face intense competition due to consumer market shifts and global economic changes. The country's retail market is the fifth-largest globally, valued at $543.2 billion in 2014. Corporate giants like RPG and Birla have established grocery chains, contributing to modernization. However, declining consumer spending, tight working capital conditions, and rising interest rates lead to shop closures and layoffs. Supermarket-format shops impact customer loyalty and store health. A corporate retail strategy is crucial

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CONTEMPORARY APPROACH TO PLASTIC WASTE MANAGEMENT, RECYCLING OF PLASTIC WASTE, AND CONSUMER ACCEPTANCE OF PRODUCTS DESIGNED FROM RECYCLED WASTE PLASTIC

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ABSTRACT

The article reviews circular economy approaches for plastic waste, including mechanical recycling and consumer perspectives on recycled plastic products. It examines plastic waste recycling scenarios in Denmark to identify challenges in improving recycling rates and meeting EU recycling targets. The quality and contamination risks of recycled plastics are key issues impacting feasibility and consumer acceptance; better contamination monitoring is needed. In developed countries, awareness of recycled plastic products is increasing, but lower in some developing countries. Consumers recognize products made from recycled plastic through textures, patterns, labels. Benefits like environmental friendliness and self-expression value drive positive attitudes, but risks around quality, safety, aesthetics, and contamination cause concerns. Purchase intentions and willingness to pay depend on product type; more information and third-party verification can improve consumer acceptance. The article advocates a circular economy approach for plastic waste, but notes consumer acceptance depends on addressing perceptions around quality, safety and contamination risks for recycled plastic products. It calls for more holistic, real-world research on the consumer perspective rather than just hypothetical surveys.

INTRODUCTION

Plastic is one of the major crucial elements that shaped our society in the 20th century (Thompson et al. 2009). Gas and oil are non-renewable fossil hydrocarbon sources that are used to make most conventional polymers. According to Plastics Europe (2012), they supply 5% of feedstock, 9% of the world's oil and gas production, and around 4% of the energy used in production (Hopewell et al., 2009). These figures have spurred continuous

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A STUDY ON THE NEED FOR ANALYZING AND MODIFYING THE COMMUNICATION CURRICULUM FOR HOTEL MANAGEMENT GRADUATES OF UTTAR PRADESH TECHNICAL UNIVERSITY

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Abstract: After a thorough scrutiny of Communication curriculum for business purposes with the course coordinators from different institutes affiliated to Uttar Pradesh Technical University, offering Hotel Management course. A needs analysis wasconducted to a group of final semester graduates undertaking Hotel Management course and to check the relevance from industry perspective industry personnel from the hospitality industry were also included in the test. This study utilized the same questionnaire for all respondents in order to investigate whether the industry needs correlate with the graduates' communication skills. The questionnaire was also formulated based on the recommendation of the language department of the Universities. The recent Communication curriculum for business purposes has revealed significant discrepancies between the graduates and the industry personnel responses especially on listening and speaking activities. However, both respondents claimed that graduates shouldhave more communication activities and less writing activities. Based on the findings, a recommended curriculum for Hotel Management graduates was designed taking into considerations the needs in learning Communication for business purposes, adapting the framework of Hutchinson and Waters (1987). It is anticipated that the recommended curriculum will benefit graduates as well as the hospitality industry.

Keywords: Hotel Management, communication curriculum, needs analysis

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SUSHANT UNIVERSITY SECTOR-55, GURUGRAM

1. INTRODUCTION

The All-India Council for Technical Education (AICTE) is a statutory body, and a national-level council for technical education, under the Department of Higher Education. Established in November 1945 first as an advisory body and later in 1987 given statutory status by an Act of Parliament, AICTE is responsible for proper planning and coordinated development of the technical education and management education system in India.

It is assisted by 10 Statutory Boards of Studies, namely, UG Studies in Eng. & Tech., PG and Research in Eng. and Tech., Management Studies, Vocational Education, Technical Education, Pharmaceutical Education, Architecture, Hotel Management and Catering Technology, Information Technology, Town and Country Planning.

In its 25 April 2013 judgment, the Supreme Court said "as per provisions of the AICTE Act and University Grants Commission (UGC) Act, the council has no authority which empowers it to issue or enforce any

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JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

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HOSPITALITY MANAGEMENT GRADUATES' PERCEPTION TOWARDS BUILDING THEIR CAREER IN HOTELS: A CASE STUDY OF DELHI NCR INSTITUTES

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Abstract

The hospitality industry in the entire world has been struggling with a genuine issue that is appealing and then retaining good quality employees. We know that students who were serious in their studies and practices can become the job generators in future and it is fundamental to understand their perception and the reality towards hospitality employment. The main objective of this study is to find out the perception of the hospitality graduates of Delhi NCR institutes regarding their mind set to build their career in the field of hospitality. Hence a self-administrated questionnaire was developed to find the importance of different factors that influences the career choice of hospitality graduates. The concluded result clearly indicated that hospitality graduates generally do not prefer to build their career in hospitality because of certain factors, however most of the respondents which was approximately (73%), indicates that if the industry offers certain factors which match with their expectation can really motivate them to join the industry. Ultimately, a set of specific corrective actions were discussed that could improve the perception of hospitality graduates towards building their career in hospitality industry.

Keywords: *hospitality graduates' perceptions, Role of Education criteria, Hospitality Career.*

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Introduction

The hospitality industry can only sustain if they are run by employees who are skilfully sound, dedicated towards their job and who can mentally take the pressure of managing the entire operations which all leads to the customer satisfaction. Since all the industry whether it is IT, medical or even production houses are directly or indirectly associated with hospitality industry and because of their compulsion to maintain a cordial relationship with hospitality industry, the growth is immense. This exponential growth is ultimately leading to an issue of non-availability of good quality staff and on the other hand because of some crucial factors it is becoming very difficult to attract and retain these required number of skilful employees as well. This problem is very complicated and there are several factors which are fundamental behind creating this void of required skillful staff.

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Global Justice: Fairness or Beyond?

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ABSTRACT:
Global justice is a critical concept that addresses the ethical and moral obligations of individuals, states, and international institutions towards creating a more equitable and inclusive world. This research paper explores the theoretical foundations, historical context, and contemporary challenges related to global justice. By examining key philosophical perspectives, international agreements, and socio-economic disparities, the paper seeks to identify potential solutions for promoting global justice and fostering a more just and harmonious global community.

Introduction

Outset

WE are living in an interconnected world where a problem in a part of the world becomes a problem of the world. This can be linked to the famous quote on account of Immanuel Kant that *"the people of the earth have thus entered in varying degrees into a universal community, and it has developed to the point where a violation of rights in one part of the world is felt everywhere."* The world has seen a shift to a concept of Globalization probably that is the reason why we hear "this is the era of Globalization" in many contexts. There is no alternative to this Globalization as it is intermixed in the contemporary cultures of the world. Globalization may be defined as a phenomenon, occurring in the world which, as a result has brought great changes in the ideologies of society, policies of the governance in countries throughout the globe. This phenomenon has even diluted the concept of sovereignty as the world has become a family or in other words borders of the countries are thrown open to this phenomenon. Even, the concept of justice is not the same as it was a century earlier than today and it has gradually changed with the dynamics of time and society. The way we look on everything in today's era *i.e.,* era of globalization and era of technology, has changed our perspective for almost everything including justice. The concept of Global Justice is often linked with the beginning of the demand of various human rights though it never been termed or explained this way but certainly it is to some extent, and we can't really deny this fact. Justice has been a sacrosanct concept which was considered very important for human existence in the past, but this concept of Justice has gone beyond this perspective now in a global world. Now it includes the justices with natural resources, environment, animals, countries and even the industries. The struggle for global justice has been a great movement across the globe; probably, that's a reason why every community and advocates of human rights and the international bodies are demanding for a universal justice which can satisfy the needs of every section of the society across borders. In the contemporary world, the whole civilized society is engaged in a joint endeavor to secure justice as it believes that injustice is lying at the roots of the society. If we proceed to understand the reality, we'll get to know that injustice is existing because of the ulterior motives of a section of people in power and dominance just to please their hoax status. The attainment of a just society has been a quest for every community in every era; and, in the complex society as of today, the thrust for justice has become much more intensified than ever.

In this paper the author will be focusing on the variation in understanding of justice as a concept and the new regime of this concept in the form of Global Justice. Further, the author will elaborate the

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UNLAWFUL CONFINEMENT: AN ESSENTIAL ISSUE IN ARAB-ISRAELI CONFLICT

By Anant Peshin[*]*, Anjali Sherawat*[**] *& Anil Dawra*[***]

ABSTRACT

Unlawful confinement, a cruel act, refers to unlawful arrest or confinement of a person without any lawful act. When considered in an armed conflict, it constitutes a war crime. The act of confining an individual unlawfully leads to gross injustice, violating the modesty and dignity of an individual. The conflict between Israel and Palestine comprising numerous incidents of unlawful confinement, include arbitrary detentions, unlawful arrests, solitary confinements, and torture of Palestinian detainees. It is very unfortunate that even Palestinian children are victimized through unlawful confinement. Such deprivations violating basic rights of individuals stand in clear contradiction to the legislation of a nation and the law governing the international community. The Rome Statute which is the governing body of the International Criminal Court has defined unlawful confinement under Article 8(2)(a)(vii)-2. It is enshrined in the common Article 3 of the four Geneva Conventions. The unlawful confinement contradicts the Right to liberty when seen in terms of law governing the human rights. Even the International Humanitarian Law states that the civilians of a nation need to be protected by the government from the offence of unlawful confinement. Though Israel has not ratified the Rome Statute, which is the governing principle of the International Criminal Court, the International Criminal Court has ruled that it had jurisdiction because the United Nations Secretary General has accepted the Palestinians accession to the treaty in 2015. The failure of the government of Israel to protect the Palestinians from the planned attacks by the groups of Jewish supremacists invites blatant violation of the civilian rights in context of this conflict, in order to ensure speedy justice, there must be an impartial body to help the exploited Arab citizens of Israel, ensuring release of wrongfully convicted individuals besides accepting the requests immediately in case of unlawful detentions.

Keywords: Unlawful Confinement, Conflict, Palestinian, Humanitarian Law etc.

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THE ECOLOGICAL CRISIS IN THE ARAVALI HILLS OF GURGAON: A STUDY

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ABSTRACT

The Aravalli Hills of Gurgaon, India, are facing a critical ecological crisis, which is a result of rapid urbanization and industrialization in the region. This study aims to assess the current condition of the Aravalli Hills and examine the major ecological challenges faced in the region. The study found that the hills have been stripped of their natural vegetation, leading to soil erosion and degradation, loss of biodiversity, and ecological imbalance. Additionally, illegal mining activities and declining groundwater levels have further exacerbated the situation.

