3.2.1

Index

Educational Administration: Theory and Practice
2023, 29(4), 2001-2006
ISSN: 2148-2403
https://kuey.net/

Research Article

Implementation Of New Education Policy (NEP) 2020 In India: Some Issues And Challenges In The Perspective Of Higher Education System

Dr. Jagbir Singh[1*], Mr. Mukesh Deshwal[2], Mrs. Pooja[3], Mr. Deepak[4], Dr. Surender Kumar[5], Mr. Sahil[6]

[1*]Assistant Professor in Political Science, Govt. College, Julana (Jind), Haryana
[2]Assistant Professor in Political Science,Govt. College, Julana (Jind), Haryana
[3]Assistant Professor in Political Science, Govt. College, Jatauli Haily Mandi , Gurugram, Haryana
[4]Assistant Professor in Geography,Govt. College, Julana (Jind), Haryana
[5]Assistant Professor in Physics, Govt. College, Julana (Jind), Haryana
[6]Assistant Professor in Chemistry, Govt. College, Julana (Jind), Haryana

***Corresponding Author:** Dr. Jagbir Singh
*Assistant Professor in Political Science, Govt. College, Julana (Jind), Haryana

Citation: Dr. Jagbir Singh, et al (2023) Implementation Of New Education Policy (NEP) 2020 In India: Some Issues And Challenges In The Perspective Of Higher Education System, *Educational Administration: Theory and Practice*, 29(4), 2001-2006
Doi: 10.53555/kuey.v29i4.6812

ARTICLE INFO

ABSTRACT

Indian higher education has long been hindered by excessive regulation. This regulation has been in the form of stringent curricular and organisational rules. Therefore the presence of private universities is almost negligible. Moreover, the existing set up of higher education in India is further marked by cramming, high-stake exams, early specialisation etc. The NEP-2020 has a quality of an overall transformation of the present higher education system. This reform brings the much needed hope in Indian higher education. After seventy-five years of independence, India is finally moving beyond the legacy of colonial rule and the subsequent regulatory constraints. Actually, the NEP-2020 is theoretically based on the National Policy on Education framed in 1986 which was amended in 1992. The NEP-2020 is a fundamental overhaul of the education system rather than incremental recommendations. The NEP-2020 is more inclusive. It would accommodate a larger number of students coming from diverse communities of India. The principal beneficiaries of this expansion is the youth population. At organisational level the NEP-2020 will push for institutional flexibility, deregulation, liberal education, and last but not the least an increased autonomy. As we shall see in the course of this research paper, opinions on the policy are mixed; some see it as a beneficial overhaul, while others believe it merely formalises practices already in place. For NEP-2020 to effect significant change and overcome the various challenges obstructing its implementation, there must be substantial academic, logistical and economic support from all segments of the society. The present research paper highlights some issues and challenges in the implementation of NEP-2020, in the larger perspective of the Indian higher education system.

Keywords: Education System, NEP-2020, Higher Education, Technology, Transformation, Deregulation.

Introduction: India adopted its first National Education Policy (NEP) in 1968, which aimed to centralise and standardise the country's educational structure. This policy introduced several higher education concepts, including 'standard setting,' 'accreditation,' and 'credit rating,' all monitored by the University Grants Commission (UGC). As the primary funding body, the UGC oversaw various educational branches, particularly in general education, science, social sciences, and languages. Empowered by Entry 66 of the Union List under the Seventh Schedule of the Indian Constitution, the UGC used its funding strategies to enforce standards and promote equity through reservations in higher education. This centralised control resulted in institutions losing some autonomy and the capacity for experimental approaches. The current NEP, introduced in 2020, is the third iteration of the policy. It establishes guiding principles for the entire education system while allowing

Optimization
A Journal of Mathematical Programming and Operations Research

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/gopt20

Modified subgradient extragradient method for solution of split variational inequality problem with application to generalized Nash equilibrium problem

Renu Chugh, Nishu Gupta & Charu Batra

To cite this article: Renu Chugh, Nishu Gupta & Charu Batra (29 May 2024): Modified subgradient extragradient method for solution of split variational inequality problem with application to generalized Nash equilibrium problem, Optimization, DOI: 10.1080/02331934.2024.2358413

To link to this article: https://doi.org/10.1080/02331934.2024.2358413

Published online: 29 May 2024.

