

**ADAPTATION TO WATER SCARCITY IN LOWER
SUBANSIRI DISTRICT OF EASTERN HIMALAYAN
A CASE STUDY OF ZIRO TOWN**

A DISSERTATION SUBMITTED TO THE DEPARTMENT OF EARTH SCIENCE,
UNIVERSITY OF SCIENCE AND TECHNOLOGY, MEGHALAYA FOR THE
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS



Submitted By
MUDO YAGIANG
Roll No. 13/MAG/05

Enrollment No. PG/13/380 of 2013-14
Fourth Semester
M.A. GEOGRAPHY

Examined
B
24/06/2015

DEPARTMENT OF EARTH SCIENCE
UNIVERSITY OF SCIENCE AND TECHNOLOGY, MEGHALAYA
JUNE, 2015



DEPARTMENT OF EARTH SCIENCE

UNIVERSITY OF SCIENCE AND TECHNOLOGY, MEGHALAYA

Techno city, Kling Road, 9th Mile, Baridua, Ri-Bhoi District, Meghalaya – 793101

Ms. Palme Borthakur, M.A. (Geog)
Assistant Professor

Phone : 0361-2895030
Mobile : 9508558080
Email : palme.borthakur@gmail.com
Website: www.ustm.ac.in
Date : 26/06/2015

Certificate

This is to certify that Ms. **MUDO YAGIANG** bearing **Roll No. 13/MAG/05** and Registration No. **PG/13/380** of **2013-14** is a bonafied student of Fourth Semester of the Course **M.A GEOGRAPHY** of the Department of Earth Science, University of Science and Technology, Meghalaya. She has carried out the dissertation entitled “**ADAPTATION TO WATER SCARCITY IN LOWER SUBANSIRI DISTRICT OF THE EASTERN HIMALAYA- A CASE STUDY OF ZIRO TOWN**” under my guidance and supervision in partial fulfillment of the requirement of the Degree of Master of Arts.

Data incorporated in this report are based on her observation and not submitted for other degree in any other institute.

Palme Borthakur
(P Borthakur)

Assistant Professor
Department of Earth Science
University of Science & Technology
Meghalaya

Chapter-1

INTRODUCTION

"We never know the worth of water till the well is dry." — Thomas Fuller (1732)

Water is a transparent fluid which forms the stream, lakes, ocean and rain and is the major constituent fluids of living things. Water is a liquid at standard ambient temperature and pressure but it often co-exists on Earth with its solid state, ice, gaseous state, steam. It also exists as snow, fog, dew and cloud. Water is one of the vital natural resources for all life on Earth. The availability and quality of Water always have played an important part in determining not only where people can live but also their quality of life.

Water covers 71% of the Earth surface. It is vital for all known forms of life on Earth. 96.5% of the planet's water is found in seas and oceans, 1.7% in groundwater, 1.7% in glacier and the ice caps of Antarctica and Greenland, a small fraction in other large water bodies and 0.001% in air as vapors, clouds and precipitation. Only 2.5% of the Earth's water belongs to fresh water and 98.8% of that water is ice and ground water less than 0.3%. Of all freshwaters in rivers, lakes and atmosphere and even small amount of the Earth's freshwater is contained within biological bodies and manufactured product.

Water on Earth moves continually through the water cycle of Evaporation and transpiration, condensation, precipitation and runoff, usually reaching the sea. Evaporation and transpiration contribute to the precipitation over land. Water used in the production of a good or service is known as virtual water.

