



FUSION OF KNOWLEDGE

MULTIDISCIPLINARY PERSPECTIVES IN RESEARCH

VOLUME - 4

CHIEF EDITORS:

**Lakshmi Namratha Vempaty
Dr. Vijay Raja**

ASSOCIATE EDITORS:

**Dr. Rupam Mukherjee
Shriya K**

CO-EDITORS:

**Dr. Maddela Prasanthi
Dr. K. Vinaya Laxmi**

FUSION OF KNOWLEDGE

MULTIDISCIPLINARY PERSPECTIVES IN RESEARCH
VOLUME- 4

EXCLUSIVE PARTNER



Paradox
INTERNATIONAL PUBLICATIONS GUIDE HOUSE
+91 - 8848074612 / 7907367147



CONTENTS

CHAPTER NO.	CHAPTER NAME	PAGE NO.
1	THE MINDFUL INVESTOR: INTEGRATING BEHAVIORAL FINANCE INTO PERSONAL FINANCE PLANNING Bibin K. Bhanu	1
2	MAPLE SYRUP URINE DISEASE Dr. Cyril Sajan	8
3	A COMPARATIVE ANALYSIS OF MARKETING STRATEGIES OF AIRTEL AND JIO AT KUMBAKONAM D. Haripriya, K. Pradeepa, N. Prabha	14
4	PROMOTING AND SUSTAINING ENROLLMENT IN PHYSICAL SCIENCE COURSES: STRATEGIES FOR ENHANCING STUDENT INTEREST AND ENGAGEMENT Devadasa. K, Laxminarayana N.H.	21
5	A HOLISTIC APPROACH OF AYURVEDIC MANAGEMENT OF MUTRAKRICCHRA W.S.R. TO URINARY TRACT INFECTION (UTI) Dr. Jajbir Singh	26
6	THE ROLE OF ARTIFICIAL INTELLIGENCE IN ADDRESSING CLIMATE CHANGE Dr. Pushpa Mamoria, Dr. Rajeev Kumar Shakya	31
7	ARSENIC CALAMITY IN WEST BENGAL – A PRELIMINARY STUDY OF FEW WARDS IN KRISHNANAGAR MUNICIPALITY OF NADIA DISTRICT, WEST BENGAL, INDIA Dr. Rajashree Dasgupta	37
8	DIGITALIZATION OF THE BANKING SYSTEM AND ITS CHALLENGES Dr. Ruchi Gupta	45
9	RECEIVABLES MANAGEMENT IN TELECOMMUNICATION INDUSTRY Dr. Seema Mahlawat	53
10	A STUDY OF SOCIAL DEVELOPMENT OF NAIR WOMEN Dr. Sr. Sheela V.J	59
11	DIGITAL INDIA: TRANSFORMING THE NATION Dr. Sunil Kumar	66

ARSENIC CALAMITY IN WEST BENGAL – A PRELIMINARY STUDY OF FEW WARDS IN KRISHNANAGAR MUNICIPALITY OF NADIA DISTRICT, WEST BENGAL, INDIA

Dr. Rajashree Dasgupta¹

ISBN: 978-93-92917-95-0 | DOI: 10.25215/9392917953.07

Abstract

Nadia District of West Bengal in India is one of the very vulnerable areas suffering from Arsenic poisoning in the recent times. The present study has tried to examine the level of arsenic contamination in Krishnanagar Town- the headquarter of Nadia District of West Bengal which has experienced a major rise of population (26.38% from 1991 to 2011) within last two decades. From the present study water samples were collected from different wards of Krishnanagr town and the arsenic level was tested for each of the samples by the Arsenic Kit. The wards 10 and 17 of the town were found to have huge arsenic content. Water samples were collected from different locations of the town and were tested by Arsenic kit. In ward no. 24, 23 and 8, the arsenic level in tubewell water was well above the permissible limit prescribed by World Health Organization (WHO) of 10 ug/L (micrograms per litre). The household survey carried out in two densely populated wards of 10 and 24 further revealed that majority of the residents (comprising mostly the slum population) procure drinking water from shallow tube-wells and are less aware of the arsenic poisoning. Already large number of people under different age groups have started suffering from different water borne diseases like cholera, diarrhea, acidity, abdominal pain etc. Symptoms like vomiting, abdominal pain, acidity, may indicate the effects of arsenic poisoning at the first stage. The prerequisite is therefore to reduce the magnitude of the particular problem by the local administration in the Municipality and to make the people aware about the quality of water they are consuming for different household purposes in their everyday life.

Key Words : *Arsenic Poisoning, Krishnanagar Town, Shallow tubewells, Water borne disease*

1.1 Introduction:

Arsenic poisoning through groundwater is one of the major crisis at present time. Densely populated Asian countries like Bangladesh, China, India, Nepal, Myanmar, Cambodia are severely affected by arsenic contamination. In India, seven major states namely- West Bengal, Jharkhand, Bihar, Uttar Pradesh in the flood plain of the Ganga River; Assam and Manipur in the flood plain of the Brahmaputra and Imphal rivers and Rajnandgaon village in Chhattisgarh state have so far been reported to be affected by Arsenic pollution. As reported by Mandal Badal K., Tarit Roy Chowdhury, Gautam Samanta, Gautam K. Basu, Partha P. Chowdhury, Chitta R. Chanda, Dilip Lodh, Nirmal K. Karan, Ratan K. Dhar, Dipak K. Tamili, Dipankar Das, K. C. Saha and D. Chakraborti (1996) seven districts of West Bengal viz. Malda, Murshidabad, Bardhaman, Nadia, Hooghly, North and South 24 Parganas have been severely affected by arsenic contamination covering an area of about 37,493 sq. kms. area affecting about 34 million people.

According to the Seminar Proceedings Report on Arsenic in Groundwater – A World Problem held published in 2006, the WHO provisional guideline limit-value for arsenic in drinking has been reduced from 50µg/L in 1993 to 10 ug/L (micrograms per litre) in 2006. Although, most industrialized nations are also taking 10µg/L as a permissible limit but some developing nations

¹ Assistant Professor of Geography, Government Girls' General Degree College, Kolkata