The study highlights the need for effective measures to conserve and restore the ecological balance in the region, including reforestation, stricter enforcement of mining regulations, and promotion of sustainable practices. The study also identifies the impact of air pollution and water pollution on the local population and their health, calling for urgent action to be taken to address these environmental challenges.

The study concludes that the current ecological crisis in the Aravalli Hills of Gurgaon is a result of human activities, and it is our responsibility to take action to protect this important ecosystem. The findings of this study serve as a call to action, urging all stakeholders to work together to conserve and restore the ecological balance in the Aravalli Hills. It is time for us to take concrete steps towards a more sustainable future, and the protection of the Aravalli Hills is a crucial first step in this direction.

KEYWORDS

Aravalli, Ecology, Illegal Mining, Restoration, Urbanization

INTRODUCTION

The Aravalli Range is a range of mountains in western India, running approximately 800 km (500 mi) from northeast to southwest across the states of Rajasthan, Haryana, and Gujarat. It is one of the oldest mountain ranges in the world, with a geological history dating back to more than 1.5 billion years ago.

The Aravalli Range is known for its diverse flora and fauna, with many species of plants and animals found only in this region. The forests of the Aravalli Range are home to a variety of wildlife, including leopards, hyenas, wild boars, and antelopes.

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ANALYSIS OF IMPACT OF TOURISM ON HERITAGE AND ENVIRONMENT IN SHIMLA

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Abstract
Tourism is an important part of India's economy, and it is also an important source of income for the local communities. In recent times, there has been a growing awareness about the importance of preserving the country's cultural heritage. Tourism has brought many benefits to the region, but it has also posed some challenges. The paper aims to analyse the city of Shimla and the impact of tourism on its fragile ecosystems by studying the tourist inflow and current scenario. The rapid growth of tourism and accelerated urbanisation has placed significant strains on the region's fragile biodiversity and threatened the preservation of its historic landmarks. To address these challenges, the Indian government has implemented several policies and initiatives aimed at promoting sustainable development and preserving its unique natural and cultural heritage for generations to come. In this study, a qualitative research methodology has been adopted in the context of Shimla as a case study for understanding the impact of tourism on cultural heritage and environment. A secondary survey was conducted to understand the current scenario of tourism on built heritage and environment. The results show that tourism has both positive and negative impacts on the built heritage and environment of Shimla. However, there are still significant challenges to achieve sustainable tourism development in this region. Through the promotion of responsible tourism practices, creating partnerships, adopting a collaborative approach, and with proper planning and management, the region can ensure a sustainable future for its tourism industry.
Keywords: Responsible Tourism, Heritage, Environment, Sustainable Tourism

1. Introduction

India is a land of rich cultural heritage, which is reflected in its art, architecture, music, dance, literature, and philosophy. The country has a diverse cultural heritage that has evolved over thousands of years, shaped by the influence of various religions, rulers, and civilizations.
India's cultural heritage was greatly influenced by the arrival of the Aryans around 1500 BCE, who brought with them their own traditions, language, and religion. Over the centuries, various other civilizations, such as the Mauryan, Gupta, and Mughal empires, have also contributed to India's rich heritage. India is home to a vast number of historical monuments and sites, such as the Taj Mahal, the Red Fort, and the Ajanta and Ellora caves. These structures not only showcase India's architectural brilliance but also provide a glimpse into the country's rich history and culture.
In recent times, there has been a growing awareness about the importance of preserving India's cultural heritage. The government and various organizations have taken several initiatives to protect and promote India's heritage, such as the restoration of historical monuments, revitalization of the Mall road, promotion of eco-tourism, preservation of forests and the promotion of traditional art and crafts.
Heritage and environment are two intertwined aspects that play a significant role in India's cultural history. India is home to a diverse range of natural and cultural heritage sites that have evolved over thousands of years. These sites not only showcase India's rich cultural heritage but also provide important ecological benefits. India's natural heritage includes its vast forests, mountains, rivers, and wildlife. These natural resources are not only essential for the country's ecological balance but also for the survival of various indigenous communities that have lived in harmony with nature for centuries.
The country's cultural heritage is equally important, with numerous historical monuments and sites that showcase India's architectural brilliance and rich cultural history. However, the preservation of

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Evaluation of Energy-Efficient Retrofit Potential for Hospitals in India

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Energy Performance Index; Building energy simulation; BIM; Refurbishment; Thermal comfort; Sustainability; Assessment tool; Building envelope; Energy renovation; Roof insulation; Energy conservation; EPI; Healthcare Architecture; Energy retrofitting.

Abstract

Energy efficiency and energy conservation play a key role in building a growing economy like India. India is continuously producing and using a large amount of energy 21% is attributed to the commercial sector. Hospitals in India's energy consumption growth rates are 12-15%, so this demand for energy consumption is only going to rise. Therefore, energy retrofitting is a pressing need of the hour. This paper aims to evaluate the various possible retrofitting options from an architectural point of view that can be applied to the building envelope. The insights to be used in the retrofitting model include wall insulation, roof insulation, and double-glazing windows. The energy consumption of the hospital is evaluated with the help of the Energy Performance Index (EPI) and then all potential options of retrofitting are considered. Then, the simulation model is built for the hospital chosen for the case study with all the measures that would bridge the gaps that are identified during the evaluation. Then, the energy usage is calculated for every retrofit measure applied. The chosen case study is the Trauma Centre, Jawaharlal Nehru Medical College, Aligarh. The finding shows that retrofitting will prove to be energy efficient.

Discipline: Architecture Science (Green & Healthcare Architecture), Energy Management; Sustainability; Hospital Management.

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1 Introduction

India is one of the largest growing economies in the world, consuming and building a huge amount of energy. Maintaining the economy in its best possible state has several angles to it. Energy conservation and energy efficiency are the prime factors that play a key role in building the economy. Accelerating the process of energy efficiency is the need of the hour. Currently, buildings consume about 35% of the total energy produced Around 9% of the total energy consumption is by

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Strategies for Disaster Resilient Vernacular Architecture in the Flood-Prone Areas of Kosi Region, Bihar

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ABSTRACT

This research paper focuses on the strategies for disaster-resilient vernacular architecture in the flood-prone areas of Kosi region in Bihar. With 76 percent of the population in Bihar's northern region constantly at risk of flooding destruction, Bihar is India's most flood-prone and so frequently referred to as "Sorrow of Bihar. Vernacular architecture, which refers to the traditional buildings constructed using local materials and techniques, has proven to be resilient in such situations. This study aims to identify the characteristics of vernacular construction that make it resilient to floods, as well as to examine the challenges faced in preserving and promoting vernacular architecture in the region. The research methodology includes literature review, site visits, and interviews with architects, engineers, and local residents. The findings suggest that the ability of vernacular construction to withstand floods is due to several factors, such as the use of local materials, incorporation of flood-resistant design features, and the community's knowledge and skills in construction. However, the challenges to promoting and preserving vernacular architecture includes the lack of government support, the dominance of modern construction practices, and the changing lifestyles and preferences of the younger generation. This paper concludes that a holistic approach is required to promote and preserve vernacular architecture. This approach should include strengthening community participation, providing incentives for traditional construction practices, and incorporating vernacular architecture principles into modern construction practices. The study's recommendations can guide policymakers, architects, and engineers in developing disaster-resilient infrastructure in flood-prone areas, thereby reducing the impact of floods on communities.

Keywords: Disaster resilient, kosi river flood, vernacular architecture, housing reconstruction.

1. INTRODUCTION

The study examines the unsafe circumstances associated with conventional residences in a local community situated in the Kosi region that are vulnerable to natural disasters. Additionally, it identifies several traditional characteristics of such homes that must be maintained in future construction.

The study highlights critical deficiencies in traditional housing in terms of disaster risk reduction, revealing opportunities for new construction techniques to withstand extreme climate events.

Gujarat in India experienced an earthquake, and Bihar in India experienced flooding seven years later. putting in place housing rehabilitation schemes after a disaster.

The second-most important concern in case of climate change is an increase in riverine and inland floods, notably in parts of northern and eastern India

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AN ASSESSMENT OF THE ROLE OF E-RICKSHAW IN IMPROVING LAST-MILE CONNECTIVITY OF THE DELHI METRO

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Abstract
Last-mile connectivity plays a major role in shaping the transportation system of the city. Last-mile connectivity is the key factor that determines the role of public transportation and enhances traffic functionality in the city. It is seen that a system with strong last-mile connectivity attracts more commuters towards the use of public transport. Last-mile connectivity helps daily commuters reach their final destination from their workplace in the best possible way. E-Rickshaw is one of the ways to enhance last-mile connectivity within 1 to 2 km of the source station. A humble rickshaw is an efficient, small, and yet sustainable transport option over private transport, which has frequent time intervals and can reach spaces that a big vehicle cannot. In the rapidly growing population, commuters rely on private transport for last-mile connectivity, which causes a huge mass of traffic on the street that is above the catering limits of roads, causing traffic congestion. E-rickshaws can help modulate various roles in society and can also benefit society with ethical and economic behavior.

Keywords: Last mile connectivity, Delhi Metro, E-rickshaws, public transport, population.

Introduction

Delhi is a megacity in the northern part of India and is connected mostly by the metro rail, which is spread throughout the city. Most people commute through the metro daily as it is one of the most comfortable and affordable means of transport available in the metro city, whose roads are congested by heavy traffic volume every day. The Delhi Metro has been instrumental in ushering in a new era in the sphere of mass urban transportation in India. The swanky and modern Metro system introduced comfortable, air-conditioned, and eco-friendly services in India and completely revolutionized the mass transportation scenario not only in the National Capital Region but throughout the entire country. Apart from providing Delhiites with a comfortable public transport option, the Delhi Metro is also significantly contributing to controlling pollution and reducing vehicular congestion on the roads. The metro is almost the backbone of the city's transportation needs in the present day and caters to almost half of the population of Delhi. The locals are highly dependent on the metro service, as this assures them hassle-free travel and also thaws time travel between the commuting destinations where the metro runs. The last-mile connectivity remains a major issue in the city of Delhi, as the road is highly occupied by traffic volumes that exceed the catering limit of the road, causing congestion and traffic jams regularly. e-Rickshaws will be available at various times, which can encourage people to shift towards e-rickshaws. modulating economy and job opportunities, as well as the advantages of size and time of travel, the safety features add to the transport, which makes the journey safer for the commuters. E-rickshaw availability at the transit hub can help people transit faster and more efficiently, both economically and efficiently, without the headache of traffic. This can provide relief for last-minute rushes, which generally occur at the transit hub. The last junction usually faces problems of not having last-mile connectivity and making it more complex to travel due to the unavailability of transport means, which can be eradicated by the introduction of the e-rickshaw, which can be government-operated and can have standard fares.