The Deccan Geographer
Vol. 62, No. 1 June and No. 2 December, 2024, pp. 33-46
(ISSN-0011-7269)
UGC Care Listed Geography Journal

AVAILABILITY OF HOUSEHOLD AMENITIES AND ASSETS AMONG SCHEDULED CASTES AND NON-SCHEDULED CASTES IN RURAL HARYANA

K. V. Chamar and S. K. Chamar

Abstract

Availability of household amenities and assets reflects a household's quality of life among various social groups. For the present research work, primary data has been collected from 1365 households comprising 975 from scheduled castes category and 390 from non-scheduled castes from 39 selected villages of 15 blocks covering the five districts of Ambala, Panipat, Rohtak Rewari, and Sirsa that represent the northern, eastern, central, southern, and western parts of the Haryana state respectively. The surveyed households were represented by 37 castes comprising 24 castes from non-scheduled castes and 13 castes from scheduled castes. After that, caste-wise as well as among the scheduled castes and non-scheduled castes availability of household amenities and assets were worked out. Thereafter, caste-wise availability of amenities and assets of all the selected 16 indicators in the households were worked out in percent in proportion to total sample households. Furthermore, the weighted score has been assigned to selected amenities and assets depending upon their relative function and value to derive composite weighted scores. To find out the 'composite weighted scores' of availabilities of amenities and assets among select caste in respect to each of the indicator the 'weighted scores' have been added of all the selected indicators. Finally, to assess the levels in availability of household amenities and assets of each caste among scheduled castes and non-scheduled castes in rural Haryana, 'average composite weighted scores' have been identified by dividing the number of households of each caste among scheduled castes and non-scheduled castes of the total composite weighted scores. The analysis reveals marked variations in availability of amenities and assets among scheduled castes and non-scheduled caste in rural Haryana.

Introduction

Availability of household amenities and assets reflects a household's quality of life among various social groups. It plays an important role in our day to day life.

References

Bairagi, S., and Chamar, K. V. (2019). Regional Inequalities in the Levels of Availability of Modern Assets of Scheduled Caste Population in Rural Haryana. Journal of People & Society of Haryana, IX(1): 5-16.

Census of India (2011) Primary Census Abstract, Haryana, 06, New Delhi.

Chamar, K. V., and Bairagi, S. (2019). Quality of Living Space of Scheduled Caste Population in Rural Haryana. Punjab Geographer, 15: 40-51.

Chamar, S. K., and Chamar, K. V. (2018). Differentials in Availability of Amenities among Scheduled Castes in Jind district: A Caste Wise Analysis. Journal of People & Society of Haryana, VIII (I): 1-12.

Chamar, K. V., and Rekha. (2016). Differentials in Availability of Amenities among Chura Caste in Village Badli: A Clan Wise Analysis. Journal of Social Science Research Perspective, 4 (1&2): 36-47.

Desai, S. B., Dubey, A., Joshi, B. L., Sen, M., Sharif, A., & Venneman, R. (2010). Human Development in India: Challenges for a Society in Transition, Oxford University Press, New Delhi.

Dhanak, R., and Chamar, K. V. (2021). Availability of Household Assets and Amenities Across Clans in Chura Caste: A Study of Jhajjar District in Haryana. Maharshi Dayanand University, Research Journal ARTS. 20(I): 1-17.

Kaur, S., and Sharma, A. (2021). A Study of Living Conditions of POJK Displaced Persons in Jammu District. The Deccan Geographer, 59(1&2): 14-27).

