NARAJOLE RAJ COLLEGE

B.A. GENERAL

PROJECT – "STUDY OF THREE MEDICINAL PLANTS OF NARAJOLE OF PASCHIM MEDINIPUR DISTRICT, WEST BENGAL"

SEM : 1ST

PAPER : ENVS

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ROLL : 4341130 **NO :** 2324395

REG. NO : VU231300421 OF 2023-2024

SUBMITTED TO

NARAJOLE RAJ COLLEGE

SESSION : 2023-2024

Narajole Raj Collage
Paschim Medinipur
(Affiliated by Vidyasagar University)
(NAAC Accredited 'B' Grade Collage)

ESTD-1966

:- Certificate :-

This is to Certify that the project work entitled "Title :- Study of Three Medicinal Plants of Narajole of Paschim Medinipur, District of West Bengal." Has been carried out by Preeti Maji for partial fulfillment of the degree of Bachelor of Arts General as proposed by the Common Courses under Curriculum & credit frame work for under graduate programme (CCFUP) 2023 & NEP-2020 of Vidyasagar University under my supervision.

The result incorporated here has not been submitted for any other degree/diplomas. Further Certified that miss. Preeti Maji has followed the rules and regulations compiled by Vidyasagar University for carrying out the project work.

Bangamoti Hansda
05.04.24

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Acknowledgement

I would like to express my sincere thanks and gratitude to Dr. Basudev Mandal, Principal, Narajole Raj College for providing me to the opportunity to undertake curriculum in this college and forgiving necessary field work facilities.

I would like to express my heartist thanks to my teacher Dr. Bangamoti Hansda, Assistant Professor dept of Botany, Narajol Raj College for her inspiration, Valuable suggetion and support in preparing my project work.

I would like to express my sincere thanks to prof. Aragna Paramita Mandal, IQAC co-ordinator, HOD department of English for here valuable advice.

I would like to express my thanks to all my teachers of studies of Narajole Raj College.

I would like to express my thanks to my praents of all friends for their constant support of encouragement.

Date - 05/04/2024

Place - Narajole

Preeti Maji
B.A. General (Humanities)

INTRODUCTION :-

• Medicinal Plants :

From earliest time mankind has used plants in an attempt to cure diseases and relieve physical Suffering. Primative peoples in all ages have had some knowledge of medicinal plants, derived as the result of trial and error. These primitive attempts at medicine were based on speculation and superstition. Most savage people have belived that disease was due to the presence of evil sprits in the body and could be driven out only by the use poisonous or disagreable substances calculated to make the body and unpleasant place in which to remain. The knowledge regarding the source and use of the various products suitable for this purpose was usually restricted to the medicine men of the tribe. As civilization progressed the early physicians were guided in great part by these observations.

In all the early civilization their was much interesting in drug plants. In china as early as 5000-4000 B.C, many drugs were in use. There are sanskrit writing in existence which tel of the methodes of gathering and preparing drug.

Area of study :-

The area is whole Narajole, Paschim Medinipur Districts of West Bengal.

Method of study :-

Making this project, we collected all the information from various website links.

ALOE VERA

- Scientific Name : Aloe Barbadenses Mills.
- Vernacular Name : Korphad, Gritakumari.
- Aloe Vera's systematic position is as followers :-
  - Kingdom : Plantae.
  - Phylum : Magnoliophyta.
  - Class : Liliopsida.
  - Order : Asparegales.
  - Family : Asphodelaceae.
  - Genus : Aloe
  - Sepcies : A. Vera
  - Binomial name : Aloe Vera (L) Burmt.

- Source :-

(i) Geographical Source :

Aloes is the indigeneous to eastern and southeren Africa and grown in cape colony. Zanzibar and islands of socotra. It is also cultivated in caribean islands, Europe and many parts of India, including North west Himalayan region.

(ii) Biological Source :

Synonym :- Aloe, Ghritakumari.

Biological source : Dried juice colleted by incisoin from the bases of the leaves of various species of Aloe.

- Aloe barbadensis (curacao aloes).
- Aloe spicata (cape aloes).
- Alo ferox.
- Family : Liliaceae.
- Aloe perryi (socotrine aloes).

(III) Family & Distribution :-

Liliceae, it is native of west indies or mediterr-anean region. It grows wild in hot dry valleys of western Himalayas and Southern, Northern part of India. Sangola is the one of the drought region it is mainly distributed in every place in rural area. some of the important place like Waki, Mahud, Chindepin, Rajuri, Sangola, Jawala. It is xerophytic plants.

(IV) Chemical composition :-

Many compounds with diserse structures have been isolated from both the central parenchyma tissue of A.vera leaves and the exudate arising from the cells adjacent to the vascular bundles. The bitter yellow exudate contains 1-8 dihydroxyan thraquinone derivatves and their glycosides, which are mainly used for their cathartic effects [15].

The Aloe parenchyma tissue or pulp has been shown to contain proteins, lipids amino acids, vit, enzymes, inorganic compounds and small organic compounds in addition to the different carbohydrates.

Some evidence of chemotaxonomic variation in the polysaccharide composition of aloes exists.

The large fluctutions in polysacoharide composition of A.Vera filled as found in the literature has been explained by the fact that the mannosy pediuses are contained in a reserve polysaccharide with a significant seasonal influence as well as large vaniations between cultivars in terms of the quantities of mannose containing polysaccharides within the parenchyma cells [18]. The chemical constituents of A.Vera leaves including the pulp and are given in table .1

Table
Summary of the chemical composition of A.Vera leaf pulp and exudate compounds.

Ones/anthrones : Aloe-embin, aloetic-acid, anthoronal aloin A and B (or collectively known as barbalion) emodin, ester or cinnamic acid.

Ates : Pure manna acetylated mannon, acetylated glucomanna xylan, celluslose. Paectic Substance 8-c-glycosyl-(2-o-cinnoamoy)-7-O-methy-laloediol A, 8-C-glucosy-(3)-aloesol, 8-C-glycosyl-(s)-7-o methyl-aloediol, 8-e-isoaloeresin D
nealosin A
Alkaline, catalase
Oxidase Superoxide dismutase.

Including compounds :- Arachidonic acid y-linolenic acid, steroids, triglicerides, triterpenoid, gibberlilin, Lignins uric acid.

Uses :-

The Aloe plant has several uses. This plant is something referred as "health plant." However, the plants uses in indigenous system of medicine are juice of leaves and pulp. Aloevera plant has speific odor. Prevalent in the plant but mainly confined in the resin portion it is now a familiar ingradient in a range of available and advertised. In shops Aloe has many therapeutic applications which are coidely accepted in whole world. Aloe Latex is an active laxative. Once it has reached the large intestine. It behave like a produg in the colon it is hydrolyzed by the bacterial flora to from aloe madium-9 anthronne, the active metabolic Aloe gels are reported to beused for the treatment of various skin conditions. Hypoglycemic actions have also been reported in Aloe extract uses for non-insulin dependent didetics. The Aloe gel is obtained by felleting the thick leaf. The gel is colourless, gelatin like with hair like connective fibers. Aloegel has been regerded as a safe additive, approved by us FDA for health drinks and skin care products.

There is also evidence to show the officaeyof aloe extract is chronic bronchial asthamatic protents.

Numerous elinical studies are now is progress to verify the effects of Alow total extract not only in these diseases but also in arthritis and possibly colitis.

Aloe extract is also considered as a possible therapy for AIDS, in asso ciation with an antiviral agentas it is able to reduce the dosage

of antiviral by up to 90% reduce the consequently the side effects.

General Medicinal uses of Aloevera plant :-

Fresh Aloe pith medicinal uses Healthing and elcatrized wound for new hair growth, cures various skin diseases interatment of x-ray reactions and in rediation therapy. useful in palme eczema, ulcers on ampulation stumps ulcers of advanced mammary carcilnoma poison and burns.

MARGOSA TREE

- Scientific name :- Azadirachtaindica Juss.
- Vernacular name :- Neem, Kadu-limb.
- Nomenclature :-
  - Kindom : Plantae.
  - Division : Magnoliophyta.
  - Class : Magnoliopsida.
  - Order : Rutales.
  - Suborder : Rutinae.
  - Family : Meliaceae.
  - Genus : Azadirachta.
  - Species : A. indica.
  - Scientific name : Azadiratta indica.
  - Other name : Nimba, Aristha.

Azadirachta indica, commonly known as neem nimtree or indian lilac and in Nigeria called dogoyaro or dogonyaro, is a tree in the mahogany family Meliaceae. It is once of two species in the genus Azadirachta, and semi-tropical regions. Neem trees also grow on islands in southern Iran. It fruits and seeds are the source of neem oils.

Description :-

Neem is a fast growing tree that can reach a height of 15-20 meters, and in Nigeria rarely 35-40 (115-131 ft).

It is decidous, shedding many of its leaves during the dry winter months. The branches are wide and spreading The dense crown is roundish and may reach a diameter of 20-25m. The neem tree is similar in appearance to its relative, the chinaberry (Melia azadarach).

White and fragrant flowers are arranged in more-or-less drooping axillary panicles which are up to 25 cm (10 in) long. The inflorescences which branch up to the third degree, bear from 250 to 300 flowers. An individual flower is 5-6 min long and male flowers exist on the some individual tree.

The fruit is a smooth (globrous), olive-like drope which varies in shape from elongate oval to nearly The fruit skin is thin and the bitter-sweet pulp is yellowish which white and very fibrous. The mesocarp is 3-5 mm thick. The white hard inner shell of the fruit enclose one, rarely two, or three, enloged seeds (kernels) having a brown seed coat.

Ecology:

The neem tree is noted for its drought resistance. Normally it thrives in areas with sub-arid to sub-humind-conditions, with an annual rain tall of 400-1,200 mm. It can grow in regions with an annual rainfall below 400 mm but it thrives best on well drained deep and sondy soil. It is a typical tropical to subtropical tree and exists at annual mean temperature 21-32°C. It can tolerate high to very high temperatures and does not tolerate temperature below 5°C. Neem is one of a very few shade giving trees that thrive in drought.

Prone areas e.g, the dry costal, southern districts of india, and pakistan. The trees are not at all deticate about water quality and thrive on the merest trickle of water, water, whatever the quality. In india and tropical countries where the indian diaspore has reached. It is very common to see meem trees are planted on large tracts of bindphyto chemicals.

Neem fruit, seeds, leaves, stems and bark contain divers phytochemical, some of which were first discovered in azadirachta seed extracts, such as azadirachta from crushing 2kg of seeds is about 5g. In addition to azadirachtin and beta-sitosterol. The yellow, bitter oil has a garlic-like odor and contain about 2% of limonoid compounds. The leaves contain quercetin, cate chins, carotenes and vitamin C.

Traditional medicine:

Products made from neem trees have been used in the traditional medicine of india for centuries, but there is insufficient clinical evidence to indicate any benefits of using neem for medicinal purpose. In adults no specific does have been established, and short-term use of neem appears to be safe while long-term use of neem may be harm the kindneys or liver, in small children, neem oil is toxic and can lead to death. Neem may also cause miscarriage. Infertility and low blood sugar

Pest and disease control :

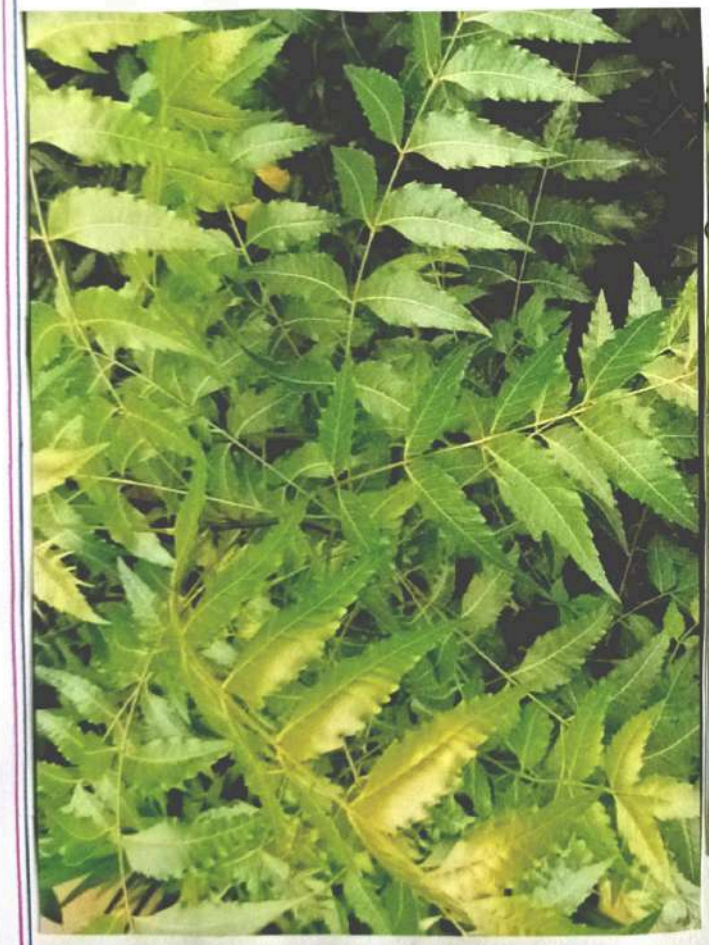
Neem is a key ungredient in non-pesticidal mangement (NPM). Proving a natural alternative to synthetic pesticides. Neem seeds are ground into powder that is soaked overnight in water and sprayed on the crop, to be effective, it must be applied repeatedly at least every ten days. Neem does not directly kill insects. It act as an anti-feed ant repellent, and egg-lying deterrent and thus protects the crop from damage. The insects starve and due within a few days. Neem also suppresses the subsequents hatching of their eggs. Neem based fertilizers have been effective against southern army worm. Neem oil has been shown to avert termite attack as an eco friendly and economical agent.