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IMPACT OF THE INFORMAL SECTOR ON THE ECONOMY OF DELHI NCR

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ABSTRACT: *The informal sector is an integral part of the Indian economy, especially in the National Capital Region (NCR) of Delhi. The informal sector comprises unregistered and unorganized economic activities, including small-scale manufacturing, street vending, and household services. This research paper aims to analyze the impact of the informal sector on the economy of Delhi NCR. We have conducted an extensive review of the literature on the informal sector and its impact on the economy. The findings show that the informal sector significantly provides employment opportunities, especially for low-skilled and uneducated workers. However, the sector also faces challenges such as a lack of formalization, weak bargaining power, and inadequate access to credit and other resources. Our study suggests that policymakers should focus on promoting formalization, enhancing access to credit and technology, and providing social protection to the workers in the informal sector.*

This paper also studies how covid-19 impacted the informal sector. There are an estimated 4.92 million informal workers in Delhi, India, comprising over 80% of the city's total workforce. This report presents Delhi's findings from Round 2 of the WIEGO-led COVID-19 Crisis and the Informal Economy study that was conducted in mid-2021 to assess how specific groups of informal workers and their households were experiencing COVID-19 resurgences and ongoing economic strains, and what extent (if any) they had recovered.

1. Introduction

The Indian economy relies heavily on the informal sector, particularly in Delhi's National Capital Territory (NCT). Street vending, small-scale manufacturing, and household services are among the unorganized and unregistered economic activities in this sector. Over the past few decades, Delhi NCR's informal sector has expanded rapidly due to urbanization, population growth, and the rise of the service sector. Unskilled and low-skilled workers, in particular, are particularly well-served by the sector's employment opportunities.

The informal sector's impact on Delhi NCR's economy is the subject of this study. The paper examines the informal sector's impact on employment, GDP, and affordable goods and services. The paper also talks about the problems that the informal sector has to deal with, like the fact that there isn't much formalization, the bad working conditions, and the lack of access to social protection. The paper also includes recommendations for actions that policymakers can

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INFORMAL SECTOR IN URBAN AREA AND ITS IMPACT: (A CASE STUDY OF GUWAHATI CITY)

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Dr Himadri S Dey, Associate Professor, Department of Planning and Development , Sushant University, Gurgaon , Haryana

Abstract
The informal sector in urban areas plays an important role in providing employment and income to a large number of people, especially those who may not have access to formal employment opportunities. However, it can also have negative impacts on planned development in urban areas, including inefficient land use, lack of regulation, and the presence of informal settlements. This paper explores the impact of the informal sector on planned development in Guwahati, a rapidly growing urban area in northeastern India. Through a review of literature and analysis of case studies, the paper identifies challenges and opportunities for incorporating the informal sector into urban planning processes in Guwahati. The excess population migrating from rural to urban areas cannot be absorbed by the urban formal sector alone. In addition to this, a large portion of rural migrants are generally unskilled and have limited education and hence they are unable to get jobs in the urban formal sectors. So they are compelled to absorb themselves in urban informal sectors because entry to this sector is free and easy.

Introduction

Migration has been an age old concept, human migration can be tracked since the time of human evolution. When humans migrated in search of food, shelter, good weather and safety. However, these days such migrations take place in search of better jobs, better opportunities and good source of income. Migration can hence be defined as physical movement of humans individually or in groups from one place to another in search of better amenities and facilities.

And from this migration if filtered, there are two sectors of people that migrate to urban areas that are informal and formal. The informal sector has been a subject of interest for policymakers, academics and development practitioners for many years. This sector is characterized by unregulated and often illegal economic activities, including street vending, waste picking, and small-scale manufacturing. Historically, the informal sector, known as the traditional economy, had to die with economic growth. However, informal trade is not only permanent but widespread during this period. Moreover, despite the widespread misconception that the informal economy is less profitable and exists separately from the formal economy; It has become a huge influence into office, commercial and large link to legal business also includes because it creates, trades, distributes and provides services to the legal business (ibid.). The most common types of work in the informal economy are housework, house sellers, and temporary jobs in construction and agriculture.

Assam has been experiencing a huge surge of rapid urbanization in recent years. Within the State, the urbanization process was the strongest in Kamrup District. The rapid urbanization that has been fueled profusely because of the explosive growth of its Prime City Guwahati, which holds 89.18% of the district's urban population.

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ABSTRACT

The programmes to reduce poverty are broken down into five categories: self-employment, wage employment, food security, social security, and urban poverty alleviation. Because there are more impoverished people in our country than anywhere else in the world, rural development and poverty reduction continue to be one of the main priorities of the national development programme. In India, programmes aimed at reducing poverty are generally associated with rural development. The community's participation, especially that of the impoverished, has improved the programmes' achievement of their objectives. By empowering the poor to solve their own financial issues, such initiatives not only helped to eliminate poverty. As poverty is on the rise, it is necessary to decentralise the activities by bolstering the panchayat raj institutions.

Over 40 crore poor people live in India, but they lack the means to access the consumption basket that serves as the benchmark for poverty. 83.36 percent of these were located in rural areas. 2 33% of the poorest people live in India and are considered to be below the poverty line. Given that one of the main goals of the development planning process has been to eradicate poverty, such a high incidence of poverty is cause for concern. Poverty is, in fact, a global problem. The goal of sustainable development for humanity is viewed as requiring its eradication. Therefore, reducing poverty in India is essential for achieving both national and global objectives. The majority of the rural poor are wage earners in agriculture, small and marginal farmers, and sporadic employees engaged in non-agricultural enterprises. For households that rely on land-based activities for their livelihood, poverty is caused by small landholdings and their low productivity. Poverty is also sustained by a weak educational foundation and a lack of other practical skills. A huge percentage of the population is compelled to seek employment in professions with incredibly low levels of productivity and earnings because of the weak physical and social capital base. For those responsible for planning and implementing development projects, creating employment possibilities for the unskilled workforce has been a significant concern. One of the main themes of India's planning process has been the reduction of poverty. The three main pillars of India's anti-poverty policy for urban and rural areas are human development, economic growth promotion, and targeted interventions to address the multifaceted character of poverty. The contribution of economic expansion to the population's access to greater work opportunities has long been understood. The growth-oriented strategy has been strengthened by a focus on particular industries that give individuals more possibilities to take part in the growing process. The planning process has gradually internalised the numerous aspects of poverty related to health, education, and other essential services. Despite the implementation of special programmes, nothing has changed in the lives of Indians. In light of the aforementioned discussion, I have attempted to focus on India's genuine poverty in this paper, as well as the union government's initiatives and their effects.

Keywords: Poverty Alleviation programmes, Poverty, India

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ORIGIN AND GROWTH OF THE CITY (VARANASI)

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Dr. Himadri Shekhar Dey, Assistant Professor, Department of Planning & Development, Sushant University Haryana, India.

Abstract:

Today's cities are based on the growth of the cities, which is based on the local economic development. Different policy makers have different ideas of cities' growth which change over time. There are imperfect cities, which are not planned by any planner but still functioning better than planned cities. Different cities have different growth patterns on the bases of historical, religious, monumental, economical and tourism. Factors that have contributed to the rise of cities and their transformation from small settlements into large urban areas.

Varanasi, a city in the Uttar Pradesh province of northern India, has a legendary history that dates back thousands of years. This old city has expanded and changed over time, becoming a thriving urban hub with a diverse population.In this summary, we will look at Varanasi's origin and growth of the city. We will look at the city's planning and cosmic planning qualities, as well as its historical and cultural significance.We will learn more about this unique city and its current role in the globe by carefully examining Varanasi's history and development. The city has problems as it continues to grow, and we will look at the reasons that have contributed to its growth and success. This paper summarizes the origin and growth of such a city.

Keywords: Growth, Concave, Plan, Development, Trade, Settlement

I. INTRODUCTION

The "most ancient continuously living city in the world" is Varanasi, the "sacred city" of India. The city is distinctive for its representations of traditional Indian architecture, art, and religion, and it continues to be a live embodiment of this culture today. Banaras is the most advanced center of civilization in terms of maintaining cultural traditions.

Varanasi has long been a center of learning, drawing academics and researchers from all over the world. Numerous esteemed institutions, including Sampurnanand Sanskrit Vishwavidyalaya, Banaras Hindu University, and the Central Institute of Higher Tibetan Studies are located in the city and provide courses and programs in a wide range of subject areas.

For many years, now no one should object to the premise that Varanasi was already an old city, a thriving Centre of religion, culture, philosophy, trade, and study. Kashi existed before Athens was only a concept. Even when Rome wasn't present anywhere, Kashi was there. Even before Egypt existed, Kashi was present. Varanasi is timeless in its existence, continuing to exist and will endure throughout eternity. Cultures have come and gone, cities were created and buried.

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LAND VALUE CAPTURE AND ITS FINANCIAL IMPLICATIONS IN INDIAN CONTEXT

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Dr. Himadri S. Dey, Assistant Professor, Department of Planning and Development, School of Art & Architecture, Sushant University

Abstract
Land is a major economic resource for any state. Economy generation sets the backbone of any planning related activity. The demand, supply, availability, amenities and value are determined by the human settlement around the land. Land related revenues play a major role in building the economic base of any state in India. Therefore, it is crucial to improvise and regulate the land value capture mechanism for the well functioning of Indian cities. Land value capture mechanism shall be taken into consideration while master planning of Indian cities. The research paper aims to analyse the mechanism of Land Value Capture through secondary research and formulation of a set of indicators to assess the land value capture mechanism for Indian cities. Further, the research paper aims to formulate recommendations for improvising the LVC mechanism of Indian cities.
The paper strongly highlights upon the role of LVC in Urban Planning, the mechanism, financial implications and legal framework related to Land Value Capture. The research paper also lays out some of the important case studies related to LVC in Indian Cities. On the basis of the secondary study and case studies, the paper lays out a framework of indicators to assess the LVC mechanism of cities and draws recommendation to improvise this mechanism for Indian cities.
Keywords: Land Value Capture, Economy, Central Business District, Finance, Taxation

I. Introduction

The research topic, "Land Value Capture and Its Financial Implications in the Indian Context," is situated within the dynamic and rapidly evolving landscape of urban development in India. The background and context of this research elucidate the multifaceted challenges and opportunities that underscore the significance of examining Land Value Capture (LVC) as a financial strategy for addressing the burgeoning urbanization and fiscal demands in the Indian subcontinent.
Land is a major asset in any country. People are the source who's demand governs the availability, amenities and price of this asset. A major aspect in the determination of value of a land asset is the formation of a Central Business District (CBD). The formation of a CBD determines the availability of amenities in a certain radius of the asset. These amenities determine the value of the land asset. The determinance of the land value is an advantageous aspect for the local economy of the state. The land value capture is a major aspect that draws the fiscal requirements of the state.