Safe drinking water is essential to human and life forms even though it provide no calories organic nutrients. Access to safe drinking has improved over the last decades in almost every part of the world, but approximately one billion people still lack access to safe water and over 2.5 billion lack accesses to safe to adequate sanitation. There is a clear correlation between access to safe water and gross domestic product per capita. However, some observers have estimated that by 2025 more than half of the world population will be facing water based vulnerability. A report, issued in November 2009, suggests that by 2030, in some developing region of the world, water demand will exceed supply by 50%. Water plays an important role in the world

CHAPTER 5

CONCLUSION AND SUGGESTION

Conclusion

Water scarcity is a problem of present as well as of the future. Water scarcity can be a result of two mechanisms: Physical water scarcity and Economic water scarcity, where physical water scarcity is result of inadequate natural water resources to supply a region's demand, and economic water scarcity is result of poor management of the sufficient available water resources. In Ziro township, Source of water available in the study area were Municipality water supply, Tube well and ground water. During this survey, it has been observed that now day, there is extremely shortage in water supply to meet the demand of the local people of Ziro Township due to deforestation and manmade activities as rapid urbanization. Hence, there is high prevalence of water supply shortage and associated health Such as diarrhea, typhoid and malaria diseases and other problem. In this survey, it also found that about 2-3% of household have no water supply facilities to compliment natural water supply sources like Ground water which is use for domestic purposes. Thus, The aim of this study is to raise the awareness and orientation of all the water users of Ziro Township to change their lifestyle to conserve water and to rise adopted the traditional ways of water storage like rain water harvesting during rainy season, to improve water supply plan to provide the sufficient drinking water and also minimize between the supply and demand gaps in order to make reduce the water shortage which is extremely facing by the entire population of Ziro Township. It will help the local people of Ziro Township to tide over the water scarcity in the future. Therefore, Government scheme of water supply should be improved and modified to fulfill the demand of water requirement for per household use.

**“A STUDY ON
LEVEL OF JOB SATISFACTION OF EMPLOYEES WITH SPECIAL
REFERENCE TO THE NATIONAL INSTITUTE OF RURAL DEVELOPMENT
AND PANCHAYATI RAJ – NORTH EASTERN REGIONAL CENTRE
(NIRDPR-NERC) GUWAHATI”**

*A project report submitted in partial fulfilment of the requirement for the
Degree of Master of Commerce*

By

E CHANGME KONYAK

(Registration No. PG/14/659. Roll No. 14/MCM/29)

UNDER THE SUPERVISION

OF

Ms. SABITA DUTTA

ASSISTANT PROFESSOR, DEPARTMENT OF COMMERCE & ECONOMICS



Al -
24/06/2016



Unveiling Excellence

UNIVERSITY OF SCIENCE & TECHNOLOGY, MEGHALAYA

Techno City, Killing Road, Baridua, Ri Bhoi, Meghalaya

2016



UNIVERSITY OF SCIENCE & TECHNOLOGY MEGHALAYA

(Established under Act 6 of 2008 enacted by the state Legislative Assembly of Meghalaya & incorporated under section 22 & 2(f) of the UGC Act 1956)

CERTIFICATE

This is to certify that the project report entitled “A study on Level of Job Satisfaction of employees with special reference to the National Institute of Rural Development And Panchayati Raj – North Eastern Regional Centre (NIRDPR-NERC) Guwahati” is written and submitted by E Changme Konyak, M.Com 4th Semester student, bearing Roll No.14/MCM/29, Registration No.PG/14/659, Department of Commerce & Economics, University of Science & Technology, Meghalaya towards the partial fulfillment of degree of Master of Commerce is a genuine record of project work done by him under my supervision. This report or a part of it has not been submitted for any degree or diploma elsewhere.

(Sabita Dutta)

Date: 30/05/2016

Place: Techno City, Meghalaya

Assistant Professor
Department of Commerce & Economics
University of Science & Technology,
Meghalaya: 793101

1.1 INTRODUCTION

1.1.1. Job Satisfaction

Human resource is of paramount importance for the success of any organisation. It is a source of Strength and aid. Human resources are the wealth of an organisation which can help it in achieving its goals. Human resource management is concerned with the human beings in an organisation. It reflects a new outlook which views organisation's manpower as its resources and assets. Human resource is the total knowledge, skills, abilities, talents and aptitudes of an organisation's workforce. The values, ethics, beliefs of the individuals working in an organisation also form a part of human resource. In the present environment, no business or Organisation can exist and grow without appropriate human resources. So human resources have become the focus of attention of every progressive organisation.