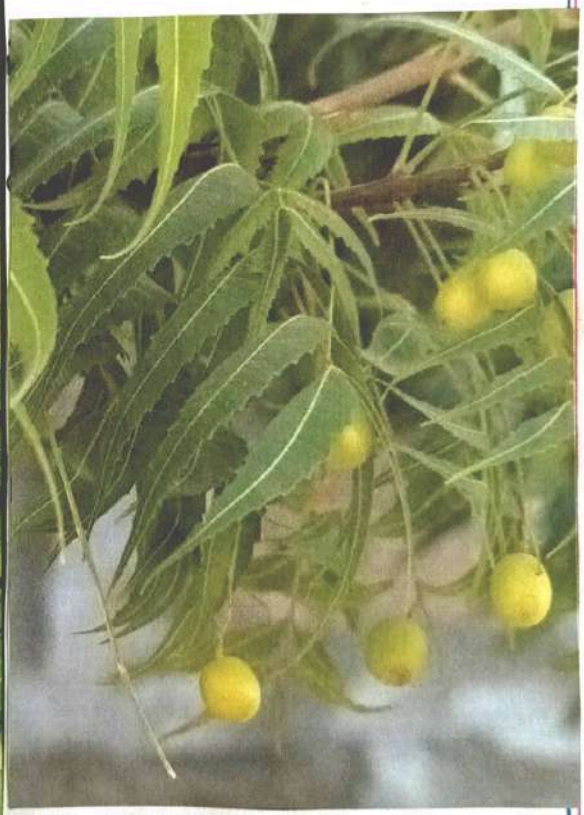
Applications of neem oil in the preparation of polymeric resins have been documented in the recent reports. The synthesis of various alkyd resins from neem oil is reported using a manoglyceride (MG) route and their utilization for the prepared for reation of conventional divalents acid meterials like phthalic and maleic anhydrides with @ MG of neem oil.

Other uses :

Tree : The neem tree is of great importance for its anti-desertification properties and possible as a good carbon dioxide sink. It is also used for maintaing soil fertility.

Fertilizers : Neem extract is added to fertilizers as a nitrification inhibitor. Animal feed neem leaves can be occasionally used as forage for ruminants and rabbits. Teath cleaning : neem has traditionally has been used as a type of teeth cleaning twig. ESTs were indentified by generation of subtractive hybridization libraries of neem fruit, leaf mesocarp by CSIR-CIMAP lucknow





PERIWINKLE

Scientific name :-

- Botanical name (s) : Vinca Rosea (catharanthus roseus).
- Family name : Apocynaceae.
- Kingdom : Plantae.
- Divison : Magnoliophyta (Flowering plants).
- class : Magnoliopsida (Dicotyledons).
- Order : Gentianales Family.
- Apocynaceae Genus : Catharanthus.
- Species : C. roseus.

Vernacular names :-

- English : Cayenne Jasmine, old maid, Periwinkle.
- Hindi : Sada bahar, Sadabhar.
- Telugu : Bilagannеru.
- Gujarati : Barmasi.
- Bengali : Nayantara.

Botanical description :

It is an herbaceous plant or an evergreen subshrub growing to 32 in 80 cm high. It has glistening dark green, and flowers all summer long. The flowers of the naturally appear pale pink with a purple "eye" in their centres. Erect or accumbent suffrutex, to 1m, usually with white latex. Stems is green, purple or red.

Leaves: Oval leaves descussate, Petiolate, lamina, Vanriable, elliptic, obovate or nanrouly obviate apex mucronate.

Flowering period: Throughout the year in equatorial conditions, and from, spring to late autumn, in warm temperate climates.

Light: Bright light, included three or four hours of direct sunlight daily, is essential for good flowering.

Temparature: Normal room temperatures is suitable at all times. It cannot tolerate temperatures less than 10°C (50°F).

Watering: Water the potting mixture plentifuly, but do not allow the pot to stand in water.

Feeding: As the flowing flowering begins,, apply standand liquid fertiliser even two weeks, plants are not tolerand of excessive fertluser.

Fertillising: The part of plants is not heavy breeders. It necessary, feed biweekly or once monthly with a fain ammount uglud fertilizer. Too much fertilizing will produce abundant foliage instead of more blooms.

Morphology

Catharanthus roseus is an evergreen or her baceous plant growing to 1m. tall. The leaves are oval to oblong 2.5-9.0 cm long and 1-3.5 cm. borad glossy green hairless with apale midrib and a short petial about 1-1.8 cm long and they are arranged in the opposite pairs. The flowers are white to dark pink with a dark red center, with a basal tube about 2.5-3 cm.

long and a corolla about 2.5 cm dlimeter with five petal like lobes. The fruit is a pair of follicles about 2-4 cm long and 3mm broad

Identification by TLC :

Viniblastine is identified by TLC by spoting standard and sample and developed in mobile phase n-Butanol: Acetic acid.

Powder characteristics :

It shows fragments of upper epidermis in surface view with straight anticlinal walls and anomocytic and anisocytic stomata, patches of lower epidemis with sinuous anticlinal walls and same types of stomata.

Geographical Distribution :-

Catharanthus roseus is native to the indian ocean island of madagascar. In the wild, it is found to be an endangered plant and the main caues of their decline is the habitat destruction by the slash and burn agriculture however, it is now common in many tropical regions world wide, including the pharmacological Activities.

- Anti Cancer activities :-

The anticancer alkaloids vinblastine and vincristine are derived from stem and leaf of catharanthus roseus. These alkaloids have growth inhibition effect of some human tumors. Vinblastine is used experimentally for treatment of neoplasmas

and is recommended for Hodgkins disease, chorio corcinoma. Vincristine another alkaloids is used for leukemia in children. Different percentage of the methonolic crude extracts of catharanthus was found to show the significant anticancer activity against numerous cell types in the in vitro condition and especially greatest activity was found againts the multidurg resistant tumor types, vinblastine is sold as velbar or vincristine as oncovin.

- Anti-diabetic activity :-

The ethanolic extracts of the leaves and flowers of roseus showed a dose dependent lowering of blood sugar in comparable to the standard drug. Lowering of blood sugar in comparable to the standard drug. gilbenclamide. They Hypoglycemic effect has appeared due to the result of the increase glucase utilization in the liver. The aqueousextract was found to lower the blood glucose level to 49-58 %. The hypoglycemic effect has appeared.

- Anti-ulcer property :-

Vincamine and vindoline alkaloids of the plant showed ant iulcer property. The alkaloid vincamine, present in the plant leaves shows cerebrovasodilatory and neuro protective activity.

- Hypotensive property :

Extract of leaves of the plant made significant exchange in hypotensive. The leaves havebeen known to contain 150 useful alkaloids among other pharmacologically active phanmacologically active compounds. significant and antihyperglycemic and hypotensive activity of the leaf extract have been reported inlaboratory animals.

- Anti diarrheal property :-

The anti diarrheal activity of the plant ethanolic leaf extracts as tested in the wistar rats with castor oil as a experimental diarrheal effect of ethanolic extracts c. roseus showed the dose deependent in hibitition of of the of the castor oil induced diarrheha.

- wound healing property :

Rats treated with 100 mg/kg/day of the eathan- anthus roseus ethanol extract had hiegh rate of wound contraction significant descreased epithelization period. significant in reage in dry weight and hydroxy proline content of the granulation tissue when composed with the controls. wound contraction to gether with increased tensile strength and hydroxy proline content support the use of c. roseus in the managment of wound healing.

• memory enhancement activity:

vinpocetine has been reported to have a versilety vinpocetine has been of action that would hypothetically be beneficial in Alzhemer's disease. The only study investigating this agent in a welldefined cohort of older studies of vinpocetine in properly-defined dementia populations concluded that there is insufficient dementia and stroke and no significant adverse event.

CONCLUTION

medicinal plants are inseparable from local livelihoods because they have long been collected, consumed, and managed through local customs and knowledge.

various conservation techniques discussed above can initiate and support conservation management plants for human healthcare needs.

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(C) Aloevera :-

www.venturneant.biz

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VIDYASAGAR UNIVERITY

NARAJOLE RAJ COLLEGE

NARAJOLE, DASPUR, PASCHIM MEDINIPUR

FOR THE DEGREE OF UNDER GRADUATE (UG) ENVIRONMENTAL STUDIES

OBSERVATION OF AN UNUSED AND POLLUTED POND IN KALYANPUR VILLAGE UNDER DASPUR POLICE STATION

SUBMITTED BY

RUMJHUM DOLAI

DEPARTMENT : HISTORY

SEMESTER : I

ROLL : 06 **NO:**

REGISTRATION NO : VR230200231 **YEAR : 2023-2024**

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Date: 01/02/24

Certificate

This is to certify that the field work entitled

"OBSERVATION OF POND WATER POLLUTION IN KALYANPUR VILLAGE UNDER DASPUR POLICE STATION

submitted by Rumjhum Dolai, a student of Semester I, for Environmental Studies (ENVS)_VAC-1 Examination 2024 has been carried out under my guidance and supervision. This is an original work and has not been published anywhere for any other purpose.

Parimal Dua

[Dr. Parimal Dua]
Assistant Professor & HOD
Department of Physiology

Acknowledgement

I express my sincere gratitude to my teacher Dr. Parimal Dua, Assistant Professor, Department of Physiology, Narajole Raj College for his valuable advice, necessary suggestion and inspiration in preparation of my project work.

I express my heartiest thanks to Dr. Basudev Mandal, Principal, Narajole Raj College for proving me the opportunity to undertake curriculum at this College and for giving necessary field work facilities.

I am also grateful to Dr. Mangal Kumar Nayak, HoD, and other teachers of my Department of History for their constant help through my field work.

I would like to express my sincere thanks to all teachers and stuff of Narajole Raj College.

I am particularly grateful to my parents and all of my friends for their constant encouragement and support.