1.1 The Urbanization Imperative in India

India, as one of the most populous countries globally, is experiencing a seismic demographic shift marked by a profound urbanization imperative. The country's urban population is projected to surge, with the majority of its citizens migrating from rural to urban areas. This profound demographic transformation is fuelled by economic opportunities and the allure of urban living, creating a substantial and growing urban population. This rapid urbanization, while emblematic of India's growth, presents unprecedented challenges.
As the number of people living in Indian cities continues to swell, the pressure on urban infrastructure, housing, and public services escalates significantly. Existing urban infrastructure struggles to accommodate the burgeoning urban population, leading to infrastructural deficits and a rising demand for new urban projects and facilities. This demographic transition necessitates substantial investments in urban development to meet the infrastructural and housing needs of the urban populace.

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Pradhanmantri Sangrahalaya, or the Prime Minister's Museum, in Delhi, opened its doors to the public in April-May 2022, after being in the making for many years. According to the official website, "The Pradhanmantri Sangrahalaya has employed technology-based interfaces to encompass heterogeneity in content and frequent rotation ...read more

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PRADHANMANTRI SANGRAHALAYA, DELHI

Ar. Savar Suri

Pradhanmantri Sangrahalaya, or the Prime Minister's Museum, in Delhi, opened its doors to the public in April–May 2022, after being in the making for many years. According to the official website, "The Pradhanmantri Sangrahalaya has employed technology-based interfaces to encompass heterogeneity in content and frequent rotation of the display. Holograms, virtual reality, augmented reality, multi-touch, multi-media, interactive kiosks, computerised kinetic sculptures, smartphone applications, interactive screens, experiential installations, etc. enable the exhibition content to become highly interactive. Because this is a tale of continuity, the Teen Murti Estate, where India's first prime minister, Shri Jawaharlal Nehru, lived for 16 years, served as the ideal setting for Pradhanmantri Sangrahalaya."

Beginning with the newly upgraded and technologically cutting-edge Nehru Museum building, where exhibits on the life and contributions of Shri Jawaharlal Nehru are now fully on display, the Sangrahalaya is a seamless fusion. A segment of the new panorama features a variety of his uncommon gifts from throughout the world that were never displayed before. Every Indian prime minister since independence is honoured in the Pradhanmantri Sangrahalaya, which also serves as a narrative account of how each one has helped the country advance over the past 75 years. It is a narrative of teamwork and compelling evidence of the democratic triumph of India. Our honourable prime ministers have represented every social group and status, indicating equal access to democracy and showing diversity. Each person made a significant contribution to the processes of growth, social cohesion, and economic empowerment that allowed India to truly define independence. The museum features 7.5 hours of interactive information that takes visitors on a thorough tour of each Prime Minister's vision for the nation. Peeking into the future and understanding how the nation has been influenced by former leaders of the country are two big benefits of revisiting the past.

The entire museum is a sight to behold, starting with the 3D-printed national emblem that rotates over the entryway. An attractive mobile installation of many kinetic LED lights that hang from the ceiling adds to the charm. It envelops the viewer in a kaleidoscope of patterns from the magnificent Tiranga, sets the tone for the remainder of the tour, and directs visitors to the exhibits.

It consists of two buildings: Building I and II. Building I is the older building or PM Jawaharlal Nehru's erstwhile residence, and Building II is the newly constructed state-of-the-art museum, a truly world-class technological experience.

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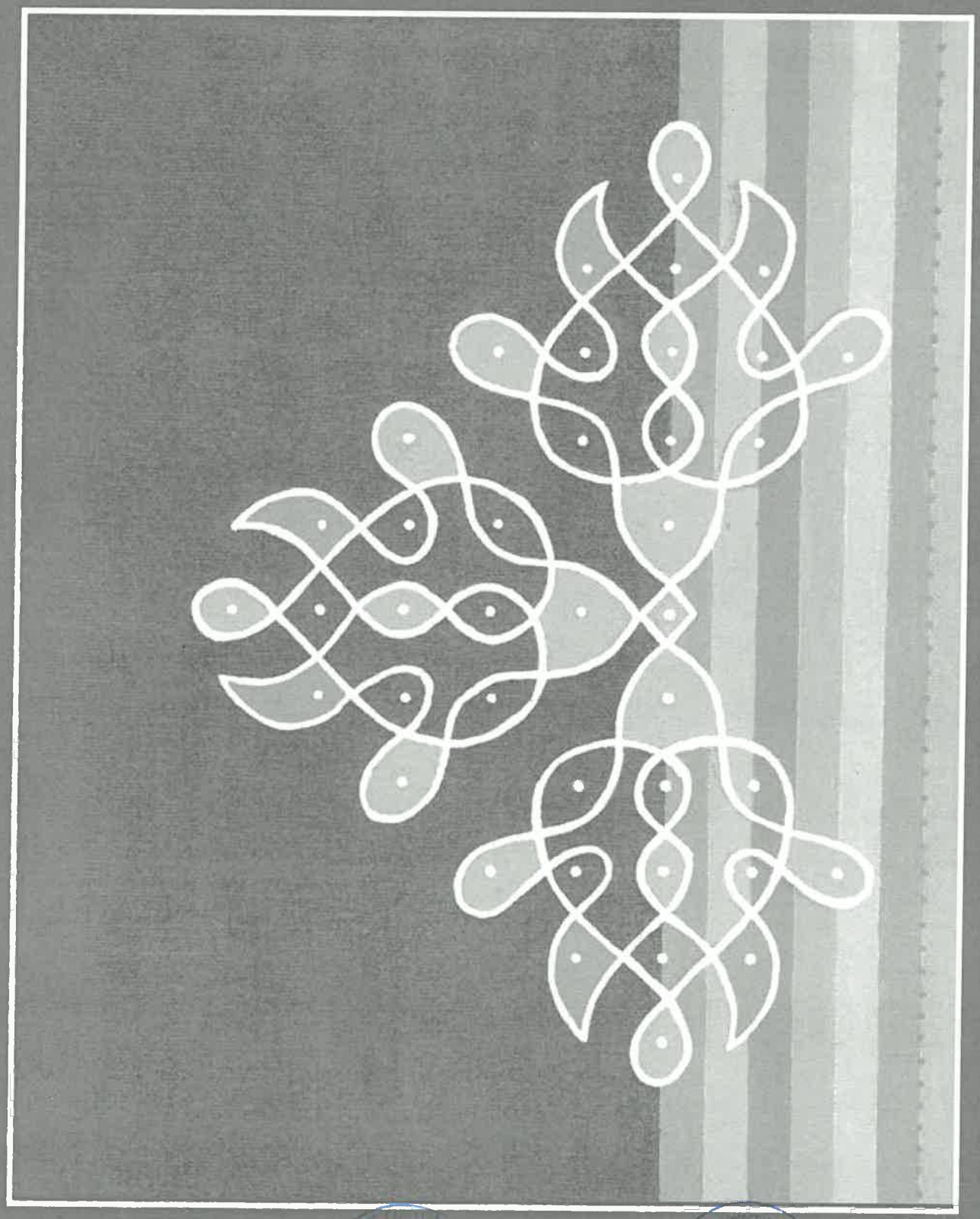

CONTENTS

ARTICLE

Architecture and Heritage in Cinema

The Built and Unbuilt

By Ar. Savar Suri

Built heritage has shaped the visual language of Indian cinema in the form of backdrops and visual motifs. There is a unique relationship between these two visual art forms. India has a rich history and diverse architectural styles that have developed as a result of the influence of various dynasties, such as the Mughals, Rajputs and Cholas to name a few. The art of cinema in India has evolved and grown, starting with Mughal-E-Azam, to an icon like Gadar. There is a profound impact of Indian cinema on society, its ability to connect with audiences emotionally and its power to shape popular culture, similar to how architecture as art also affects society.

The Representation of Architecture in Indian Cinema

Architecture and built heritage are depicted and utilised in various genres of Indian films, including historical epics, regional cinema, and contemporary films. This is achieved primarily by the use of architectural heritage and iconic landmarks as visual backdrops in Indian cinema, wherein these architectural sites become integral to the storytelling process, creating a sense of time, place, and atmosphere. Also, monuments are sometimes used as backdrops for storytelling, highlighting their significance in conveying historical narratives and cultural contexts. These architectural gems also sometimes assume the role of characters, influencing the emotions and actions of the film's protagonists.