Rani, A., and Chamar, K. V. (2019). Differentials in Availability of Amenities among Bawaria Caste in Rewari district: A Clan Wise Analysis, Thematics Journal of Geography, 8(7): 71-84.

Tiwari, R., and Nayak, S. (2013). Drinking Water and Sanitation in Uttar Pradesh: A Regional Analysis. Journal of Rural Development, 32(1): 61-74.

--Dr. K. V. Chamar
Former Professor and Head
Department of Geography
M. D. University
Rohrak (Haryana)

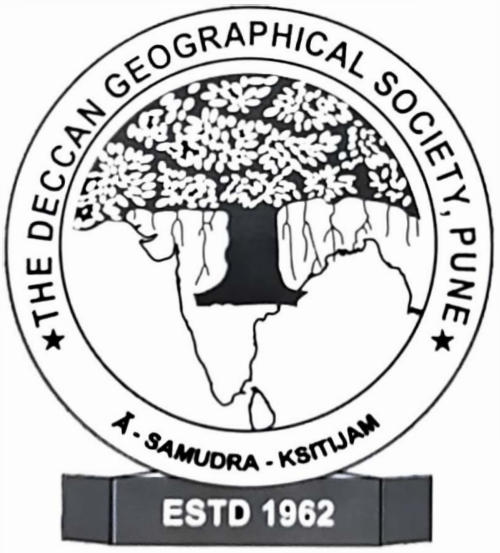
--Dr. S. K. Chamar
Assistant Professor
Department of Geography
Govt. College, Julana
Jind (Haryana)

ISSN-0011-7269

THE DECCAN GEOGRAPHER

Volume 62 Number 1 June and Number 2 December 2024

(UGC Care Listed: A Peer Review and Refereed Journal)



Chief Editor
Professor B. C. Vaidya

THE DECCAN GEOGRAPHICAL SOCIETY, INDIA
(ESTD : 1962)

The Deccan Geographer

UGC Care Listed: A Peer Review and Refereed Journal

Vol. 62, No. 1 June and No. 2 December 2024 (ISSN-0011-7269)

CONTENTS

Contd...

Chief Editor : Professor B.C. Vaidya

ACS OMEGA

Open Access

http://pubs.acs.org/journal/acsodf

Article

Bismuth Vanadate and 3D Graphene Composite Photoanodes for Enhanced Photoelectrochemical Oxidation of Water

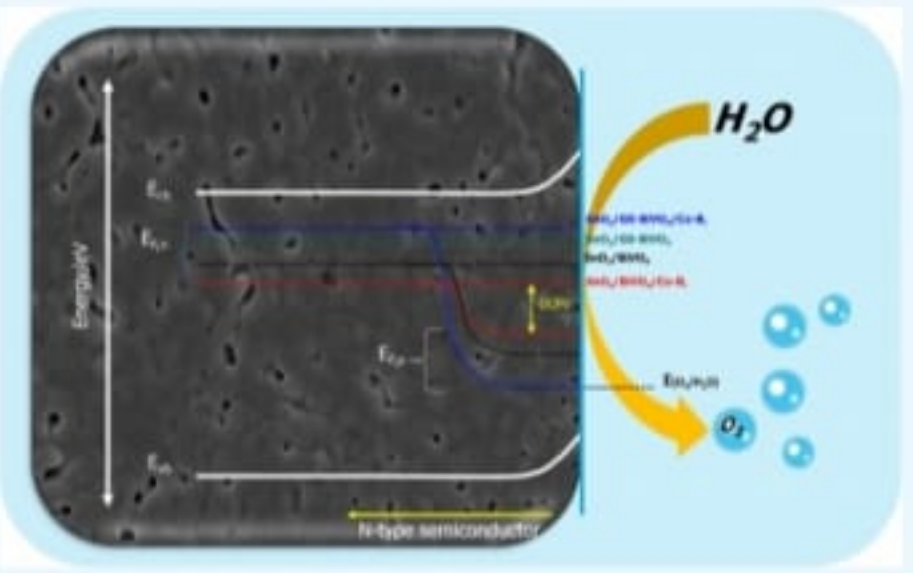
Abhishek Sharma, Sudipa Manna, Sriram Kumar, and Ashis Kumar Satpati*