Job satisfaction is the collection of tasks and responsibilities regularly assigned to one person, which job is a group of positions, which involves essentially the same duties, responsibilities, skill, and knowledge. Job satisfaction is a set of favourable or unfavourable feelings with which employees view their jobs, more specifically the nature of jobs they do, the quality of supervision they receive, co-workers pay and perks, and promotional avenues. Job satisfaction affects job performance, employee turnover, and absenteeism. High job satisfaction results increase in employees morale, high work performance, less employees turnover, and less absenteeism. Naturally it is the satisfied worker or an employee who shows the maximum effectiveness and efficiency in his or her work.

Job satisfaction is the topic of wide interest to both people who work in the organisation and people who study them. The traditional model of job satisfaction focuses on all the feelings that an individual has about his or her job. However, what makes a job satisfying or dissatisfying does not only on the nature of job, but also on the expectations that individuals have of what their job should provide. Satisfied employees is inclined to be more industrious, inspired, and dedicated to their. Job satisfaction results from the exchange of personal factors, such as principal, character, and opportunity with employment factors such as the impression of the work situation and the job itself. It is a pleasurable emotion state of the appraisal of one's job, an effective reaction and an attitude toward one's job. No doubt job satisfaction is an attitude but one should clearly distinguish the objects of cognitive

CONCLUSION

Job satisfaction focuses on all the feelings that an individual has about his or her job. Job satisfaction depends on supervisor belief, behaviour, pay and promotion, etc. The factor analyses meticulously identified that the job sustainability as well as the working condition and other inter personnel relationship among the workers is able to ascertain their level of satisfaction within the working domain. Employees must be cared for and counselled in order to increase their satisfaction level in the organization based on the aspects identifies as per above analyses.

The success or failure of an organization depends on the efficiency of its Manpower. Job satisfaction plays a vital role in boosting the efficiency of level of the employees. On the basis of the study made it can be said that NIRDPR-NERC, do take good care of its employees. There have been attempts made by the organisation to increase the satisfaction level of the employees – like job related training inputs, employees' recognition, good working conditions, satisfactory salary, etc. It has still got a long way to go.

From the finding and analysis, it is clear that the level of satisfaction of employees on the job is good. From this more research \ survey are needed to obtain useful information to compare the results about success and failure of changes in work and the level of job satisfaction among the employees.

A Project Report
On
“A Study on the Recruitment and Selection Process and effect of
Employee Attrition on it at GNRC, Guwahati”

For
Guwahati Neurological Research Centre Limited (GNRC)



Submitted in Partial fulfillment for the award of the degree of Master of
Business Administration (MBA) under University of Science and Technology,
Meghalaya

By
Name: RESHMI KUMARI DAS
Registration no: PG/15/1373
Roll no: 15/MBA/17



Department of Business Administration
School of Business Science
University of Science & Technology, Meghalaya
Techno-city, 9th Mile, Killing Road, Baridua, Meghalaya- 793101



ISO 14001 : 2004
Certificate No. EMS 97647

Dispur
Guwahati-781 006



GNRC LTD.

Quality • Value • Trust

(An ISO 14001 : 2004 Organization)

Regd. Office : GNRC Complex, Dispur, Guwahati-781 006

CIN : U85110AS1985PLCOO2447



Sixmile, Guwahati-2:

GNRC Medica
North Guwahati - 781031

Ref. No: GNRC/Project/(c)/1491

Date: 06/01/2017

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Reshmi Kumari Das**, student of **Master of Business Administration (MBA)**, **University of Science & Technology Meghalaya (USTM)**, **Guwahati (Assam)** has successfully completed two (2) months (1st July 2016 to 31st August 2016) Project on "Study on the Recruitment & Selection Process and its effect of Employee attrition", in the department of Human Resource at GNRC Ltd, Guwahati.

We wish all the best for her future endeavor!

For GNRC Ltd.,



Ganesh Sharma
Senior Executive- HR

1.1 About the topic

After identifying the number and type of personnel required in any organisation by the process of manpower planning and job analysis, next comes the process of recruitment and selection. Both recruitment and selection are integrated and interrelated terms. Recruitment involves location of such personnel motivating them to offer their candidature and selection involves selecting the suitable candidates and rejecting the unfit ones.