Date: 1/02/2024
Place: DASPUR

Ranjhum Dolai
B.A. History (H)
Narajole Raj College

বিষয়ঃ- দাঁতপুর থানার অন্তর্গত কল্যাণপুর গ্রামের একটি পুকুরের জলদূষণ-

Page no. 1

ঃ সূচিপত্র ঃ

বিষয়ঃ- দাঁতপুর থানার অন্তর্গত কল্যাণপুর গ্রামের একটি পুকুরের জলদূষণ।

- ভূমিকা।
- Selection of visiting site
- উপকরণ ও পদ্ধতি (Metoriads and Method)
- পর্যবেক্ষণ পদ্ধতি (observation Method)।
  - জলদূষণের উৎস।
    - (i) গৃহস্থালীর আবর্জনা।
    - (ii) কৃষিক্ষেত্র থেকে জলদূষণ।
- বর্ণামূলক পদ্ধতি (Desoritive Method)।
  - (i) প্রাকৃতিক কারণ।
  - (ii) মানবীয় কারণ।
- অবস্থান এবং তাদের ব্যবহার।
  - ক্ষেত্রের বিবরণ।
- obsering the Structure (enironment of Side)
- উপাদান সনাক্তকরণ ও চিহ্নিতকরণ (i) প্রথমত, (ii) দ্বিতীয়ত,
- বর্তমান অবস্থা।
- আলোচনা।
  - কীভাবে অবস্থান করা যায়।
  - উপসংহার।
    - তথ্যসূত্র।

জলদূষণ

ভূমিকা :- পৃথিবীতে মানুষের জীবনধারণের জন্য যে কয়েকটি গুরুত্বপূর্ণ আবশ্যিক উপাদান বর্তমান তার মধ্যে অন্যতম প্রধান হল জল। ছোটোবেলা থেকে স্কুলে আসা অতি-প্রচলিত "জলের অপর নাম জীবন" প্রবাদটি মোটেই অতিশয়োক্তি নয়। পৃথিবীতে মানুষের বেঁচে থাকা অত্যন্ত উন্নতি অবিকিছুর জন্যই জলের একান্ত প্রয়োজন।

জল ছাড়া জগতে মানুষ কেন, কোনো প্রাণীর অস্তিত্বই কল্পনা করা কঠিন। আমাদের প্রতিদিনকার জীবনের প্রত্যেক মুহূর্তে আমরা জলের ওপর নির্ভর করেই বেঁচে থাকি। প্রাণী তথা উদ্ভিদ জগতের অস্তিত্ব রক্ষার মূল উপাদানই হল জল।

কিন্তু বর্তমানে মানুষ প্রয়োজনের তাগিদে ও লোভের বশবর্তী হয়ে উন্নত প্রযুক্তির আশ্রয়ে যথেচ্ছভাবে অহরহ প্রাকৃতিক পরিবেশ থেকে অযুত আহরণ, শোষণ ও ধ্বংস করে চলেছে যার ফলে পরিবেশের ভারসাম্য নষ্ট ও জীবকুলের ক্ষতি হয়। এবং বাস্তুতন্ত্রের ভারসাম্য নষ্ট হয়। এর কুফল হিসেবে মানুষকে ভোগ করতে হয় জলদূষণ।

:Selection of visiting site:- (7)

জলদূষণ প্রকল্পটি দাসপুর থানার অন্তর্গত নিজ নাড়াজোল গ্রাম পঞ্চায়েতের অধীনের একটি অব্যবহৃত পুকুর।

উপকরণ ও পদ্ধতি (Metarials and Method)

প্রকল্পটি অর্থাৎ পুকুরটির জলদূষণ পরিমাপ করতে বিভিন্ন উপকরণ এবং পদ্ধতি প্রয়োজন।

পর্যবেক্ষণ পদ্ধতি (observation Method)

আমি পর্যবেক্ষণ পদ্ধতি হিসাবে কল্যাণপুর নামের একটি গ্রামের একটি পুকুরকে বেছে নিয়েছি, এই পুকুরের জলে বিভিন্ন ধরণের প্লাস্টিক, আবর্জনা, বর্জ্য পদার্থ, ফলের খোসা, গাছের পাতা ইত্যাদি পড়ে থাকতে দেখেছি; এর ফলে পুকুরটির রং স্বাভাবিক রং-এর চেয়ে বদলে গেছে। পুকুরটির রং এখন হয়ে গেছে সবুজ, পুকুরটিতে গবাদি পশু স্নান করানো হয়, কাঁসর কাচা, রাসায়নিক সারের ড্রাম ধোয়া ইত্যাদির ফলে এই অবস্থা হয়ে গেছে। পুকুরটিকে পর্যবেক্ষণ করে বুঝতে পারলাম এই জলদূষণের কারণগুলি।

চিত্র - ১ :- দূষিত পুকুর

:- জলদূষণের উৎস :-

(1) গৃহস্থালীর আবর্জনা :- গ্রাম এবং শহর এলাকার বিভিন্ন আবর্জনা বর্জ্য পদার্থ যেমন দৈনন্দিন ব্যবহার্য বস্তু, গৃহস্থালীর কাজে ব্যবহৃত জল, সাবানজাতীয় পদার্থ সহ ব্যাকটেরিয়া প্রভৃতি জীবাণু, সবজি পচানো জল, মলমূত্র ত্যাগ, জামাকাপড় কাচা এই সবই নর্দমা পয়ঃপ্রণালী দিয়ে নদনদী, হ্রদ, খাল ও সমুদ্রের জলে পড়ে জল দূষণ ঘটায়।

(2) কৃষিক্ষেত্র থেকে জলদূষণ :- চাষের ক্ষেত্রে বিভিন্ন প্রকার ছত্রাকনাশক আর, কীটনাশক, আগাছানাশক, ইঁদুর নাশক, পতঙ্গনাশক, DDT, জৈব কীটনাশক প্রভৃতি দেওয়ার ফলে সেগুলি বৃষ্টির জলের সঙ্গে মিশে জলাশয়ে পড়ে জলদূষিত করে।

:- বর্ণনামূলক পদ্ধতি (Descritive Method) :-

পুকুরের জল প্রধানত দুই ভাবে দূষিত হয়ে থাকে।

যথা :- (1) প্রাকৃতিক কারণ।
(2) মানবীয় কারণ।

(1) প্রাকৃতিক কারণ :- প্রাকৃতিকভাবে এই পুকুরটি কম দূষিত হয়ে থাকে, কারণ জৈব স্বাভাবিক প্রক্রিয়ায় কৃষিজমির জল পুকুরে এসে পুকুরটি দূষিত করে।

(2) মানবীয় কারণ :- পুকুরের জল অধিকাংশত বেশি মানুষের কারণেই দূষিত হয়।

যন্ত্রপাতি এবং তাদের ব্যবহার (Equipment and their use):-

আমি এই জলদূষণের জন্য একটি পুকুরকে বেছে নিয়েছি,
প্রত্যক্ষ ও পরোক্ষভাবে কিছু টেকনিক বা যন্ত্রপাতি ব্যবহৃত করেছি, সেগুলি হল — (i) একটি জাল,
(ii) একটি জার,
(iii) একটি ব্যাগ,
(iv) একটি দূষিত পুকুর,
(v) নোটবুক ও কলম,
(vi) স্মার্টফোন,

প্রথমে আমি এই পুকুরটিকে দেখলাম, এবং পুকুরটিতে কোন অপচয় প্লাস্টিক ও ছেঁড়া জামাকাপড় ব্যাগ ফুল নিশান, এই অপচয় প্লাস্টিক গুলোকে জাল দিয়ে তুললাম, এরপর এগুলিকে নোটবুকে লিপিবদ্ধ করলাম ও স্মার্টফোন দিয়ে ছবি তুললাম,

ক্ষেত্রের বিবরণ (Field Description)

(0) Observing the structure (environment of side):-
পুকুরটির আশেপাশে অনেক জলবসতি আছে, পুকুরটির চারিদিকে বিভিন্ন ধরনের গাছ রয়েছে এবং গাছ অনেকটা আছে,
(0) উপাদান সনাক্তকরণ ও চারিত্রায়ন:- জলাশয়টি থেকে প্লাস্টিক বোতল, আবর্জনা, ছেঁড়া কাপড়-জামা, ছিঁড়ে জুতা ও বিভিন্ন বর্জ্য পদার্থ পাওয়া গেছে এবং প্রাণীদের মৃত দেহ জল থেকে উদ্ধার করলাম,

চিত্র- ২:- দূষিত খুকুর পর্যবেক্ষণ
করতে গিয়ে- আমি-

প্রথমত:- এই পুকুরটি থেকে আমি বোতল, প্লাস্টিক, ছিঁড়ে জুতো, ছিঁড়ে জামা-কাপড়, ফলের খোসা, বর্জ্য পদার্থ ইত্যাদি সংগ্রহ করলাম।

দ্বিতীয়ত:- এই পুকুরের মৃত প্রাণীদের উদ্ধার করলাম ও অন্য পুকুরে স্থানান্তর নিয়ে গেলাম।

বর্তমান সমস্যা (Current Problems):- পুকুরটি দূষিত হওয়ার ফলে আশেপাশের মানুষের বিভিন্ন সমস্যা হচ্ছে, যেমন— (i) জলের মধ্যে থাকা প্রাণী যেমন মাছ, এবং জলজ প্রাণী মারা যাচ্ছে, যার ফলে পুকুরটি দূষিত হচ্ছে, এবং যার ফলে পুকুর থেকে দুর্গন্ধ বেরোচ্ছে এর ফলে আশেপাশের মানুষ নিঃশ্বাস নিতে পারছে না।

(ii) জল দূষিত হওয়ার ফলে মানুষের শরীরে অনেক অসুবিধা দেখা দিচ্ছে, যেমন— জ্বর, কাশি, সর্দি, ডায়রিয়া, কলেরা ইত্যাদি জাতীয় রোগ হচ্ছে।

আলোচনা (Discussion):- জলদূষণ মূলত মানুষের প্রত্যক্ষ ও পরোক্ষ কারণে হয়ে থাকে, বর্তমানে টিউবওয়েল এসে যাওয়ায় মানুষ মৃত আবর্জনা পুকুরে ফেলছে, এবং মানুষ নিজেই দূষিত করছে।

জলদূষণের ফলে আমাদের যেমন পানীয় জলের সমস্যা হচ্ছে, ঠিক তেমনই জলদূষণের ফলে জলজ প্রাণী ও উদ্ভিদের অস্তিত্ব হারিয়ে যাচ্ছে, তাই জল যাতে দূষিত না হয় তার দিকে লক্ষ্য রাখতে হবে।

কীভাবে সমস্যার সমাধান করা যায়:

এই সমস্যার সমাধানের জন্য কয়েকটি পদক্ষেপ নিতে হবে যেমন — (i) বাড়ির কাজে ব্যবহৃত সবজির খোসা, প্লাস্টিক, ফলের খোসার পচা অংশ ইত্যাদি জলে ফেলা বন্ধ করতে হবে।

(ii) সর্বদা জলের পরিষ্কার রাখতে হবে।

(iii) পুকুরের জলে গবাদি পশু, কৃষিকাজে ব্যবহৃত রাসায়নিক সার ইত্যাদি ধোঁয়া বন্ধ করতে হবে।

(iv) পুকুরটিতে পড়ে থাকা প্লাস্টিক, বর্জ্য পদার্থ ইত্যাদি জাল দিয়ে তুলে ফেলতে হবে।

উপসংহার:

জল দূষণ রোধ করতে হলে প্রত্যেক নাগরিককে সচেতন হতে হবে, আপনাকে জলদূষণ করা থেকে বিরত রাখতে হবে। সমুদ্রের খনিজ তেল পরিবহনের ব্যবহারের ব্যাপারে সতর্কতা অবলম্বন করা জরুরী। জমিতে কীটনাশকের ব্যবহার কমিয়ে জৈব সারের ব্যবহার বেশি করে প্রচলন করতে হবে, উন্নত প্রযুক্তির সাহায্যে দূষিত জলকে দূষণমুক্ত করতে হবে। সর্বোপরি আইনানুগ ব্যবস্থা জারি করতে হবে তবেই আমরা আগামী প্রজন্মকে সুন্দর একটা পরিবেশ উপহার দিতে পারব।

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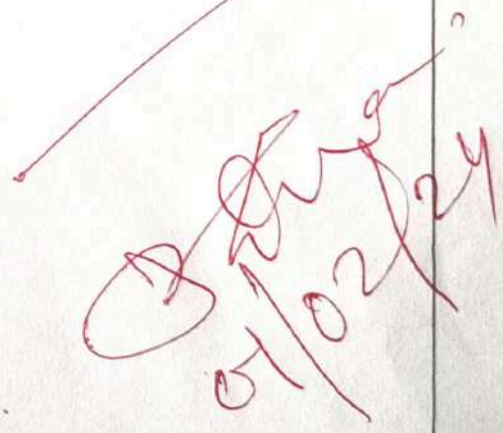

Title:- A Project On Capacity Building of Local People for flood management in Daspur-1 Block, Paschim Medinipur

Vidyasagar University

For the degree of B.sc (Hons) in Geography 6th sem

Paper :- C14P Exam-2023

Regestration No :- 1300523 year:- 2020-2021

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Under the Supervisior of Prof. Ishita Biswas

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Certificate

This is to certify that ...Kalpana Bhunia..... (Reg. No.- 1300523 Roll- 1126130, No- 200045) of 6th Semester, B.sc in Geography (H) Examination, 2023 has prepared a project report on ".A project on..... Capacity building of Local people for flood management in Daspur-1 block, Paschim Medinipur....." under my supervision. The work partially fulfills the requirement of Core Course C14P of Geography UG syllabus.