Often there is an effort by the director, writer and set designer to create striking and iconic shots capturing the grandeur and beauty of architectural sites and bringing them to life on the big screen, sometimes with music. To illustrate this, specific examples from Indian cinema can be cited. For instance, the iconic song "Bol Na Halke Halke" from the film "Jhoom Barabar Jhoom" (2007), showcases the Taj Mahal and explores its emotional impact on the audience. The Taj is also shown as a backdrop in the song "Suno Na Sangemarmar" from the film "Youngistaan" (2014), coming onto the screen in conjunction with the lyrics corresponding to it. There is also a rich depiction of Mughal forts and palaces in Bollywood films, with a particular focus on the Red Fort and Chandni Chowk, for instance in films like "Fanaa" (2006) and "Bajrangi Bhaijaan" (2015). There is widespread use

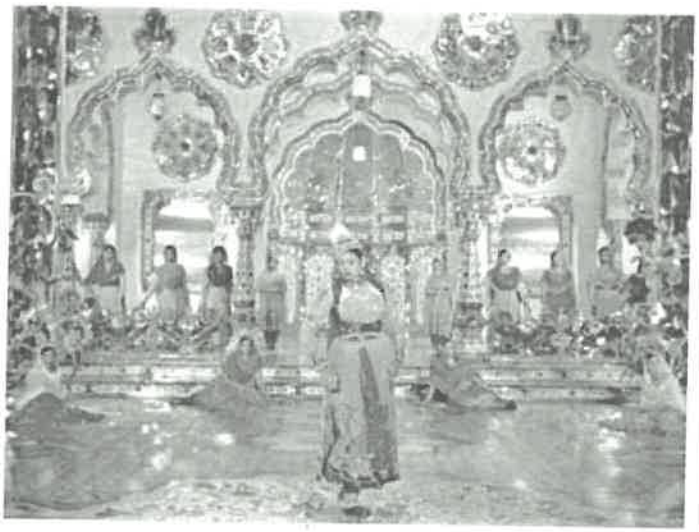

Fig. 1: Still from the famous dance sequence in "Mughal-E-Azam" (1960). *Source: Deepesh Salgia and Shapoorji Pallonji & Co. Ltd.*

Development of MSMEs in India: challenges vs. Govt policies

Pooja Nanda and Vikas Kumar

Published Online: 29 Jul 2023

Abstract

Micro, small and medium enterprises (MSMEs) have been recognised as a global engine for growth and employment. They are a major contributor to gross domestic product (GDP), exports and jobs, playing a crucial role in improving the socio-economic profile of a country. Thus, it is vital to increase the competitiveness of MSMEs through the creation of an efficient legal, regulatory and administrative system. This can enhance their accessibility to finance, technology and skilled human resource. Present work highlights the challenges faced by MSMEs in India and their associated impact. The aspects covered include the technology, human resource, operations and policies. These challenges have been mapped to the policies and schemes of Govt of India, which can contribute to the development of MSMEs. Need for the effective implementation of policies as well as better coverage of MSMEs have been recommended.

Keywords

MSME, MICRO, small and medium enterprise, technology adoption, Govt policy, small business, Make in India

SOB-71

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Exploring the boundaries of Neuromarketing through systematic investigation

Shikha Bhardwaj [a], Gunjan A Rana [b], Abhishek Behl [c], Santiago Juan Gallego de Caceres [d]

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https://doi.org/10.1016/j.jbusres.2022.113371

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Abstract

Neuromarketing literature has grown remarkably in recent years. Although the field has generated a diverse body of knowledge, we still find a dearth of studies classifying the existing literature into research themes and further presenting known and unknown aspects of Neuromarketing from a business and management viewpoint. To bridge this gap, the present study conducted a systematic literature review of Neuromarketing from 2011 to 2021, with a sample of 100 peer-reviewed articles. Based on rigorous review and thematic analysis of 41 relevant research articles, four research themes were identified – 1) Phenomenon, 2) Application, 3) Bright side, and 4) Dark side of Neuromarketing. Further, a theoretical framework of neuromarketing effect on consumer behaviour was presented. Future research thrust areas in theory, application, methodology, and evidence were identified.

The Role Played by Interactive Whiteboards in the Intersection of Technology, Visual Learning, and Learner Motivation

Bhanu Arora, Jagat Narayan Giri

Abstract

The purpose of this study article was to ascertain the impact of interactive whiteboard utilization as a teaching technique on participant engagement. In particular, it was hoped to determine whether information delivered on an interactive whiteboard would result in a greater level of participant involvement. The usage of an interactive whiteboard in the learning setting was also investigated in order to see if methodology had an effect on the degree of participant engagement. In other words, does the way the whiteboard is used affect how engaged the audience is? Participants in the study included 82 learners and 5 trainers. An interactive whiteboard was used by the trainer to provide a lesson in each of the 5 classes. The training session's learners were handed surveys to fill out after the instruction. Another survey was filled out by the trainers. A clear preference for interactive whiteboards in the classroom was revealed by the results of the polls. To implement changes in upcoming training sessions, the outcomes will be utilized to inform future technology investment decisions.

How to Cite

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Issue

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Section

Articles

Journal of Survey in Fisheries Sciences 10(3) 787-796 2023

Natural Occurrence, Toxicity, Health Implication Of Mycotoxin In Fruits And Their Derivative Products: A Comprehensive Examination

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Abstract
Mycotoxins are natural secondary metabolites produced by filamentous fungi and are commonly found in both food and feed. These toxic compounds are primarily generated by fungal species belonging to Aspergillus, Fusarium, Penicillium, and Alternaria. The presence of mycotoxins in the food chain raises significant concerns for human health, as these compounds can induce severe toxicity even at low doses. The contamination of fruits with mycotoxins not only poses health hazards but also leads to substantial economic losses, particularly for countries engaged in exporting such food commodities. Among the mycotoxins commonly found in fruits and their processed products are aflatoxins, ochratoxin A, patulin, as well as Alternaria toxins such as alternariol, alternariol methyl ether, and altenuene. These mycotoxins are carcinogenic, immunosuppressive, neurotoxic, genotoxic, teratogenic, and also cause some complications like cerebral edema, impaired child growth, balkan endemic nephropathy, etc. The objective of this study is to conduct a comprehensive review on the toxicity of major mycotoxins, their natural presence in fruits, dried fruits, juices, wines, and various processed products. The review also focuses on the available analytical methods for detecting these mycotoxins and discusses the strategies employed for their control and mitigation.

Keywords: Food safety, Mycotoxin, Aspergillus, Fusarium, Penicillium, Alternaria

INTRODUCTION

It is well known in this era & in this century that fruit juices are one of the major sources of vitamins (with low calory), minerals which they may serve as antioxidants, and also play a crucial role in preventing numerous ailments and disease like diabetes mellitus, heart diseases, dermatological problems, cancer and even aging in men & women[1] to which their consumption was so high these days both men & woman, elders and children. Mycotoxins are basically natural products having low molecular weight that are created as secondary metabolites by some threadlike-like fungi species, which mostly. There are almost 400 metabolites classified & termed as mycotoxins of which less than or a dozen are found to be very deleterious to human beings when exposed to them through direct intake of such toxins via food kinds of stuff, vegetables, fruits, meat, eggs, and even dust that are contaminated with these toxins[3] etc. These mycotoxins are usually produced by different fungi/molds mainly from Aspergillus, Alternaria or Claviceps, Fusarium & Penicillium genera respectively[4]. It has been shown that in one study that raw materials usually were found to have tolerated higher contamination levels (excluding the consumable) than the Completed goods, and these fugal metabolites are practical unavoidable contaminants in foods and feeds right from pre/post harvesting depending on the level of care/sanity given during these agricultural processes[5]. And this has also being seen that it occurs as a result of dilution effect (during formulation) with noncontaminated ingredients when preparing the final product likewise the potential reduction in negative effects through processing. Therefore, the concentration of mycotoxin in the final product is expected to be lower than in the raw material. Toxin formation can occur both in the field and during the storage of agricultural commodities, whether in their raw or processed states food[6]. But it is well known that plants typically evolve efficient detoxification system to counteract fungal infections. It has being shown in one study that these mycotoxins are usually released from the food by the process of digestion as a result of administration of food that has been tainted or polluted with harmful substances into the stomach[5]. It was being found that natural acids (e.g., tartaric acids, malic acids, citric acids) found in fruits imparting tartness to fruits inhibit bacterial spoilage by reducing the Ph, thereby creating an environment less conducive to bacterial growth. This pH of fruit can vary among the different species of fruits, to which usually ranges from <2.5 to 5.0 which discourages bacterial growth but well tolerable for many fungal species[7]. The mycotoxins which are deleterious to human being and most commonly found mycotoxin in fruits and their processed products are *aflatoxins, ochratoxin A, patulin and Alternaria toxins* respectively[8]. Currently in this century it has being reported that almost all the developed and most of the developing countries have their own maximum levels (MLs) of mycotoxin being established for certain food commodities and feed are regulated to safeguard both animal and public health as well[7].

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UGC CARE Group 1

AN OVERVIEW OF THE THERAPEUTIC PLANTS USED IN THE TREATMENT OF CANCER AND OTHER AILMENTS

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ABSTRACT:

Cancer is a prominent global cause of mortality, affecting a growing population of individuals. Approximately 6 million new cancer cases are diagnosed globally every year, highlighting its

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AFJBS

African Journal of Biological Sciences

Journal homepage: http://www.afjbs.com

Research Paper

Open Access

Preparation and Assessment of Herbal Lip Balm by using Butea Monosperma Flowers

Riya Sangelia[1], Neelam Dhankhar[2], Shoaib Khan[3] and Sunil Kumar[4]

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ABSTRACT

The cosmetic industry has witnessed a significant shift towards natural and herbal products in recent years, aligning with the global trend of embracing a more sustainable lifestyle. This transition is evident in the growing demand for herbal cosmetics, which are regarded as invaluable gifts from nature. Among these products, lip care items such as lipstick, lip balm, and lip jelly play a pivotal role in enhancing facial beauty and maintaining lip health. Across history, a plethora of natural ingredients have been harnessed for lip care, with documented usage tracing back to ancient civilizations such as the Egyptians. Notably, The Butea monosperma flower, commonly referred to as the flame of the forest, presents medicinal properties and serves as a cosmeceutical ingredient owing to its antifungal, antibacterial, and anti-inflammatory attributes, among others. Evaluating the quality of lip balm products involves assessing performance parameters such as color, odor, spreadability, pH, texture, and skin compatibility. This abstract highlights the importance of herbal cosmetics, particularly in lip care, and underscores the significance of evaluating product quality to ensure consumer satisfaction and safety.

Key Words: Cosmetic, lip balm, Herbal, color, consumer, lip care

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SHS-29

Research

Formulation and Assessment of Herbal Toothpaste utilizing extract from Pomegranates, Amla, Alum and Clove Oil

Baibhaw Kumar[1], Nimish Batra[2*], Deepti Chauhan[3], Pooja Mehra[4]

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Article History
Received: 28/03/2024
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DOI:
10.62896/ijpdd.1.6.5

Abstract:

The preparation and evaluation of a unique herbal toothpaste using extracts from clove oil (Eugenia caryophyllata), pomegranates (Punica granatum), amla (Phyllanthus emblica), and alum (potassium aluminumsulfate) are shown in this work. Pomegranate peel, amla fruit, alum, and clove oil were used in the formulation process to extract bioactive components, which were then included into a toothpaste base. The toothpaste was subjected to physicochemical characterisation in order to assess variables like stability, viscosity, and pH. Using standardized microbiological assays, the antibacterial activity of the herbal toothpaste was evaluated against common oral pathogens, such as Porphyromonasgingivalis and Streptococcus mutans. Additionally, in vitro and in vivo tests using animal models were used to examine the toothpaste's capacity to prevent plaque formation and lessen gingival irritation. The developed herbal toothpaste outperformed conventional toothpaste controls in terms of antibacterial effectiveness against tested microorganisms, according to the results. It also showed encouraging results in preventing the production of plaque and decreasing gingival irritation, suggesting that it could be a useful dental hygiene solution. Clove oil added to the herbal toothpaste formulation enhanced its analgesic and antibacterial qualities, balancing the effects of alum, amla, and pomegranate extracts. Eugenol, the main component of clove oil, has been demonstrated to have strong antibacterial action against dental pathogens and to relieve gingivitis and toothaches. The herbal toothpaste that has been created using extracts of pomegranates, amla, alum, and clove oil shows promise as a means of improving dental health. Utilizing these natural constituents' synergistic benefits, the toothpaste provides a secure and efficient substitute for traditional oral hygiene solutions. In order to confirm its effectiveness, safety, and long-term advantages for maintaining oral health, more clinical research is necessary.