Cite This: *ACS Omega* 2023, 8, 33452−33465

Read Online

ACCESS | Metrics & More | Article Recommendations | Supporting Information

ABSTRACT: Bismuth vanadate ($BiVO_4$) has been one of the most promising photoanodes for the photoelectrochemical (PEC) water oxidation process. Efforts are still on to overcome the drawbacks of this photoanode to enhance the catalytic efficiency and improve the stability. In the present work, three-dimensional graphene (3D-G) was incorporated inside the $BiVO_4$ matrix, primarily to improve the conductivity of the material. The photoanodes are fabricated with the incorporation of a SnO_2 heterojunction and application of cobalt borate ($Co-B_i$) as a cocatalyst. The incorporation of 3D-G has enhanced the photocurrent from 0.72 o 1.21 mA cm^{-2} in ITO/SnO_2/$BiVO_4$ and ITO/SnO_2/3D-G-$BiVO_4$ materials; the photocurrent has been improved from 0.89 to 1.52 mA cm^{-2} in ITO/SnO_2/$BiVO_4$/$Co-B_i$ and ITO/SnO_2/3D-G-$BiVO_4$. Semiconductor properties are evaluated from the Mott−Schottky measurements, and the charge transfer and transport kinetics of the PEC process are measured from several photoelectrochemical investigations. Both the charge transport and the charge transfer efficiencies are enhanced upon inclusion of 3D-G into the catalyst system. The lifetime of the charge carrier is observed to be increased. The decrease in the decay kinetics of the holes, enhancement in the open-circuit photovoltage (OCPV), and the resulting modulation of the surface states are responsible for the enhancement in the surface charge transfer process due to the inclusion of 3D-G into the catalytic system. Therefore, the additional role of 3D-G in the modulation of the surface states and release of the Fermi level pinning has made the band alignment between the semiconductor and the analyte better, which resulted in enhanced catalytic performance in the photoelectrochemical oxidation of water.



1. INTRODUCTION

Generation of hydrogen using solar energy is one of the promising routes to harvest solar energy for sustainable utilization of renewable energy. The photoelectrochemical (PEC) splitting of water using solar light is the most promising route to harvest solar energy for sustainable energy generation with zero carbon footprints.[1] The overall water splitting reaction through the PEC route has the anodic process; the oxygen evolution reaction (OER) and the cathodic process; and the hydrogen evolution reaction (HER). However, the sluggish kinetics through complicated pathways makes the oxygen evolution reaction the rate-limiting step of the overall water splitting process. The development of an efficient photoanode for sustainable oxidation of water is therefore the most challenging in the overall PEC water splitting. The important photoanode materials that have been investigated over the years are TiO_2, WO_3, α-Fe_2O_3, and $BiVO_4$,[2−6] and most of these materials are not so expensive for practical utilizations. Among them, $BiVO_4$ has been extremely promising due to some of the important parameters such as band gap ~2.4 eV, favorable band position, photoelectrochemical stability in aqueous solution, earth abundance, and nontoxicity with a high theoretical efficiency of 7.5 mA cm^{-2} under AM 1.5 G illuminations.[7] However, the experimentally observed solar to hydrogen (STH) conversion efficiency of the bare $BiVO_4$ is only 5.2%; such lowering of experimental efficiency arises mainly due to the slow surface kinetics, poor hole diffusion, and fast charge recombination.[8−13]

Several strategies have been adopted to enhance the experimental STH efficiency, which include heterojunction formation,[14−18] heteroatom doping,[6,19,20] creation of oxygen vacancies,[21,22] band engineering,[20,23−26] crystal facet engineering,[27−29] and nanostructure control;[30] all these processes are essentially aimed at enhancing the transport of the photogenerated holes from the bulk of the material to the interface. Heterojunction formation with suitable band positions has a specific role in transporting the majority carriers toward the sink through the generation of low-energy pathways, which