Ishita Biswas,

Signature of Supervisor

ACKNOLEDGEMENT

I would like to express my gratit-ude to my project work guide Mrs. Ishita Biswas whose cordial support has held me a lot to complete my project Report on "A project on capacity building of local people for flood management in Daspur-I Block, paschim Medinipur" described in the syllabus of CBCS (Geogra-phy Honours) and also thankfull to all the professor Mr. Subhasis Das, Dr. Sukamal Maity, Mr. Subhas Manna and Mrs. Mousumi Maity of department of Geography, Narajole Raj College. The excellent sprit effective guidence and constant encoargement gave me the confidence to complete the project work.

This project report would have been not possible without the help of my friends, who indeld were helpfull co-operative entire course of project.

Date : 22/06/23
Place: Ramdaspur

Kalpana Bhunia

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Introduction :

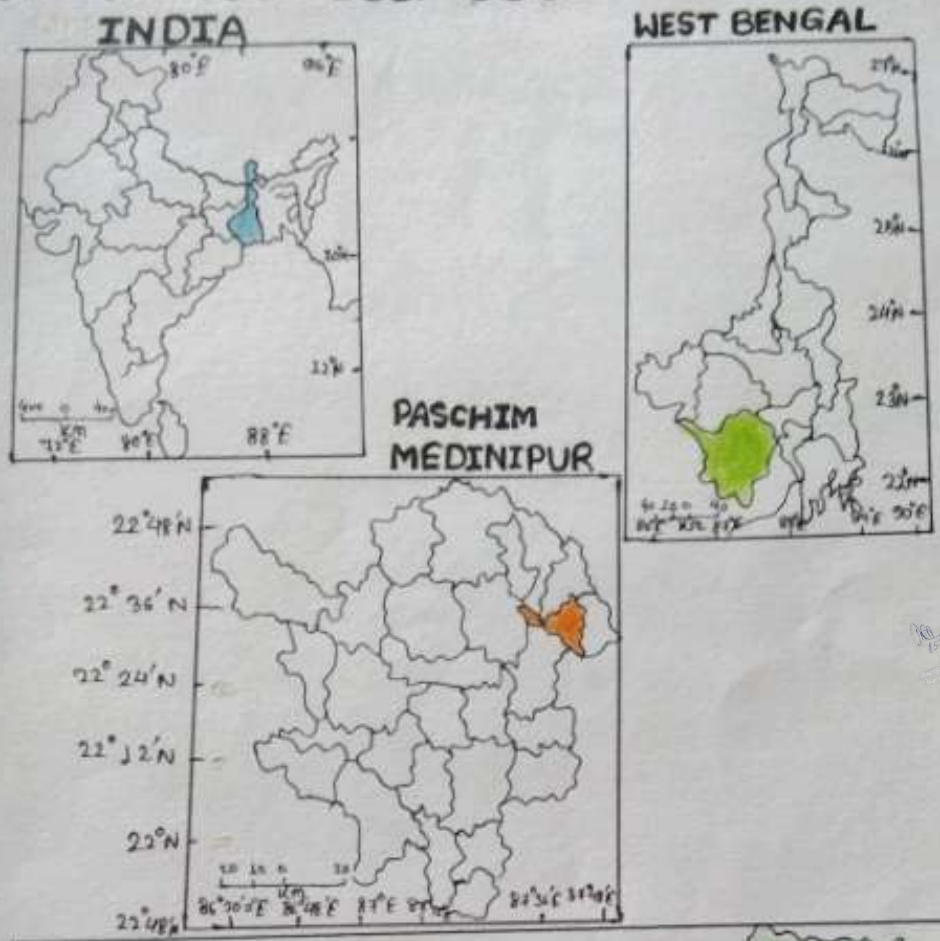
Flood is one of the natural disaster. Which puts people in danger. Generally, riverine areas have to face floods at certain times of the year. People have to face this extreme disaster due to the vagaries of the weather. When excessive rainfall occurs for a long period of time, the river loses its capacity to hold water due to which the water spreads over a wide are around it and causes loss of life as well as property damage to the common people, which is called flood.

In 2015, the world Resources Institute made a special list of about 164 countries in the world in terms of population affected by floods. In terms of this list, about 80% of the people affected by floods are in the highest position in 15 countries of the world. Among all those countries India is a flood prone area. Floods are common in different part of India. The impact of this flood can be seen in Daspur-1 block of west Medinipur district in India which is the area selected for our study. People living in that area have to face floods almost every year. These floods also lead to displacement. Also, economic activities are stopped along with their livelihoods. The study up to 2020 attributed the flooding in all these areas to excess water storage in Shilavati River, Kangsavati River and connecting tributaries. However, there were deadly floods in 1978, 1993, 2007, 2011, 2017, 2019 and 2020, which were devastating. Because of which there isanot of damage in that area. Even these floods destroy infra-structure, roads, irrigation systems and agricultu-ral crops. Human develop capability to deal with this flood. Also, several governmental and non-gover-nmental measures are taken to mitigate the flood in the area or region and overall public awareness in increased.

Selection of Study area:

Daspur-I block of West Medinipur is one of the rural flood prone area. This block is our present study area. This block is an agriculturally rich area within West Medinipur district. The geographical location of that block 22°85'40"N to 22°37'39"N and 87°41'15"E to 87°44'20"E. The block has a total area of 166.58 sq Km and total population of 175331 (2001). Whose population density is 1053/Km^2. which is much more than the population of other blocks of paschim Medinipur district. Daspur-I block is surrounded by Chandrakona and Ghatal police stations on the North, Keshpur police stations on the west, Debra and pashkura police station on the south and Daspur-II block on the East. This block is highly prone to chronic flooding. In the south and in the middle of the palaspai canal and in the east and South of the Kangavati river are noteworthy. Therefore, the surrounding areas of ten face floods due to excess rainfall.

LOCATION OF THE STUDY AREA



Objectives of the Study :

Flooding is a long-term, suffocating environmental impact. As a result of this the balance of the environment is destroyed as well as destruction of the ecosystem, which affects plants and animals. And as a result, people Suffer loss as well as property loss. In Daspur-I Block flood is not clearly observed and how much the people of that area have been able to present flood and what methods they have been able to adopt area as follows—

- Properly managing the natural flow of the river.
- Overall improvement of local water bodies or other water drainage systems.
- Use and maintance of healthly land along river banks.
- Construction of dams and reservoirs and diversion of excess water into canals and flood ways.
- Planting vegetation to retain excess water terraced slopes and levees to reduce run off (man-made clannels to divert flood water) constructing dyke dams reservoirs or holding trunks to store excess water during floods.
- To create appropriate public awareness to aviod various risks or impacts of floods.
- Rapid restoration of all adverse conditions in flood affected areas.
- Minimizing all types of damage (loss of life and property) due to floods etc.

Methodology :

The Methodology include primary and second -ary data are used for the fulfillment of the project. We have done the work more based on this process —

1. We visited and observed the village in Daspur-1 Block to find out the causes of flood.
2. After finding the causes, We have identified safe places in different villages. so that people can reach safe places during flood.
3. We used climate data to predeet the wether.
4. Administrative at last of West bengal 2011 it is used to prepare the study area map.
5. Census district handbook of paschim Medinipur, 2011 from this PCA, Demographic data were collected.
6. climatic data were collected the Apart from that prim -ary data has been collected through field survey. The survey has been collected from to investigation present study problems.

The whole work study start can be present categorized in to three types —

a. **Pre-field Work :**

Under the pre-field study, I briefly required collected various secondary types of data.

b. **Field Work :**

During the field work primary data are collected.

c. **Post field Work :**

During this period collected data are ana -lysed, fromulated tables. Prepared maps are analysed the result of the study.

CHAPTER ONE (1)

NATURE AND IMPACT OF FLOODIN DAS -PUR-1 BLOCK

Nature:-

Geographical region :

The study area is the Daspur-1 Block located in the lower reaches silabati river catchment and administratively is located within Ghatal subdivision of paschim Medinipur distric of the state of West bengal. The geographical of area Duspur-1 Block 168.30 Km^2. It has 1 Panchayat samity. 10 gram panchayat, 162 mouza and 157 inhabited villages with a population of 203.987 (2011 Census). Daspur police station serves this Block. Headquaters of C.D Block is at Duspur.

Physiography:

The study area is situated in lower catchment of the shilabati river and Kangsabati river which has originated from chotanagpur plateau, in Daspur-1 C.D Block. The area is flat deltaic country inter sected rivers. The height of the vent area Daspur-1 block is 9 m (30ft). It is a flood prone area and is affected by water logging in the rainy season. Some area of this area is coverd by clayey soil, which is poor permeble to water, causing water segment. Most of the area sediments of silabati river and its tributaries. The study area comes under the subtropical waram and humid climate with moonsonal heavy rainfall. Silabati and Kangsabati area the important river in Ghatal Sub-division area including Chandeswar Khal, Ketala Khal Donai Khal Buriganga etc.

Climate of study area:

The study area has a tropical monsoon climate hot summer and well distributed normal rainfall. The year devieted into four seasons. The winter season starts about middle of december and continuous till the end of febraury in summer which extend up to may. The south west monsoon

season continuous up to the end of september. October and first half of november is the post monsoon. The study area have highly effected in monsoon season by flood.

Rainfall:

The study area Duspur-1 comes under monsoon climate. Therefore maximum rainfall (>90% of total anual rainfall) is concentrated in a sudden period. If we observed the yearly rainfall distribution. The maximum rainfall occured in between 4 month and another 7-8 month very less amount of rainfall. The average anual rainfall 250-300 mm. Rainfall deerea-sed in the cold weather month of november and december. Rainfall is the main causes of flood.

Impact of flood in Dospur-1 Block :-

It is 2 types. They are -

1. Human
2. Environment

1. Flood and it's impact on Environment :

The ecosystem is impact made up of two elem -ent resources and pasative. The climate are activeted when the atmosphere change. Wheather it occeeres unex -pected are over times one of the hazard that result from environmental changes in the occureed or since animation time. Flood is one of the elematies on a natur -al disaster time caused by the overflow of water on a day dry region. Floods are playing a Rivotal part in the matences of the earth natural cycle.

➡ **Impact of flood on environment :-**

Flood have a wide range of negativation and posative effect depending on their location management depth and intensity. Includials and communitade are impact by flood. The flood on the environment.

➡ **Effect of flood on agricultural condition :-**

The economy and Livelihood of the maintained of some countries rely on agricultural lands. Due to flooding the buitly agricultural lands became less fertile soil year of the agricultural the cultivation land is areas held of with the higher speed flow of the flowing water. The productivity of such agricultural land is reduse by 40 present. As water speps in touch flooded land the extra mousture will make the winter season crops deficult to growth. Flooding water affect the connact of the soil Living it nutrant different nitrogen.

➡ **Impact of flood on Ground water Quality :-**

Ground water is major part of the geological natural cycle. Ground water as found water ground and mosics through water is found aquifer. This aquifer

are the primary sources of drinking water. Floods are the mazor contiamirds. Water with Pathogenic. Consumption of contaiminds, water with pathogenic microbas is the leadin causes of water born diseases like cholergtyphoid. Water is a chemical composition of oxygen and hyd -rogen. Water is the most essential componerd of the seruical of all living organism. Flood cause the mobili -zation of harmfull material like pesticide, hazards matarial is the river, ponds streems and ground water and market impact of taken the chemical that insum of from industrial land and form land.

→ Effect of Flood on Aquatic Biota :-

A aquatic eeosof is major impact flood servining the aquatic ecosystem precuides distured by natural disaster and climatic. Flood have advers impact on the aquatic system and all the seruics. The probability of rick of flood in causes due to gradial changes in the natural water cycle and climate change. The flood have both positive and negetive impact on the aquatic Ecosystem.

Flood effect the primary productivity of feth water by changing the clirity. Oxygen content and pud of the water of low productivity of the aquatic system Flood have more pasetive impact of the aquatic. Eco -system need flood fair crease productivity and genear -ate a unique or new spacies.

11. Impact of flood on Human being in Daspur-1 Block :

Generally flood affects the any type of structure, including building, bridges, sewerage system, roadways, and canals as a primary effects and water condamination, crop damages, communication disturbance etc as a secondary effect. In the study area those effect are critically observed. Agriculture loss is the main affects of flood in the Ghatal block, of all the forms of natural disasters flooding is one of the most destructive. It leaves far-reaching effects.