Recruitment forms the first stage in the process, which continues with selection and cease with placement of the candidate. Recruitment makes it possible to acquire the number and type of people necessary to ensure the continued operation of the organization.

In simple terms Recruitment is understood as a process for searching and obtaining applicants for jobs, from among the available recruits. It is the “process of finding and attempting to attract job candidates who are capable of effectively filling job vacancies.”

Different definitions of Recruitment are as follow:

Taylor “Recruitment is the process of locating, identifying and attracting capable applicants.”

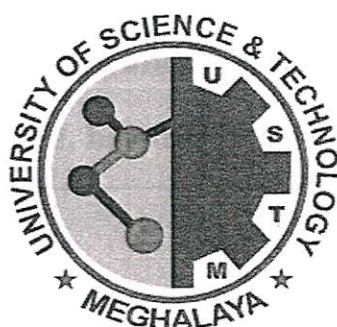
Flippo “Recruitment is a process of searching for prospective employees and stimulating and encouraging them to apply for jobs in an organisation.”

Sources of Recruitment:

- I. **Internal Source of Recruitment:** It invites applications from people within the organisation. Applications are invited to promote people to higher posts (promotion) or transfer them to other departments at the same level. A senior post in production department, for example may be filled by juniors in the production department or surplus staff in the production department may be shifted in the sales department. Employees assume responsibilities of the same status in transfers and higher status in promotions. It is a process of recruiting personnel already payroll of an organizations, which takes place within the concern or organization. Internal recruitment may lead to increase in employee’s productivity as their motivation level increases. It also saves time, money and efforts. But a drawback of internal

DIVERSITY OF HERBACEOUS SPECIES USED IN TRADITIONAL ASSAMESE CUISINE OF JORHAT DISTRICT

Dissertation submitted for the partial fulfillment of the requirement
for the degree of Masters of Science in Botany



Submitted By

Dharitri Dutta

M.Sc 4th Semester

Roll No. 16/MSB/69

Regd.No. PG/2016/2850

Department of Botany

School of Biological Sciences

University of Science and Technology, Meghalaya

Meghalaya-793101



Department of Botany

School of Biological Sciences

University of Science and Technology, Meghalaya

Techno city, Kiling Road, Baridua, 9th mile, Ri-bhoi, Meghalaya

Dr. Nibedita Das

Asst. Professor, Department of Botany

School of Biological Sciences, USTM

CERTIFICATE

I have the pleasure that Post Graduate research project entitled **“Diversity of herbaceous species used in traditional Assamese cuisine of Jorhat District”** submitted by **Ms. Dharitri Dutta** is a record of bonafied project research work carried out by her under my guidance and supervision in the fulfillment of the requirement for the degree of Master of Science with specialization in **“Angiosperm taxonomy”**. This research out puts contained in her project is the outcome of her continuous efforts.

Date: 31/5/18

Place: Guwahati

(Dr. Nibedita Das)

Chapter 1

INTRODUCTION

The term "medicinal plant" includes various types of plants used in Herbalism ("herbology" or "herbal medicine"). The word "herb" has been derived from the Latin word, "*herba*" and an old French word "*herbe*". Now a days, herb refers to any part of the plant like fruit, seed, stem, bark, flower, leaf, stigma or a root, as well as a non-woody plant. Earlier, the term "herb" was only applied to non-woody plants, including those that come from trees and shrubs. These plants used as food, flavanoid, medicine or perfume and also in certain spiritual activities.

Herbs have been used for medicinal purposes long before prehistoric period. Among ancient civilization, India has been known to be rich repository of medicinal plants. The ancient scholars only believed that herbs are only solutions to cure a number of health related problems and diseases.

Treatment with medicinal plants is considered very safe as there is no or minimal side effects. The golden fact is that, use of herbal treatments is independent of any age groups and the sexes. Recipes for the treatment of common ailments such as diarrhea, constipation, hypertension, low sperm count, piles, dysentery, menstrual disorders, bronchial asthma and fevers are given by the traditional medicine practitioners very effectively.