Keywords: *Pomegranate extract, Amla extract, Alum, Clove oil, Dental plaque, Antimicrobial, Pain relief, Antibacterial, Antioxidant, oral pathogens.*

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1. Introduction:

In recent years, there has been an increase in knowledge and preference for products made from herbs, notably in the personal care and oral hygiene categories. Herbal formulations provide a natural alternative to traditional products, typically providing numerous benefits without the potential negatives associated with synthetic components.[1]Among these herbal developments, herbal toothpaste has acquired popularity due to its perceived safety and effectiveness. The purpose of this study is to investigate the formulation and efficacy of a unique herbal toothpaste using extracts from pomegranate, amla (Indian gooseberry), alum, or and clove oil.[2][3][13][16].Each of these components has long been revered for its therapeutic properties, particularly in relation to dental health.

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Review

Breast Cancer Post Market Monitoring of Drugs & Procurement Strategies

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Article History
Received : 20/03/2024
Revised : 22/04/2024
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Abstract

Breast cancer represents a formidable global health challenge, necessitating continual advancements in treatment modalities and healthcare delivery. This research paper explores the pivotal intersection of post-market monitoring of breast cancer drugs and strategic procurement strategies, aiming to optimize patient outcomes while ensuring accessibility and affordability. Beginning with an overview of the current landscape, this paper investigates the methodologies and regulatory frameworks governing post-market monitoring breast cancer drugs. It scrutinizes the strengths and limitations of existing surveillance mechanisms, including spontaneous reporting systems and real-world evidence generation, and examines emerging trends such as Pharmacovigilance in digital health platforms. This paper delves into the complexities of drug procurement, analyzing various strategies employed by healthcare systems and stakeholders to enhance accessibility and affordability.

Keywords: *Breast Cancer, Raloxifene, Tamoxifen, Bioavailability, Treatment, Toxic, Breast, Patient, Mechanism.*

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1.Introduction

Breast cancer a disease in which cells in the breast grow out of control. There are different kind of breast cancer. The kind of breast cancer depends on which cells in the breast turn into cancer. Mainly breast cancer begins in the ducts or lobules it can spread outside the breast through bloods vessels and lymph vessels. When breast cancer spreads to others parts of the body, it is had metastasized. Men and women are both affected but women experience it more frequently.

What is breast cancer

Most frequently from the lobules that supply the milk ducts with milk or the inner lining of the milk ducts. Cancers that start in the ducts are called ductal carcinomas, and cancers that start in the lobules are called lobular carcinomas.

Types of Breast Cancer

There are many types of breast cancer

1. Ductal carcinoma in citu (DCIS)
2. Invasive Ductal Carcinoma
3. Inflammatory Breast Cancer
4. Metastatic Breast Cancer
5. Some other specific types.

2. Etiology

When you're told that someone have breast cancer, it's natural to wonder what may have caused the disease.

- But no one knows the exact causesof breast cancer.

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Research

Formulation and Evaluation of Anti-Aging Cream Using Red Grapes Peel Extract

Bharat Rana[1*], Harsh Rana[2], Saurabh Saraswat[3], Pankaj Mahotra[4]

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Received : 20/03/2024
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Abstract:

Aging is a natural process that affects everyone. As we age, our skin undergoes various changes, such as the loss of elasticity, the appearance of fine lines and wrinkles, and the development of age spots. Exposure to ultraviolet radiation from the sun is a significant extrinsic factor that generates reactive oxygen species (ROS), damaging dermal collagen and elastic fibers, leading to wrinkles, dryness, pigmentation, and loss of elasticity over time. While these changes are inevitable, there are ways to minimize their impact and maintain a youthful appearance. One such way is by using herbal anti-aging creams. In this article, we will explore the preparation of a herbal anti-aging cream using red grape peel extract which is rich in antioxidants and its potential benefits for the skin.

Keywords: *Reactive Oxygen Species (ROS), anti-ageing, radiation, oxidative stress, pigmentation, red grape peel.*

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1. Introduction

Skin aging is a natural biological process influenced by both intrinsic and extrinsic factors. Intrinsic aging, also known as photoaging, is primarily caused by exposure to ultraviolet (UV) radiation from the sun. Over time, UV rays generate reactive oxygen species (ROS) that damage dermal collagen and elastic fibers, resulting in wrinkles, dryness, pigmentation, and loss of elasticity. However, the rate of skin aging can be slowed down through external intervention. One effective approach is the topical application of plant extracts rich in antioxidants, which can combat UV-induced aging at the skin level. Red grape peels in particular, contain high levels of resveratrol and other flavonoids that can help protect the skin from UV radiation and oxidative stress [1].

2. Benefits of Red Grape Peel Extract for the Skin: The use of red grape peel extract in skincare products, such as anti-aging creams, can offer several benefits for the skin. Some of the key benefits include:

i. **Antioxidant Protection:** The antioxidants present in red grape peel extract help neutralize free radicals and protect the skin from oxidative stress. This can help prevent the breakdown of collagen and elastin, proteins that are essential for maintaining the skin's firmness and elasticity.

ii. **Reduction of Wrinkles and Fine Lines:** Grape peel extracts have demonstrated anti-aging effects by attenuating wrinkle formation and improving skin hydration and brightness [1],[2],[3].

iii. **Brightening of the Skin:** Red grape peel extract contains natural acids, such as tartaric acid, which can help exfoliate the skin and brighten the complexion. [[7],[8],[9]]

5-52-30

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Research

Formulation and evaluation of antidiarrheal sachet using *Dalbergia sissoo* leaves

Ujjwal Verma[1*], Amit Kr. Pandey[2], Saurabh Saraswat[3], Manvi Aggarwal[4]

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DOI: 10.62896/ijpdd.1.5.4

Abstract:

Diarrhoea represents a global health concern, affecting millions of individuals every year. In the quest to discover effective remedies, the focus has shifted towards the exploration of natural alternatives. One such candidate is Dalbergia sissoo, commonly known as Indian Rosewood, a plant with a rich history of traditional medicinal use. This article delves into the exploration of Dalbergia sissoo and its potential as an anti-diarrhoeal agent.

Keywords: *diarrhea, sachet, Dalbergia sissoo, phytotherapeutics*

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1. Introduction to *Dalbergia sissoo*

Dalbergia sissoo or Indian Rosewood is a plant that has been subjected to significant scientific study due to its diverse phytochemical composition and potential medicinal applications. The primary focus of this study is the anti-diarrhoeal properties of a formulation derived from this plant.

The purpose of this investigation is to combine traditional knowledge with modern scientific methodologies to understand the pharmacological mechanisms at play in *Dalbergia sissoo*. The plant's rich phytochemical profile forms the basis for exploring its potential role in managing diarrhoea. [1]

2. Botanical Description of *Dalbergia sissoo*

Dalbergia sissoo, also known as Indian rosewood or sheesham, is a medium to large-sized deciduous tree belonging to the family Fabaceae. It is native to the Indian subcontinent and is commonly found in the foothills of the Himalayas. [2]

The tree is known for its durability and resistance to termites, making it a valuable resource for timber. Beyond its economic value, *Dalbergia sissoo* also has cultural significance in various regions. [3]

Fig 1- Dalbergia Sissoo Tree

Fig 2- Fruits of D.sissoo

Fig 3- Leaves of D.sissoo

3. Phytochemistry of *Dalbergia sissoo*

The phytochemical profile of *Dalbergia sissoo* encompasses a diverse range of compounds, including flavonoids, tannins, alkaloids, terpenoids and saponins. These compounds contribute to the tree's therapeutic potential, particularly its anti-diarrhoeal activity. [4]

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JCARR
JOURNAL OF CLINICAL ADVANCES AND RESEARCH REVIEWS

Acceptance Letter

Date: 27/04/2024

Manuscript I'd: JCARR/24/2/03

Type of Manuscript: Research

Title: Formulation of Herbal Mouth Ulcer Gel using Guava leaves Extract and Clove Essential oil

Email: siddharthg521@gmail.com

Dear,

Siddharth Goel*, Dr. Neelam Dhankar

Department of Pharmacy, School of Health Sciences, Sushant University, Gurugram

We are pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical Advances and Research Reviews (JCARR).

Your manuscript underwent a thorough peer-review process, and the reviewers recognized the significance and quality of your work. We believe your research will make a valuable contribution to our journal and the scientific community at large.

To proceed with the publication process, we kindly request that you complete and sign the attached Copyright Transfer Agreement. This form ensures that we have the necessary permissions to publish your work in JCARR. Additionally, please review the attached proofs carefully and provide any corrections or feedback within 24 Hours. Your prompt attention to this matter will help maintain the publication schedule.

We appreciate your dedication to advancing research and are honored to include your work in JCARR. If you have any questions or require further assistance, please do not hesitate to contact us.

Thank you for choosing JCARR as the platform for your research. We look forward to publishing your manuscript in an upcoming Volume-1, Issue-2, 2024.

Available online on http://www.jcarr.in/

Best regards,

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Editor In-Chief

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Sujata Publications
GET YOUR DREAMS INKED

SHS-33

JCARR
JOURNAL OF CLINICAL ADVANCES AND RESEARCH REVIEWS

Acceptance Letter

Date: 27/04/2024

Manuscript I'd: JCARR/24/2/01

Type of Manuscript: Research

Title: Formulation and evaluation of herbal mosquito Repellent cream using Tagetes erecta L. & Mentha piperita L.

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Dear,

Akash Kumar[1*], Mohit Sharma[2], Dr. Neelam Dhankhar[3]

[1,2,3]School of Health Sciences, Department of Pharmacy, Sushant University, Gurugram, Haryana, India*

We are pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical Advances and Research Reviews (JCARR).