1. Flood have the most damaging effects on the crops and livestock which are simply washed away by the strong currents of the flood.
2. Equally damaging is its effects on house and property.
3. people also not only rendered homeless but they are also killed by thousand.
4. Flood also lead to the shoutage of flood and drinking water and as a result starvation shows its ugly head.
5. There is a great loss of transport and communication links. Many railway line and roads are simply washed away by the fury of flood.
6. Even after the flood water recater people become prey to many water borne diseases.

CHAPTER → TWO (2)

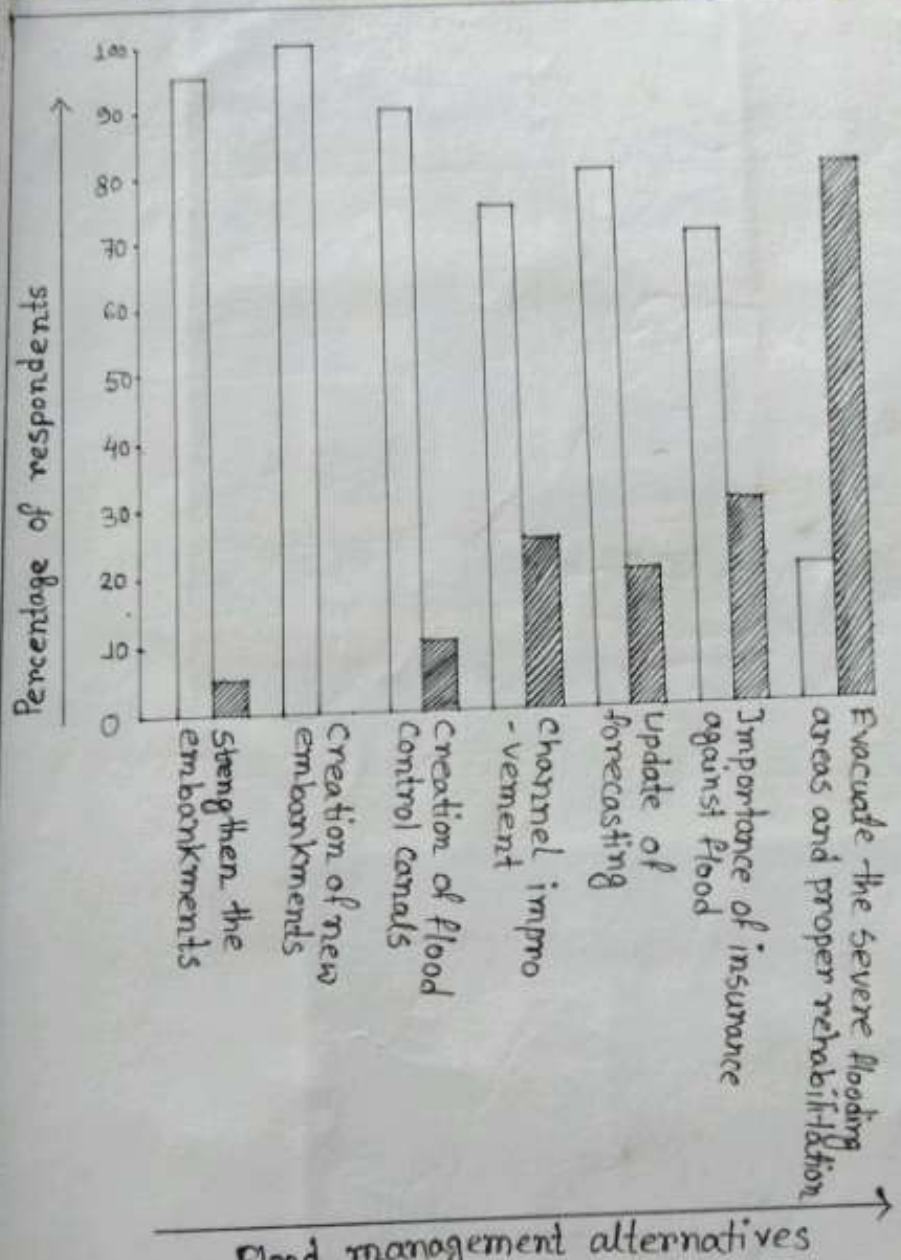
CAPACITY BUILDING OF LOCAL PEOPLE FOR FLOOD MANAGEMENT

Capacity building refers to the ability of an individual or a particular organization to meet specific goals for the sake of social development in a specific period of time. Floods are one of the few extreme dangers or dangers that weather freaks sometimes push people to face. Especially since long time, the river management system by the people, the structure of the river channel has been changed, the climate has been affected, etc. The global flood situation has become quite dire. Flooding is the biggest problem in Daspur-1 block. The natural problem cannot be prevented. Therefore, the ability of the people in Daspur-1 block to cope with the flood can be seen. The capacity building that can be observed among people in the flood affected areas are follows —

1. Flood-affected people located in Daspur-1 block build or build their houses higher to prevent floods so that their residences do not have to be displaced in flood-related situations.
2. They keep drinking water system elevated so that their drinking water is not inconvenient during floods.
3. Stores food so that they do not face famine during floods. In addition to this, they also arrange some medicines.
4. Emergency lights are arranged instead of electricity so that they do not have to face any kind of problem during floods.
5. Raised shelters are also built to accommodate domestic animals and food is also stored for them.
6. The bank of the river or dam is made strong so that the bank of the river is not eroded as a result of flood.

7. Plantation is done in river basin area. Because the roots of the tree can hold the soil firmly, the soil does not erode. Along with it, the river basin area is not eroded and the river dam is not broken.
8. The mud houses are properly repaired so that the houses of local people are not damaged during floods.
9. People living in flood prone areas construct properly planned watercourses to prevent flooding. So that the excess water of the river does not flood the area as well. Water can flow easily through the water-courses.
10. Drainage systems are constructed in local settlement areas, so that the water can flow easily without standing.
11. Garbage accumulated in the river bed is released at regular intervals so that the river bed remains deep and the river can easily carry excess water.
12. The roads are built as per the plan, so that the roads are not damaged due to floods.
13. In order that there is no problem of transportation or communication during floods, people keep a boat or canoe in their house.
14. After receiving the warning message of flood, the farmers cut the crops from their agricultural land ~~Land~~ and keep it strong in certain places.
15. To make people aware by indentifying flood prone areas and preparing maps.
16. Located in Daspur-1 ~~Block~~ Block in creasing Knowledge about flood and creating public awareness among the people living in different areas so that they can prevent the flood.

PUBLIC PERCEPTION ABOUT THE FLOOD MANAGEMENT ALTERNATIVES OF DASPUR-1 BLOCK (2011)



Index:
- Yes
- NO

Scale:
Vertical = 1 cm to 10 percentage of respondents
Horizontal = 1 cm to flood management alternatives

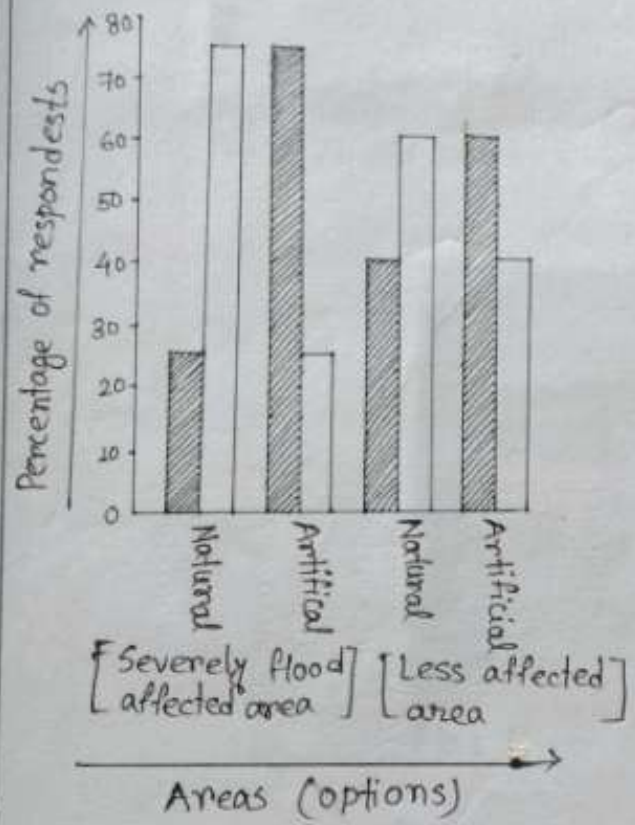
[Source: https://www.researchgate.net/publication/273439...
917

PHOTOGRAPS

Pic: Water pump house of flooded area

Pic: Local Dam of Dospur-1 block

PUBLIC PERCEPTION ABOUT THE CAUSES OF FLOOD OF DASPUR-1 BLOCK (2011)



Index:-

- Yes
- NO

Scale:-

Vertical = 1 cm to 10 percentage of responds

Horizontal = 1 cm to Areas (options)

[Source : https://www.researchgate.net/publication/273493917]

Pic : Damp's structure for passing flooded water

Pic: River side view of flooded areas

Pic: Living Settlement of Local people for people for flood management

CAPACITY BUILDING OF LOCAL PEOPLE FOR FLOOD MANAGEMENT

Interpretation :-

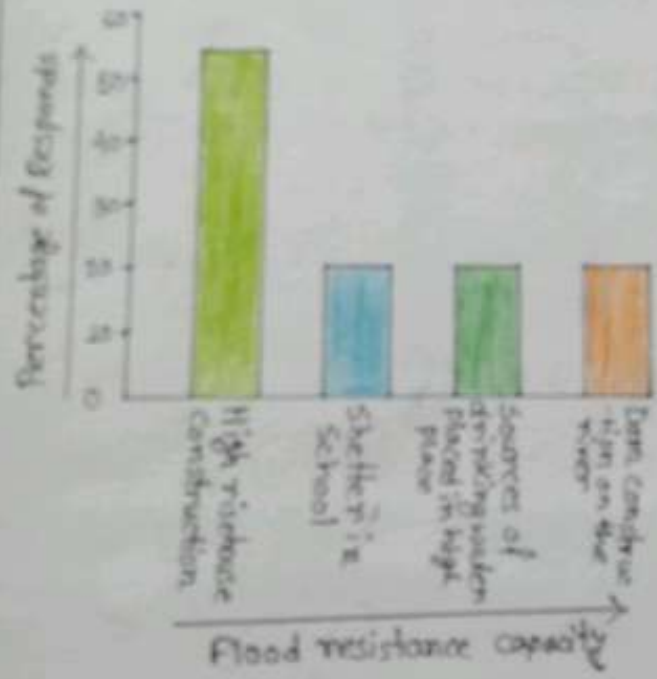
Table No.1 :

Based on the table we have taken from the secondary data of our surveyed area, by drawing a bar graph we get the result that different people's response to the cause of flood is different. Some people consider flood as a natural phenomenon. It should be noted that the perceived thread and concerns are not always accompained, as they may be in ~~con~~ coveniend and demand gread adaptation effort. Some people accept that flood is their fate or artificial phenomenon. They blame the administrative management for the hardships they face during floods.

Table No.2 :

Table-2 respresents the public perception of management alternatives according to the respondent's opinion. 100% people support the creation of new embankments. Even the survey shows that there is a lack of knowledge among the ~~some~~ common people to prevent floods. The flood defense measures should integrate also governmental support for the reinsurance and monitoring of social conditions for proper protection of the most valunerable part of the population. The importance of warning is clearly higlighted.