There is a rich habitat of natural foods in Indian tribal environments that could possibly be used to promote food security, nutrition and health. Many wild and lesser known food plants having medicinal properties are being used in the country as culinary herbs by different tribes and these plants play a major role in meeting the nutritional and health care requirements. In India, more than 300 wild plant species are used as subsidiary food/vegetables by tribal and out of 800 plants, at least 250 plants can develop as a new source of food in the near future. Northeast India is the home of a large numbers of tribal communities with rich culture and traditional knowledge systems. The selection and utilization of different plant species for healthcare is very diverse and unique among these communities.

The state of Assam is inhabited by various ethnic communities such as Ahom, Koch, Kachari, Mising, Moran, Motok, Chutia, Keot, Koibarta, Rabha, Deori, Bodo etc. among them Ahom, Koch, Kachari, Mishing, Chutia, Koiborta, Brahim and Kalita people are inhabitants of Jorhat. The indigenous communities use the plants according to their belief in healing properties for various ailments by using those plants in different cuisines, in religious and ceremonies which are reflected in their folk behavior. Thus, they directly or indirectly help in the management and conservation of plant diversity.

Chapter 5

CONCLUSION

From the present study total 42 numbers of herbaceous plants having medicinal properties as well as ethnic uses in recipes are found. Species are described with their species name, local name, family, parts used, medicinal use and different ethnic recipes. The Species are belonging to different families. Among them the highest number of species used is 9% belong to the family Amaranthaceae. The different parts used are found to be tender shoot, stem, leaf, rhizome and the whole plant. From the results it is found that leaves are mostly used by the people. The plants can be used in the treatment of various ailments like stomach problem, piles, fever, dermatological problems, hair fall, eye sight improvement, various ENT problems, menstrual disorders, body and abdominal pain, nerve disorders, anemia etc. Since those herbaceous plants possess tremendous medicinal properties so it is important to conserve them with serious consideration. Factors which are the main reason of extinction of these herbs are - lack of awareness among common people, soil erosion, cleaning of jungle, flood, increasing population etc. Therefore it is necessary to encourage as well as aware the people for cultivation of ethnomedicinal plants at large scale.



A Minor Project

On

Clinic Management System

Submitted to the University of Science &
Technology, Meghalaya

Ri-Bhoi, 9th Mile, Meghalaya

1078
20-02-19

BCA 4th Semester, Batch 2016-2019



Submitted By:-

VanlalInghaka

Rwikha Basumatary

16/BCA/21

16/BCA/15

Guided By:-

Nitumani Sarmah



UNIVERSITY OF SCIENCE & TECHNOLOGY, MEGHALAYA

CERTIFICATE FROM GUIDE

This is to certify that the project work, entitled Clinic Management System carried out by **Vanlalnghaka** and **Rwikha Basumatary** bearing University Roll No: **16/BCA/21 0** & **16/BCA/15** students of **BCA 4th Semester of University of Science & Technology, Meghalaya** under my personal supervision and guidance. The report is found worthy of acceptance for the minor project of BCA 4th semester.

All help received have been duly acknowledge and no part of this report has been reproduced for any other degree or diploma.

A handwritten signature in black ink, appearing to read 'Nitumant', is written over a horizontal line. Below the signature, the date '27/06/18' is written.

Mr Nitumant Sarmah

Faculty

Department of Computer Science & Electronics

University of Science & Technology, Meghalaya

1.Introduction

Currently many clinics in our country still store patient's records by using paper or card manual system. Doctors need to write down the patient's information in the medical records. These works are inefficient and consumes time. Moreover patient's records are not secure. Clinic Management System is a computerized record system. Its main purpose is to reduce the burden of doctors and nurses and improve the patient's record management system.

10. Conclusion

Project introduction is the first step in building a system. Basically it will tell what is the application or a system that we are intended to build, what it will look like, brief describe on the proposed project, setting up the project scope, defining project objective, problem statements of the project and also the expected outcome. This stage will be used as a reference to ensure system meet the project scope and project objective.