Your manuscript underwent a thorough peer-review process, and the reviewers recognized the significance and quality of your work. We believe your research will make a valuable contribution to our journal and the scientific community at large.
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SHS-34

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Research

Formulation of Nutraceutical Tablets Using Nutmeg and Cinnamon

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Abstract:
Nutraceuticals are dietary supplements that provide health benefits beyond basic nutrition. They are derived from natural sources such as plants and are often used to prevent or treat various chronic diseases. Nutmeg (Myristica fragrans) and cinnamon (Cinnamomum zeylanicum/cassia) are two spices that have been traditionally used for their medicinal properties, and have gained attention as potential sources of nutraceuticals. Formulating nutraceutical tablets from nutmeg and cinnamon could provide a convenient and effective way to deliver their health benefits. However, manufacturing nutraceuticals into capsules and tablets is a tedious process that requires careful formulation and evaluation. This article will review the potential of nutmeg and cinnamon as nutraceutical ingredients, and discuss the formulation and evaluation of nutraceutical tablets containing these spices.

Keywords: *Nutraceuticals, Dietary supplements, Health benefits, Nutmeg, Cinnamon, Medicinal properties, Nutraceutical tablets*

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1. Introduction:

Dosage forms are pharmaceutical drug products in the form in which they are marketed for use, with a specific mixture of active ingredients and inactive components (excipients), in a particular configuration (such as a capsule shell, for example), and apportioned into a particular dose. Tablets are defined as unit dose, temper evident solid preparations containing one or more active ingredients. Conventional drug delivery systems like tablets and capsules often dissolve rapidly in the gastrointestinal tract for absorption into the bloodstream give rise to inordinately high drug concentrations in plasma. The concept of making utility of food as health promoting factor beyond its nutritional value is gaining acceptance with in public arena and among scientific community. Nutraceuticals contain health- supporting ingredients or natural components that have an ability health benefit for the body.

A nutraceutical is a product isolated or purified from foods that is generally sold in medicinal forms not usually connected with food. [2]. The functional component of the food must be standardized in the nutraceutical product and generate under good manufacturing practices (GMPs).

Various benefits of nutraceuticals are may help us live longer, may increase the health asses of our diet, help us to abstain from particular medical conditions, have a psychological advantage from doing something for oneself and may be sensed to be more "natural" than traditional medicine and less likely to produce unpleasant side effects. Nutraceuticals normally contain the required amount of lipids, protein, carbohydrates,

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Research

Formulating a Natural, Effective Anti-Dandruff Shampoo with Rice Starch and Flaxseed

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Abstract:

The constant evolution of scientific research has led to the development of innovative solutions for common problems. One such issue that has plagued the majority of the population is Dandruff. Dandruff is a common scalp disorder characterized by flaking, itching and irritation. While conventional anti-dandruff shampoos contain synthetic ingredients that can be harsh on the scalp, there is growing interest in developing natural, plant-based alternatives. Rice starch and flaxseed are two promising ingredients for formulating a mild, effective herbal anti-dandruff shampoo. This article will delve into the formulation and evaluation of an anti-hair fall shampoo that utilizes the nourishing properties of rice starch and flaxseed.

Keywords: *Rice starch, Flaxseed, Dandruff, Scalp, Flaking, Itching,*

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1. Introduction

Dandruff is a common scalp condition characterized by flaking, itching and irritation. The primary culprit behind dandruff is a yeast known as Pityrosporum, which disturbs the scalp's health [1,15]. While there are many commercial anti-dandruff shampoos available, they often contain harsh synthetic ingredients that can further irritate the scalp. As a result, there is growing interest in developing natural, plant-based anti-dandruff shampoo formulations that are effective yet gentle on the scalp [[1]]. Rice starch and flaxseed are two promising natural ingredients that have been studied for their potential use in anti-dandruff and other personal care products. Rice starch acts as a natural absorbent and thickening agent [[2]], while flaxseed contains beneficial compounds like lignans that can soothe and nourish the scalp [[3]]. These natural ingredients promise an effective and safer alternative to conventional anti-dandruff shampoos, which often carry adverse side effects like hair loss and irritation [15] In order to formulate this innovative shampoo. We delve into the mixture of rice starch and flax seeds, both renowned for their hair benefits. The aim is to produce an anti-dandruff formulation, that not only tackles dandruff but does so with minimal risk to the user's scalp health or overall well-being. [16] This article will guide you through the process of formulating such a shampoo, from understanding the benefits of each ingredient to the evaluation of the final product.

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Understanding Dandruff

Dandruff, a common scalp condition, manifests as flaky skin on the scalp and can be attributed to several factors, each influencing the scalp's health in different ways. Understanding these causes is crucial for effective treatment:

- **Irritated and Oily Skin**: Known medically as seborrheic dermatitis, this condition affects oily areas of the body, including the scalp, causing red, greasy skin covered with flaky white or yellow scales.[17]
- **Yeast-like Fungus (Malassezia)**: This fungus lives on the scalps of most adults but can sometimes irritate the scalp and cause more skin cells to grow. When these extra skin cells die and fall off, they mix with the oil from the hair and scalp, forming dandruff.[17]

SHS-36

Analysis of price variation & formulation aspects of different brands of cefixime marketed in NCR region

Analysis of price variation & formulation aspects of different brands of cefixime marketed in NCR region

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Keywords: Dissolution, Disintegration, Friability, Hardness, Defects

Abstract

Abstract

Cefixime tablets are frequently recommended by doctors to cure bacterial infections. Cefixime tablets are commonly prescribed to treat bacterial infections. This antibiotic medication can work either as bacteriostatic or bactericidal. In the NCR region,

Aim & Objective

To identify the Price Variability Among certain brands of Cefixime available NCR region

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CERTIFICATE OF PUBLICATION

This is to certify that the article entitled

ARCHITECTURAL STUDY OF WOMEN'S SPACE WITHIN HOMES: PAST AND CONTEMPORARY

Authored By

Dr. Suruchi Modi

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SAA-65

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Poverty Alleviation Programmes

(INDIA)

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ABSTRACT

The programmes to reduce poverty are broken down into five categories: self-employment, wage employment, food security, social security, and urban poverty alleviation. Because there are more impoverished people in our country than anywhere else in the world, rural development and poverty reduction continue to be one of the main priorities of the national development programme. In India, programmes aimed at reducing poverty are generally associated with rural development. The community's participation, especially that of the impoverished, has improved the programmes' achievement of their objectives. By empowering the poor to solve their own financial issues, such initiatives not only helped to eliminate poverty. As poverty is on the rise, it is necessary to decentralise the activities by bolstering the panchayat raj institutions.

Over 40 crore poor people live in India, but they lack the means to access the consumption basket that serves as the benchmark for poverty. 83.36 percent of these were located in rural areas. 2 33% of the poorest people live in India and are considered to be below the poverty line. Given that one of the main goals of the development planning process has been to eradicate poverty, such a high incidence of poverty is cause for concern. Poverty is, in fact, a global problem. The goal of sustainable development for humanity is viewed as requiring its eradication. Therefore, reducing poverty in India is essential for achieving both national and global objectives. The majority of the rural poor are wage earners in agriculture, small and marginal farmers, and sporadic employees engaged in non-agricultural enterprises. For households that rely on land-based activities for their livelihood, poverty is caused by small landholdings and their low productivity. Poverty is also sustained by a weak educational foundation and a lack of other practical skills. A huge percentage of the population is compelled to seek employment in professions with incredibly low levels of productivity and earnings because of the weak physical and social capital base. For those responsible for planning and implementing development projects, creating employment possibilities for the unskilled workforce has been a significant concern. One of the main themes of India's planning process has been the reduction of poverty. The three main pillars of India's anti-poverty policy for urban and rural areas are human development, economic growth promotion, and targeted interventions to address the multifaceted character of poverty. The contribution of economic expansion to the population's access to greater work opportunities has long been

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INFORMAL SECTOR IN URBAN AREA AND ITS IMPACT: (A CASE STUDY OF GUWAHATI CITY)

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Abstract
The informal sector in urban areas plays an important role in providing employment and income to a large number of people, especially those who may not have access to formal employment opportunities. However, it can also have negative impacts on planned development in urban areas, including inefficient land use, lack of regulation, and the presence of informal settlements. This paper explores the impact of the informal sector on planned development in Guwahati, a rapidly growing urban area in northeastern India. Through a review of literature and analysis of case studies, the paper identifies challenges and opportunities for incorporating the informal sector into urban planning processes in Guwahati. The excess population migrating from rural to urban areas cannot be absorbed by the urban formal sector alone. In addition to this, a large portion of rural migrants are generally unskilled and have limited education and hence they are unable to get jobs in the urban formal sectors. So they are compelled to absorb themselves in urban informal sectors because entry to this sector is free and easy.

Introduction

Migration has been an age old concept, human migration can be tracked since the time of human evolution. When humans migrated in search of food, shelter, good weather and safety. However, these days such migrations take place in search of better jobs, better opportunities and good source of income. Migration can hence be defined as physical movement of humans individually or in groups from one place to another in search of better amenities and facilities.

And from this migration if filtered, there are two sectors of people that migrate to urban areas that are informal and formal. The informal sector has been a subject of interest for policymakers, academics and development practitioners for many years. This sector is characterized by unregulated and often illegal economic activities, including street vending, waste picking, and small-scale manufacturing. Historically, the informal sector, known as the traditional economy, had to die with economic growth. However, informal trade is not only permanent but widespread during this period. Moreover, despite the widespread misconception that the informal economy is less profitable and exists separately from the formal economy; It has become a huge influence into office, commercial and large link to legal business also includes because it creates, trades, distributes and provides services to the legal business (ibid.). The most common types of work in the informal economy are housework, house sellers, and temporary jobs in construction and agriculture.

Assam has been experiencing a huge surge of rapid urbanization in recent years. Within the State, the urbanization process was the strongest in Kamrup District. The rapid urbanization that has been fueled profusely because of the explosive growth of its Prime City Guwahati, which holds 89.18% of the district's urban population.