DIFFERENT TYPES OF STRATEGIS /ADAPT BY LOCAL PEOPLE FOR CONTROL IN DASPUR-1 BLOCK



Index :-

- High risehouse construction
- Shelter in school
- Sources of drinking water place in high place
- Dam construction on the river

Scale :-

Vertical = 1cm to 10 percentage of Responds

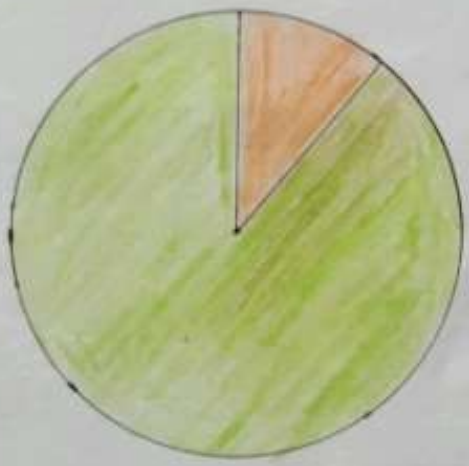
[Source : Primary data]

Pic: Boro slaughter of local area

Pic: Houses structure in flooded area

Pic: Upper primary school Building in flood prone area

NUMBER OF CAPABLE PEOPLE FOR CONTROLLING FLOOD IN DASPUR-1 BLOCK



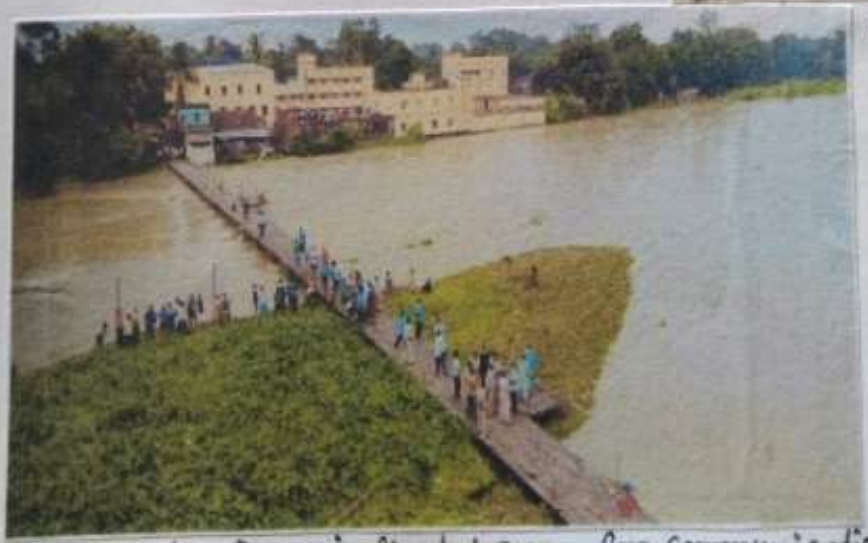
Index :-
- Yes
- NO

[Sources: Primary data]

Pic: Boro slaughter for controlling flood water

Pic: House types in floodprone area for flood management

Pic: Water tube well in flood prone area



pic: Wooden Dam in flooded area for communication

Table NO.3: Capacity building of Local people for flood management

Based on the table we have takes from the primary data of our surveyed area. By drawing a bar graph we can see what measures people have taken to prevent floods. There are high rise house construction, shelter in school, sources of drinking water placed in high place and Dam construction on the river etc.

Table NO.4:

By drawing a pie diagram, we get the result that different people's response to the management of flood in different. Out of 100%, 60% of people have the ability to resist floods.

CHAPTER → THREE (3)

FINDING AND CONCLUTION

Findings :

Flooding is a major problem in various villages of Das-pur-1 Block of Paschim Medinipur district. It is seen the health resilience capacity in Daspur-1 block. Paschim Medinipur reduced the flood danage. In another word we can say that health resilience approach in an effecting and very useful approach for flood management. But there is some differences in social groups. The major findings of the study are —

I. The people of the surveyed area are affected by floods every year. Even every year about 64% of the total families are completely damaged.

II. The region got suffer in sanitation, darainage, calvert and public health facilities by flooding.

III. Every year due to flooding, people's agriculture is getting damaged. As a result of which the rate of loss of people-'s economy is increasing year after year and the opportunity of job resources is de creasing.

IV. Local people have to face the problem of drinking wat-er in flood affected areas.

V. Due of improper knowledge of flood mitigation strate-gies of people the region suffer during flood.

VI. The flooded area is directly related with affected popu-lation, roads and agricultural land.

VII. In various areas living in Daspur-1 Block, mud hous-es were damaged due to flood and the affected families took shelter in safe places during the flood situation.

VIII. More interestingly, it is found that the relationship between education level of the family head and health resilience is possitive.

IX. The depth of the river is decreasing due to excessive irrig-ation in the river located in Daspur-1 block. As a result, due to excess rain, water seepage can also be observed in the region.

x. Vegetation is less on the river embankment and local people have built settlement. As a result the river embankment has become weak in nature.

xi. Fish farming is done in small reservoirs. As a result of floods, water bodies are filled with water, causing a lot of loss to the people who earn their livelihood through fish farming.

xii. people who are more educated are more vigilant before flood to prevent flood and people who are less educated to fail to adopt awareness.

Conclusion:

Flooding in Daspur-1 block a regular and recurring phenomenon. It was happened in the past and will continue to happen in the future. It is neither possible to totally stop floods nor to completely eliminate flood damages. However, it is possible to minimize the severity of the impact and damage potential. The study revealed several important fact about the influence between people and floods. Surveys provide in-depth feedback from responderds on what respondents think and feel about flood risk.

River friendly and multi-pronged measures that are based on scientific understanding of the causes and effects of floods and that recogrize the geomorphic importance and environmental value of floods are likely to be more effective, then the existing 'hard' engineering measures of flood control.

REFEIRENCE

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- primary Dada source.

APPENDIX

Table1: Public Perception about the causes of Flood of Daspur-1 Block During 2011

Areas	Options	Percentage of Respond-ents	
		Yes	NO
Severely flood affected area	Natural	25	75
	Artificial	75	25
Less affected area	Natural	40	60
	Artificial	60	40

[Source: https://WWW.researchgate.net/publication/273439391]

Table2: Public perception about the flood Management Alterna-tives of Daspur-1 Block During 2011

Flood Management alternatives	Percentage of respondents	
	Yes	NO
Strengthen the embankments	95	5
Creation of new embankments	100	0
Creation of flood control canals	90	10
Channel improvement	75	25
update of forecasting	80	20
Importance of insurance against flood	70	30
Evacuate the severe flooding areas and proper rehabilitation	20	80

[Source: https://WWW.researchgate.net/Publication/273439391]

Table 3: Different types of strategies about by local people for flood control in Daspur - 1 Block

Flood Management of prevention	The Number	percentage
High rise house construction	8	53.33
Shelter in school	3	20
Sources of drinking water placed in high place	3	20
Dam construction on the river	3	20

Table 4: Number of capable people for controlling flood in Daspur - 1 Block

Flood resistance capacity	The Number	Percentage
Yes	9	60
NO	6	40

Questionnaire on Capability building of Local people for flood management :-

SL No.	village	Head of the family	Flood resi-stance capacity	Flood Management of prevention
1.	Narajole	Asit Bakshi	Yes	I. High rise house construction II. Dam construction on the river III. planting trees on the river embankments.
2.	Narajole	Amio Bakshi	Yes	I. High rise house construction II. Dam construction on the river
3.	Narajole	Ajoy Bakshi	Yes	I. High rise house construction II. planting trees on the river embankments.
4.	Ramdas-pur	Dipak Bhunia	Yes	I. High rise house construction II. Sources of drinking water placed in high place
5.	Ramdas pur	purnchanda Bhunia	Yes	I. High rise house construction II. Dam construction on the river
6.	Ramdas pur	Pradip Bhunia	NO	I. The mud house gets submerged in the flood.
7.	Ramdas pur	Ananta Bhunia	NO	The mud house gets submerged in the flood.
8.	Ramdas pur	Nimai Ruidas	Yes	I. The high rise house construction II. Dam construction on the river.
9.	Ramdas pur	Utam Bhunia	NO	I. The mud house gets submerged in the flood. II. Problem of drinking water III. Shelter in school (Kalyanpur primary school)

Sl. No.	Village	Head of the family	Flood resistance capacity	Flood Management of Prevention
10.	Ramdas pur	Purnchan-dra Bhunia	NO	As a result of Mixing raw and ripe the houses gets flooded.
11.	Kaladarja	Ambika Kuilya	Yes	1. High rise house construction 11. Sources of drinking water placed in high place.
12.	Kaladarja	Bidhth Kuilya	Yes	1. High rise house construction 11. Sources of drinking water placed in high place.
13.	Kaladarja	Karthic Dolai	NO	Shelter in relief camp
14.	Kaladarja	Biswanath Dolai	NO	Shelter in School
15.	Kaladarja	Animesh Kuilya	Yes	1. High rise house construction 11. Sources of drinking water placed in high place.

EXAMINED
Examined by
12/08/2023

" Investigation The Cause of Low Student Enrollment and Attendance in Narajole Raj College – A Geographycial Perspective"

"INVESTIGATION THE CAUSE OF LOW STUDENT ENROLLMENT AND ATTENDANCE IN NARAJOLE RAJ COLLEGE- A GEOGRAPHYCAL PERSPECTIVE"

Prepared By

Registration No :- VU2110023508

Roll :- 1125130-210030

No :- 210030

Under the supervision of

Prof. Subhasis Das and Prof. Subhas Mannà

Narajole Raj College

Narajole,Paschim Medinipur,West Bengal,721211

EXAMINED

Examined

Vidyasagar University

Midnapore,Paschim Medinipur,721102

Narajole Raj College

Affiliated by
Vidyasagar University
Accredited : Grade B by NAAC

Estd.-1966

Certificate

This is to certify that Payel Samanta (Reg. No.- VU211023508, Roll-1125130, No.-210030) of 5th Semester, B.sc in Geography (H) Examination, 2023 has prepared an group project report on the entitled "Investigation The Cause of Low Student Enrollment and Attendance in Narajole Raj College - A Geographycial perspective" under the supervision of Prof Subhasis Das and Prof. Subhas Manna. The work partially fulfills the requirement of Core Course of C11P of Geography UG syllabus.

14/02/24

Signature of the supervisors

Payel Samanta

Signature of the student

ACKNOWLEDGEMENT

I would like to express my gratitude to my project work guide "Prof. Subhasis Das and Prof. Subhas Manna" whose cordial support has helped me a lot to completed my project work on "Investigation the cause of low student enrollment and attendance in Narajole Raj College–A Geographycal Perspective"prescribed in the syllabus under CBCS pattern .

I would also like to thank for the valuable advice suggestions of our departmental teachers Prof. Ishita Biswas,Dr.Sukumal Maity and Prof. Mousumi Maity Mondal.

I am also deeply indebted to my classmates who had helped me hugely by providing the important materials for the project work.

Date; 12.2.2024

Payel Samanta

Student's signature

-: CONTENT :-

Chapter-VII: Conclution :-

7.1 Finding

7.2 nacomendations

OBJECTIVE

The objective of the study is to :-

(A) To know the nature of student admission in the Narajole Raj College.

(B) To know the relationship with socio econo-mic condition and college admission and attendence.

(C) To know the relationship with institural Condition and student admission and attendence.

Chapter- 1

Investing Socio-Economic-Infrastructural Factor With Relating to College admission attendance of Narajol Raj College

Chapter-I (Conceptual Framework

Introduction:- Narajole Raj college also as Nara-Jole college is an Undergraduate and postgraduate college situated in narajole, Pase-him medinipur, West Bengal India. The college was established in the year 1966 12 honowes course and 15 general course at the undergraduate level was rainning, which was affiliated to vidy-asagar University. The college Formation was a historical background. Historical the demand of a college by the local communities in a rural band forces to the astablished ments of his college.

The mejority of the student of this college menly comes from the different village of Nij naraj-ole and Rajnagar gram panchayat. other Studen-t comes from different grampanchayat of Daspur-I black as well as ghatal block. The interion location and centrifugal froce are the causes for student migration in the Daspur-I block. The transport network with the college is menly road rout. Bus servies is only transpotation facility that was avail by the student of this college. fa.

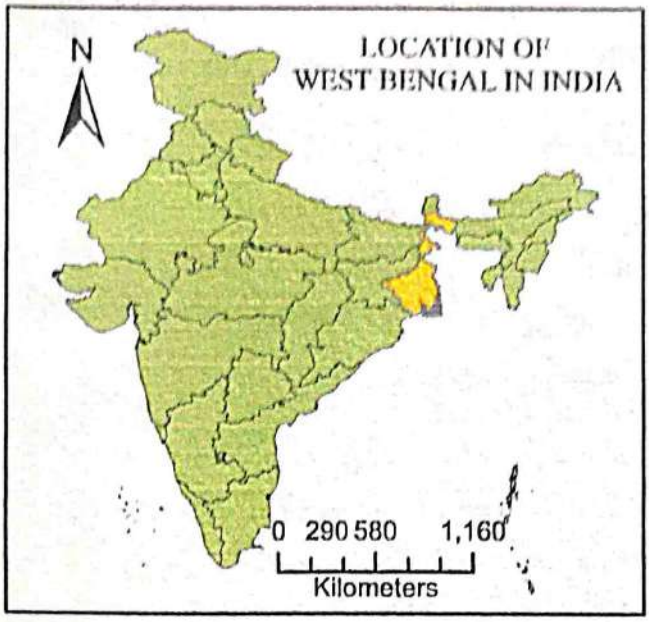
Besides the few banniers the college hass been rainning success fully and provides higher education to the students as well as the others training cources. Laking enrollment in the higher education is the growing problem in india as well as wast bengal. Therfore attracted student in high-er educetion is challenges not only of this college also in the other college of west bengal. The covid pandora is also and cuncial of the continutly.