Received: May 10, 2023
Accepted: August 30, 2023
Published: September 9, 2023

AIMS Mathematics, 9(1): 1718–1754.
DOI:10.3934/math.2024084
Received: 01 November 2023
Revised: 01 December 2023
Accepted: 05 December 2023
Published: 13 December 2023

http://www.aimspress.com/journal/Math

Research article

Generalized viscosity approximation method for solving split generalized mixed equilibrium problem with application to compressed sensing

Charu Batra[1], Renu Chugh[2], Mohammad Sajid[3,*], Nishu Gupta[4] and Rajeev Kumar[1]

[1] Department of Mathematics, Maharshi Dayanand University, Rohtak 124001, India
[2] Department of Mathematics, Gurugram University, Haryana 122413, India
[3] Department of Mechanical Engineering, College of Engineering, Qassim University, Buraydah 51452, Saudi Arabia
[4] Department of Mathematics, Government College, Julana, Jind 126101, India

* **Correspondence:** Email: msajd@qu.edu.sa.

Abstract: In this study, we establish a new inertial generalized viscosity approximation method and prove that the resulting sequence strongly converges to a common solution of a split generalized mixed equilibrium problem, fixed point problem for a finite family of nonexpansive mappings and hierarchical fixed point problem in real Hilbert spaces. As an application, we demonstrate the use of our main finding in compressed sensing in signal processing. Additionally, we include numerical examples to evaluate the efficiency of the suggested method and then conduct a comparative analysis of its efficiency with different methods. Our findings can be used in a variety of contexts to improve results.

Keywords: projection operator; hierarchical fixed point; equilibrium problem; CQ-algorithm; approximation; iterative methods; numerical results
Mathematics Subject Classification: 47H09, 47H10

1. Introduction

Consider H a Hilbert space and Q a nonempty, closed and convex subset of H. Let $F : Q \times Q \to \mathbb{R}$ be a bifunction, $g : Q \to H$ a nonlinear mapping and $\psi : Q \to \mathbb{R}$ a function. Then, the generalized mixed equilibrium problem (GMEP) identifies $\xi \in Q$ such that

$$F(\xi, z) + \langle g\xi, z - \xi\rangle + \psi(z) - \psi(\xi) \geq 0 \text{ for all } z \in Q. \tag{1.1}$$

If $g = 0$, Problem (1.1) becomes a mixed equilibrium problem to identify $\xi \in Q$ such that

$$F(\xi, z) + \psi(z) - \psi(\xi) \geq 0 \text{ for all } z \in Q. \tag{1.2}$$

54. A. Kangtunyakar, S. Suantai, A new mapping for finding common solutions of equilibrium problems and fixed point problems of finite family of nonexpansive mappings, *Nonlinear Anal. Theor.*, **71** (2009), 4448–4460. https://doi.org/10.1016/j.na.2009.03.003

55. K. Goebel, W. A. Kirk, *Topics in metric fixed point theory*, Cambridge: Cambridge University Press, 1990. https://doi.org/10.1017/CBO9780511526152

56. S. H. Rizvi, A strong convergence theorem for split mixed equilibrium and fixed point problems for nonexpansive mappings, *J. Fixed Point Theory Appl.*, **20** (2018), 8. https://doi.org/10.1007/s11784-018-0487-8

57. S. Husain, N. Singh, A hybrid iterative algorithm for a split mixed equilibrium problem and a hierarchical fixed point problem, *Appl. Set-Valued Anal. Optim.*, **1** (2019), 149–169. https://doi.org/10.23952/asvao.1.2019.2.05

58. R. Tibshirani, Regression shrinkage and selection via the Lasso, *J. R. Stat. Soc. B*, **58** (1996), 267–288. https://doi.org/10.1111/j.2517-6161.1996.tb02080.x

AIMS Press