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LAND VALUE CAPTURE AND ITS FINANCIAL IMPLICATIONS IN INDIAN CONTEXT

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Abstract
Land is a major economic resource for any state. Economy generation sets the backbone of any planning related activity. The demand, supply, availability, amenities and value are determined by the human settlement around the land. Land related revenues play a major role in building the economic base of any state in India. Therefore, it is crucial to improvise and regulate the land value capture mechanism for the well functioning of Indian cities. Land value capture mechanism shall be taken into consideration while master planning of Indian cities. The research paper aims to analyse the mechanism of Land Value Capture through secondary research and formulation of a set of indicators to assess the land value capture mechanism for Indian cities. Further, the research paper aims to formulate recommendations for improvising the LVC mechanism of Indian cities.
The paper strongly highlights upon the role of LVC in Urban Planning, the mechanism, financial implications and legal framework related to Land Value Capture. The research paper also lays out some of the important case studies related to LVC in Indian Cities. On the basis of the secondary study and case studies, the paper lays out a framework of indicators to assess the LVC mechanism of cities and draws recommendation to improvise this mechanism for Indian cities.
Keywords: Land Value Capture, Economy, Central Business District, Finance, Taxation

I. Introduction

The research topic, "Land Value Capture and Its Financial Implications in the Indian Context," is situated within the dynamic and rapidly evolving landscape of urban development in India. The background and context of this research elucidate the multifaceted challenges and opportunities that underscore the significance of examining Land Value Capture (LVC) as a financial strategy for addressing the burgeoning urbanization and fiscal demands in the Indian subcontinent.
Land is a major asset in any country. People are the source who's demand governs the availability, amenities and price of this asset. A major aspect in the determination of value of a land asset is the formation of a Central Business District (CBD). The formation of a CBD determines the availability of amenities in a certain radius of the asset. These amenities determine the value of the land asset. The determinance of the land value is an advantageous aspect for the local economy of the state. The land value capture is a major aspect that draws the fiscal requirements of the state.

1.1 The Urbanization Imperative in India

India, as one of the most populous countries globally, is experiencing a seismic demographic shift marked by a profound urbanization imperative. The country's urban population is projected to surge, with the majority of its citizens migrating from rural to urban areas. This profound demographic transformation is fuelled by economic opportunities and the allure of urban living, creating a substantial and growing urban population. This rapid urbanization, while emblematic of India's growth, presents unprecedented challenges.
As the number of people living in Indian cities continues to swell, the pressure on urban infrastructure, housing, and public services escalates significantly. Existing urban infrastructure struggles to accommodate the burgeoning urban population, leading to infrastructural deficits and a rising demand for new urban projects and facilities. This demographic transition necessitates substantial investments in urban development to meet the infrastructural and housing needs of the urban populace.

SAA-66

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ORIGIN AND GROWTH OF THE CITY (VARANASI)

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Abstract:

Today's cities are based on the growth of the cities, which is based on the local economic development. Different policy makers have different ideas of cities' growth which change over time. There are imperfect cities, which are not planned by any planner but still functioning better than planned cities. Different cities have different growth patterns on the bases of historical, religious, monumental, economical and tourism. Factors that have contributed to the rise of cities and their transformation from small settlements into large urban areas.

Varanasi, a city in the Uttar Pradesh province of northern India, has a legendary history that dates back thousands of years. This old city has expanded and changed over time, becoming a thriving urban hub with a diverse population.In this summary, we will look at Varanasi's origin and growth of the city. We will look at the city's planning and cosmic planning qualities, as well as its historical and cultural significance.We will learn more about this unique city and its current role in the globe by carefully examining Varanasi's history and development. The city has problems as it continues to grow, and we will look at the reasons that have contributed to its growth and success. This paper summarizes the origin and growth of such a city.

Keywords: Growth, Concave, Plan, Development, Trade, Settlement

I. INTRODUCTION

The "most ancient continuously living city in the world" is Varanasi, the "sacred city" of India. The city is distinctive for its representations of traditional Indian architecture, art, and religion, and it continues to be a live embodiment of this culture today. Banaras is the most advanced center of civilization in terms of maintaining cultural traditions.

Varanasi has long been a center of learning, drawing academics and researchers from all over the world. Numerous esteemed institutions, including Sampurnanand Sanskrit Vishwavidyalaya, Banaras Hindu University, and the Central Institute of Higher Tibetan Studies are located in the city and provide courses and programs in a wide range of subject areas.

For many years, now no one should object to the premise that Varanasi was already an old city, a thriving Centre of religion, culture, philosophy, trade, and study. Kashi existed before Athens was only a concept. Even when Rome wasn't present anywhere, Kashi was there. Even before Egypt existed, Kashi was present. Varanasi is timeless in its existence, continuing to exist and will endure throughout eternity. Cultures have come and gone, cities were created and buried.

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The Paradigm Shift of the Lgbtq Community in India: A Study Concerning the Future of Same-Sex Marriage and Conjugal Rights

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Author

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Abstract

The LGBTQ community has been fighting for decades, and various movements are taking place around the world. While there have been notable advancements in LGBTQ rights activism in India in recent years, obstacles still exist on both a social and legal level. Although the government must make sure that these rulings are broadly accepted by society, the courts have been crucial in rendering just and equitable verdicts. Unfortunately, neither the federal government nor the state governments have taken concrete steps to support LGBTQ people, and social acceptance is still elusive

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Section
Articles

THE CHANGING PERSPECTIVE ON HOMOSEXUALITY IN INDIAN CULTURE

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Abstract
In 2018, a ray of hope finally broke through the lengthy veil of prejudice that has surrounded LGBTQ people in India. The historic decision that decriminalized consenting gay conduct was a major victory in the fight for equality. But it's important to understand that, despite its significance, this legislative shift is only the start of a much-needed shift in public opinion. LGBTQ people have suffered greatly, sometimes even from inside their own families and society at large. The community has been forced to the periphery of understanding and acceptance time and time again.
Although the Indian Penal Code, 1860 formerly had a particular section that dealt with same-sex desire, the historic Navtej Singh Johar case compelled an analysis of these antiquated statutes. By decriminalizing consenting same-sex sexual behavior (Section 377, IPC, 1860), the Honourable Supreme Court made a daring move. It's important to remember that section 377 of IPC, 1860, still applies and punishes nonconsensual intercourse. Even if legalization is an important step, it is not enough to provide LGBTQ people the social and legal respect they are due. This research paper aims to offer a perceptive synopsis of the current situation that this minority group is facing. It aims to spread knowledge and debunk the damaging myths that have supported their marginalization. This research is about to illuminate the difficulties faced by people in this community by utilizing an abundance of social data and behavioral patterns. By doing this, we hope to promote a more accepting society and highlight the reality that these persons are just like everyone else and should be treated with respect and dignity they are neither unique nor odd.
Keywords: LGBTQ, Same-Sex Relations, Homosexuality, Indian culture, Socio-Legal Justice

INTRODUCTION

The term "human being" refers to a member of the "homo sapiens" species, which suggests that a person is more developed mentally than an animal. It is, in essence, all men, women, and children who can think, which distinguishes them from the animal kingdom. Moreover, it might also link to a "natural person," that is, a person having a unique personality as opposed to a "legal person." All people are included under the broad phrase "human being," Which makes no distinction between persons depending on their sexual beliefs. In our constitution, Article 14, ensures the right to equality before the law for everyone.[1] Unfortunately; earlier a particular clause in the Indian Penal Code[2] that made same-sex relationships illegal for a whopping 158 years. Even after the highest judicial system of India (Supreme Court) ruled in 2018 that homosexuality is unconstitutional, many in Indian culture still believe that homosexuality is wicked or even a mental illness. On the other side of the coin, several progressive nations, like Norway, Denmark, Finland, and Belgium, firmly support same-sex marriage and fiercely reject any discrimination based on sexual choices. In Indian society, opinions about same-sex weddings or relationships that are consensual have gradually changed. Our goal in writing this article is to clarify the present situation of LGBTQ people in Indian society.

RESEARCH OBJECTIVES

To analyze the current state of affairs for LGBTQ people, this research paper aims to answer the following important questions:
1. Is it intrinsically abnormal to be gay?

[1] The Constitution of India. Art.14.
[2] The Indian Penal Code. 1860 (Act 45 of 1860). s.377.

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Research Article

Educational Administration Theory and Practice

Contract Labor Trends And Regulations:Asia Pacific (Apac) Countries Perspective

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ARTICLE INFO

ABSTRACT

Contract labour is referred to as contingent workforce around the world. Many, if not most, organizations now use a combination of contingent and non-contingent staff. A contingent worker can be a freelancer, independent consultant, contractor, part-timer, on-call worker, or someone with another form of alternative employment arrangement.Contingent workers operate on a project-based model. meaning they are engaged specifically for particular tasks or projects, rather than being hired for ongoing, continuous employment. In essence, they are brought in as needed, depending on the requirements of each project. Unlike permanent employees who have ongoing roles within the organization, contingent workers are typically not guaranteed ongoing work beyond the scope of the current project they are hired for.
In this paper we review the trends in engagement of contract labor legal frameworks governing contingent labor in various APAC nations, including China, Vietnam, Thailand, Malaysia, Singapore, Indonesia, Hong Kong, South Korea, Taiwan, Australia, and New Zealand.

Introduction

The utilization of contract labor has witnessed a remarkable surge across the Asia Pacific (APAC) region in recent years, reshaping the dynamics of workforce management and employment practices. As organizations grapple with the evolving demands of the global economy, the adoption of contingent workforce strategies has emerged as a pivotal solution, offering flexibility, agility, and access to specialized expertise.
Amidst the myriad of reasons prompting businesses to embrace contingent workforce solutions, four primary rationalizations stand out prominently. First, the imperative for flexibility in personnel planning has compelled organizations to turn to temporary workers, enabling them to swiftly adjust their workforce in response to fluctuating market conditions and project demands, all while circumventing the constraints associated with permanent hires. Second, the imperative of maintaining operational continuity drives the adoption of contract labor, as temporary workers step in to fill vacancies during staff shortages, ensuring seamless workflow and productivity even amidst challenging circumstances.
Third, the pursuit of access to specialized expertise propels organizations to engage contingent workers who bring forth niche skills and knowledge essential for specific projects or peak periods, thereby bolstering efficiency and innovation without the burden of permanent overheads. Lastly, the desire for an extended evaluation period motivates employers to enlist temporary workers, providing a window to assess their performance, cultural fit, and compatibility before committing to permanent hiring decisions, thereby mitigating the risk of mismatches.As businesses across APAC countries navigate the complexities of workforce management, understanding the trends and regulations surrounding contract labor becomes indispensable.

Trends of Engagement of Contract Labour in APAC

Companies around Asia Pacific (APAC) are employing contingent workforces, with some stating in a new report that they want to extend their use. The contingent workforce consists of short- and fixed-term contractual employees, freelancers, and independent contractors who are outsourced to agencies. According to the most recent business study report from PERSOLKELLY, was conducted in a cross-section of industries in 12 markets in Asia Pacific namely India , China, Vietnam, Thailand, Malaysia , Singapore ,Indonesia, Hong