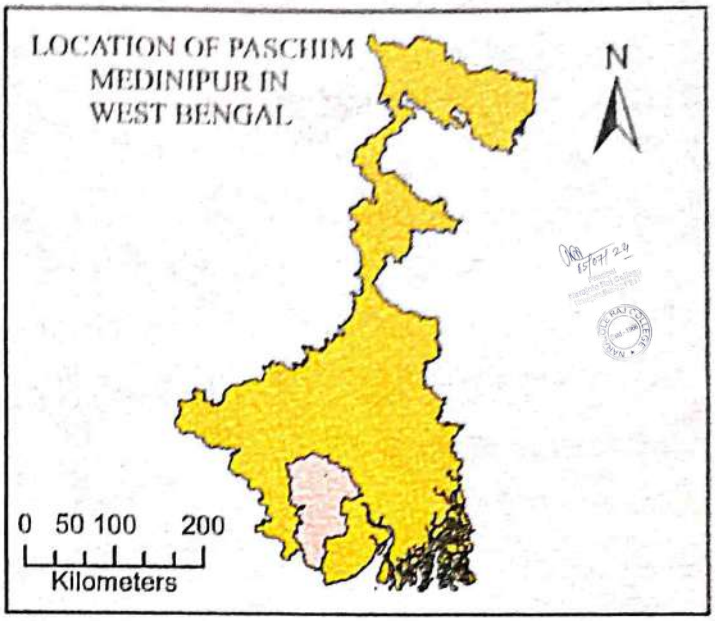
Location of the Study area :-

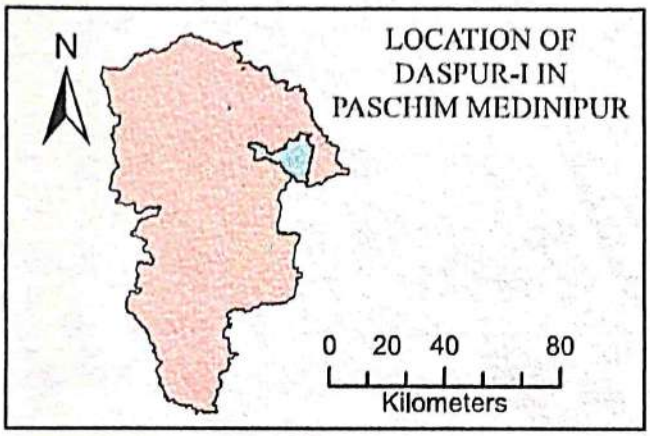
The area Narajole Raj college is located from 22°33'57" N to 22°34'1" and 87°36'13"E to 87°36'19" E. The college is located in the Streat of west Bengal. Paschim Medinipur, District. The total Geoggraphical area is nearly

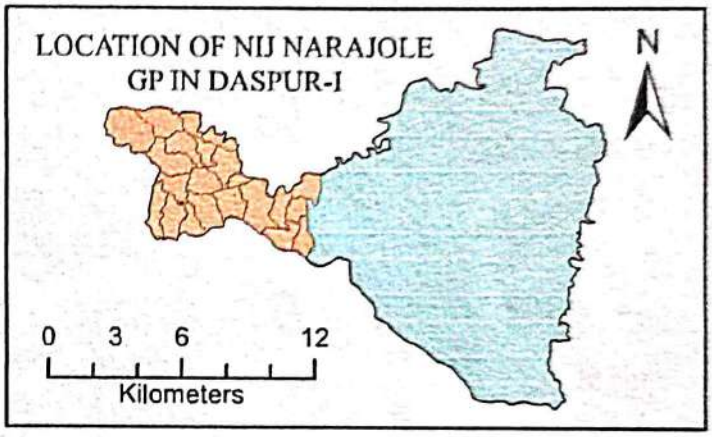
The total student of this college is in the year 2023 where _____ is male and _____ is Female.

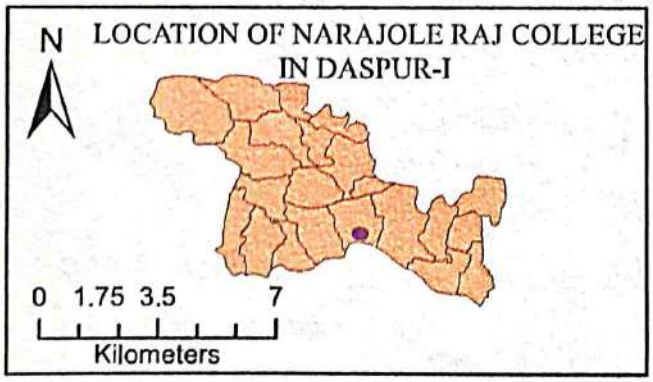
Location Map

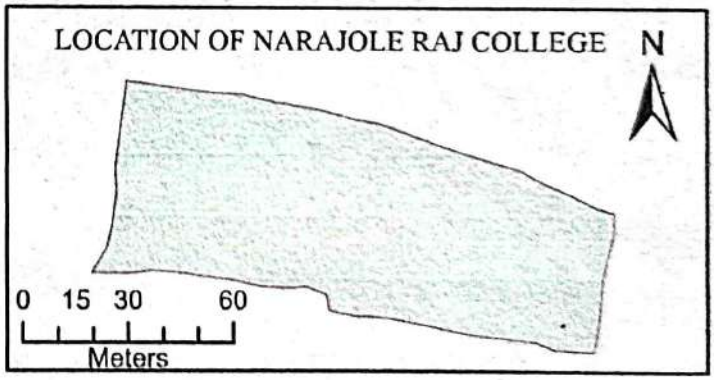


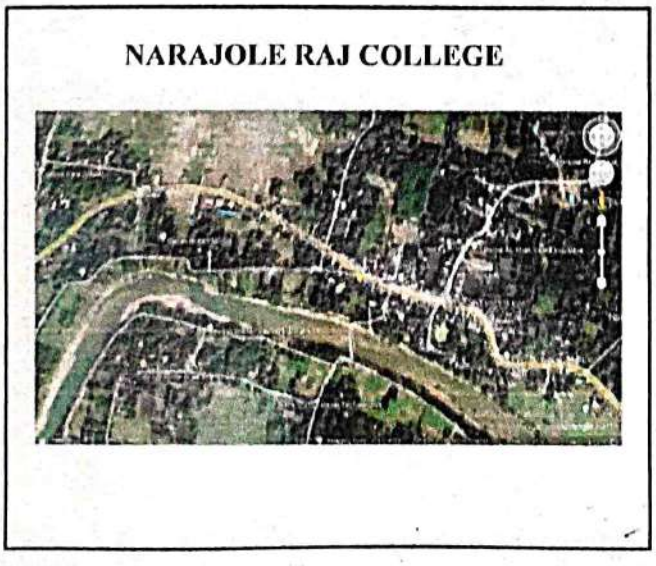


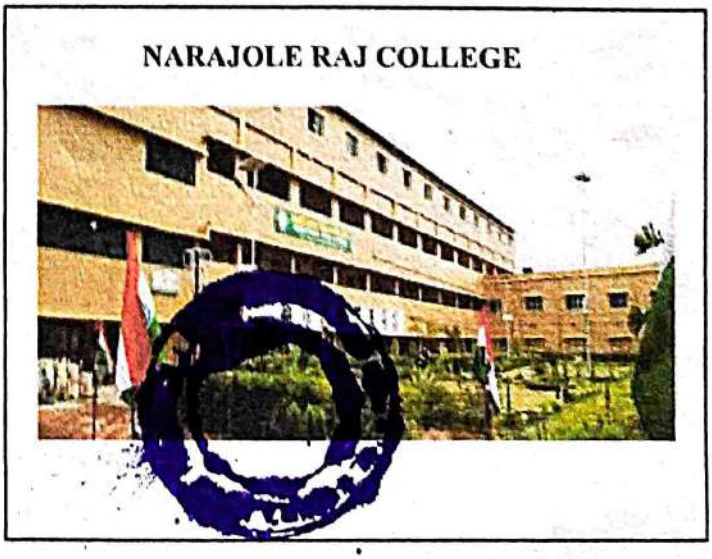












The objective of the study :-

The objective of the study is to -

A. To know the nature of student admission is the narajole Raj college.

B. To know the Relationship with socioeconoine condition and college admission at attendance.

C. To know the relationship with in lmastruct ural condition and student admission at attendancee.

Methodology :- The methodology includes primary and secondary data, which are used From the Fullfiured present study. The secondary data was collected from the narajole raj college office. The map of Narajole Raj colleg -e was preapare with the help of Google earth pro software. The primary data was collected based of schedule method. The whole Study can be catagorized into 3 type.

(i) Poe Field work :- Under this step we Reriew the previus literature, peap -are questionine and collected ranius secondary data

(ii) Field work :- during this period we collected primary data.

(iii) Post Field work :- In this phase we tabulated collected data in computer, analysied, penparied man using excel and Are GIS software and analy -sed the result of this study.

Limitation of the study :-

The limitation of the study are -

(a) Time sontaqe
(b) Small Number of Respondents
(c) Unavability of secondary data
(d) outside college students sample is small

Chapter-2

Chapter: 2- Nature of the students enrollment

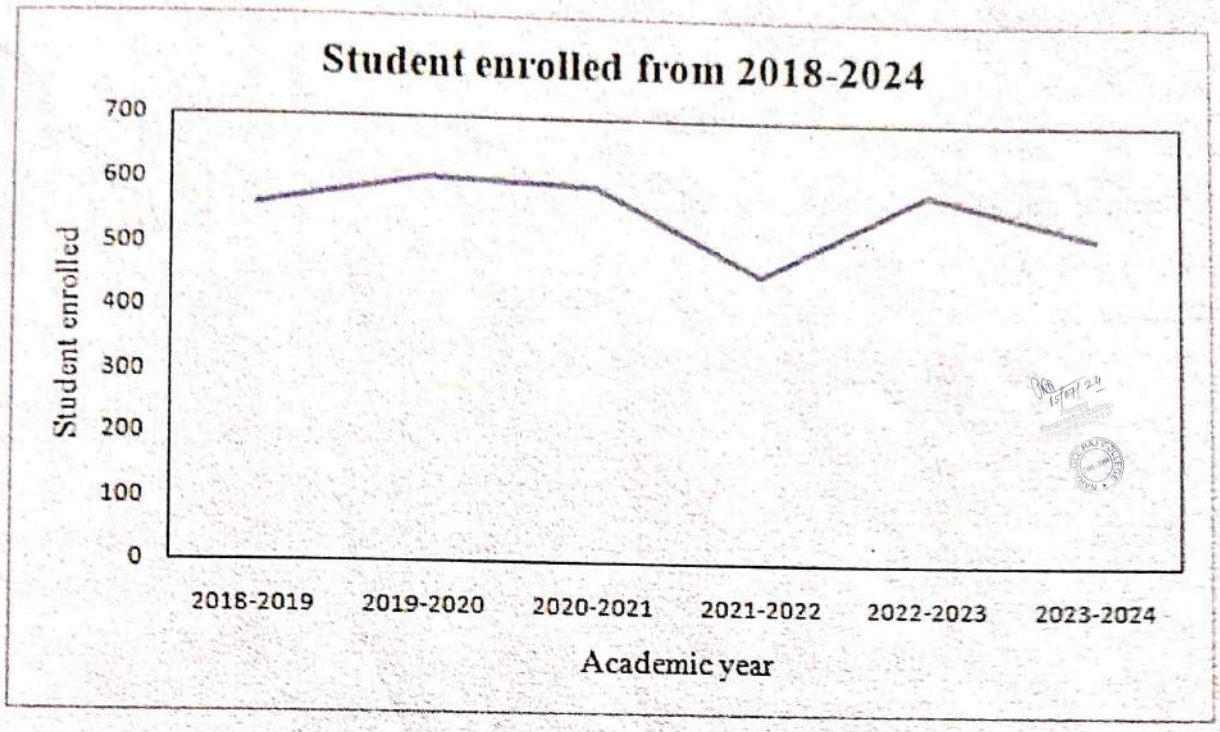
For the purpose of project work we collected seendary data of student enrollment from 2018 to 2024 for every year. we found that student enrollment was decreased from 563-521 in between 2018 – 2019 and 2023 – 2024. The node of student enrollment.

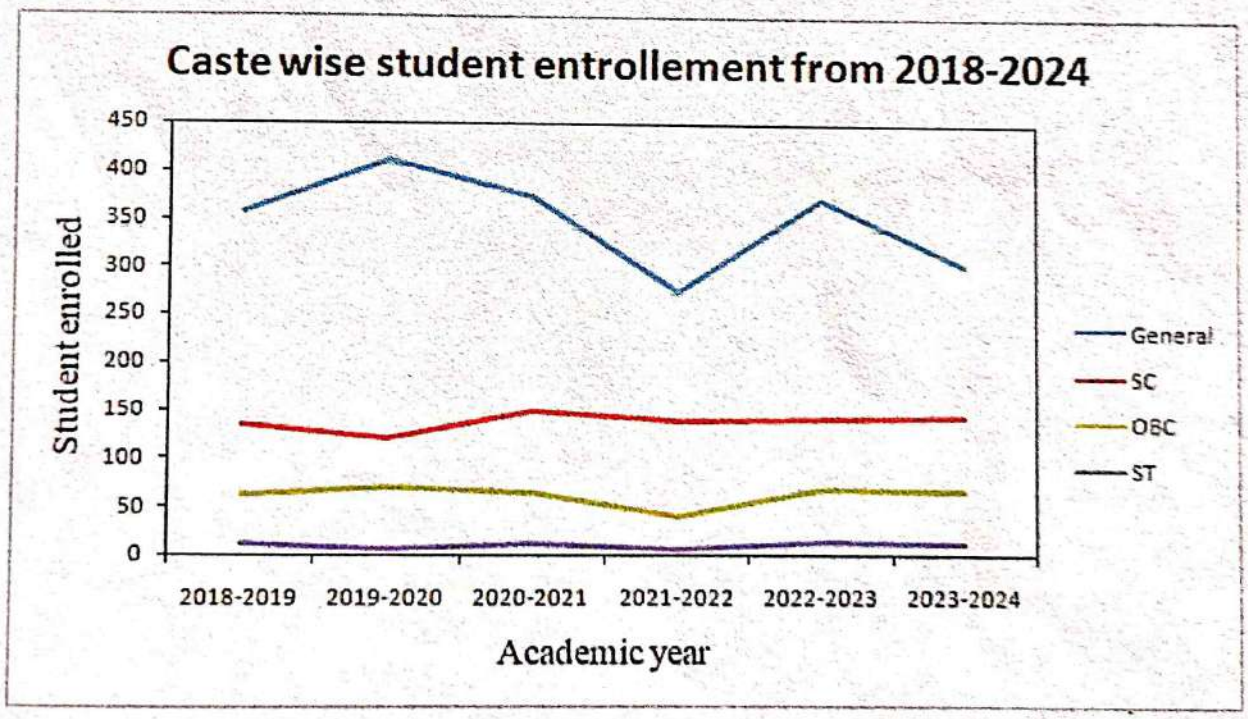
2.1- Nature of male and female enrollment :—

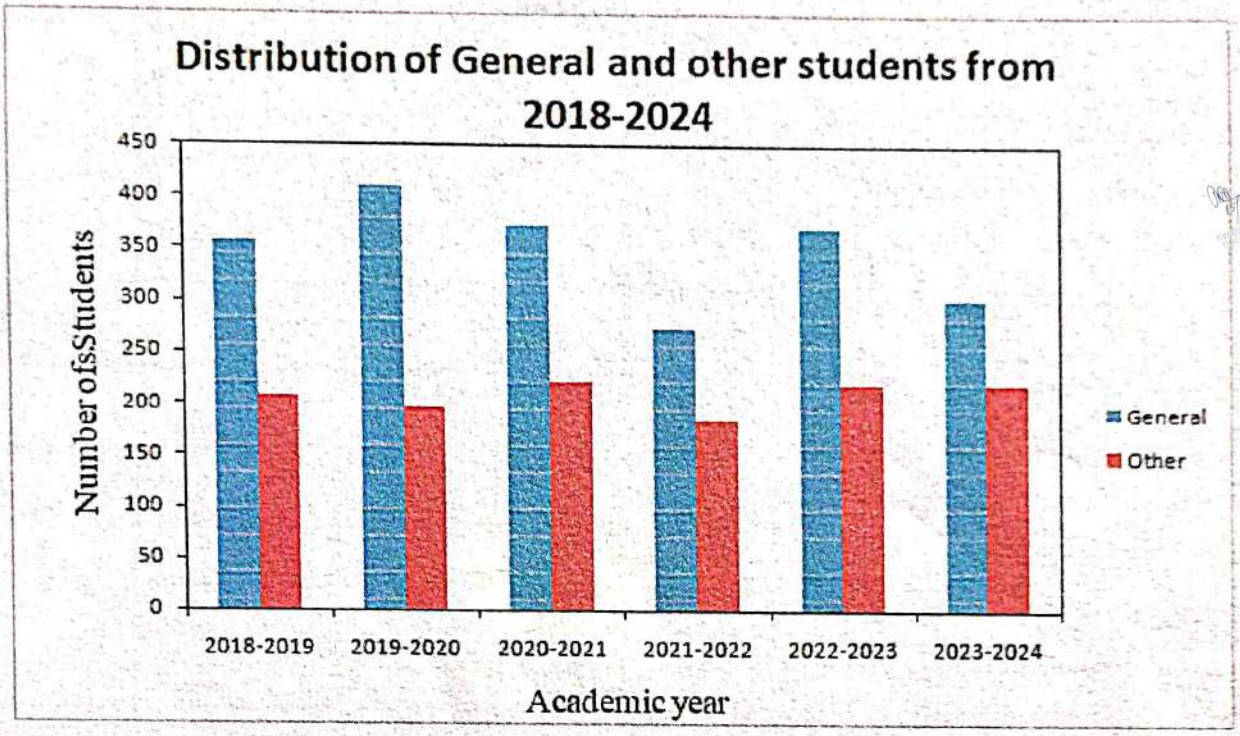
we analised the data in the maintion period found that the enrollment of female student was high in compare to male student for every acollmie year. nearly 1.5 to was ofrraty.

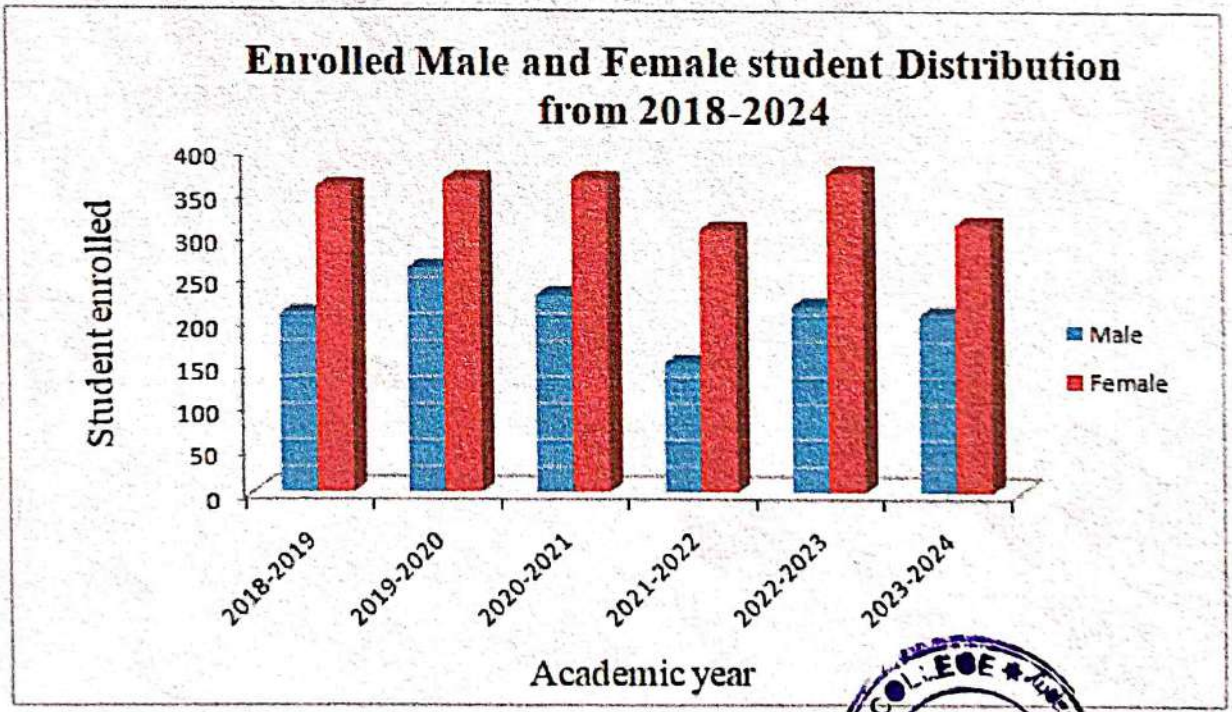
2.2 Nature of caste was enrollment Students :—

we also analised the data of student enrol —lment accending to different caste catagorey it is obsenved that must of the enrollment was belong to general catagory nenaly 70. The enroll —ment SC student was modevate nearly 10 – 15%. the enrollment ST student was very now in compare to the catagory.


Student enrolled from 2018-2024
Student enrolled
700
600
500
400
300
200
100
0
2018-2019
2019-2020
2020-2021
2021-2022
2022-2023
2023-2024
Academic year


Caste wise student entrollement from 2018-2024
Student enrolled
450
400
350
300
250
200
150
100
50
0
2018-2019
2019-2020
2020-2021
2021-2022
2022-2023
2023-2024
Academic year
General
SC
OBC
ST


Distribution of General and other students from 2018-2024
Number ofsStudents
450
400
350
300
250
200
150
100
50
0
2018-2019
2019-2020
2020-2021
2021-2022
2022-2023
2023-2024
Academic year
General
Other


Enrolled Male and Female student Distribution from 2018-2024
Student enrolled
400
350
300
250
200
150
100
50
0
2018-2019
2019-2020
2020-2021
2021-2022
2022-2023
2023-2024
Academic year
Male
Female

All tables

Table 2: Student Enrollement from 2018 - 2024

Year	Student enrolled	Seat intake	General	SC	OBC	ST	Male	Female
2018-2019	563	969	356	134	62	11	207	356
2019-2020	606	969	410	120	70	6	261	365
2020-2021	594	969	372	148	63	11	229	365
2021-2022	457	969	273	139	39	6	150	307
2022-2023	590	969	370	140	67	13	217	373
2023-2024	521	969	302	143	65	11	207	314

Table: 3.1 Amount of student expenditure per day

Caste category	Average expenditure per day	Sex category	Average expenditure per day	Monthly Income of the family	Average expenditure per day
GEN	32.60	Male	44.47	<10000	21.65
SC	27.44	Female	27.92	10000 - 20000	35.08
ST	10.00			>20000	44.95
OBC	36.05				

Table: 3.2 College distance from home

Caste category	Average distance in km	Sex category	Average distance in km	Monthly Income	Average distance in km
GEN	13.97	Male	11.14	<10000	10.67
SC	11.76	Female	11.70	10000 - 20000	11.87
ST	2.33			>20000	12.95
OBC	9.45				

4.1 College infrastructural situation

Caste category	College infrastructure satisfaction	Sex category	College infrastructure satisfaction	Monthly Income	College infrastructure satisfaction
GEN	3.29	Male	2.68	<10000	3.28
SC	3.30	Female	3.58	10000 - 20000	3.47
ST	3.00			>20000	3.52
OBC	3.70				

4.2 College refreshment and sanitation opportunity

Caste category	Refreshment and sanitation satisfaction	Sex category	Refreshment and sanitation satisfaction	Monthly Income	Refreshment and sanitation satisfaction
GEN	2.62	Male	2.54	<10000	2.52
SC	2.41	Female	2.27	10000 - 20000	2.26
ST	2.50			>20000	2.33
OBC	1.43				

4.3 Availability of transport facility

Caste category	Type of transport facility (%)			
	Bus	Cycle	Bike	Walking
GEN	65.23	23.50	0.51	10 .76
SC	6.02	88.23	0	5.75
ST	3.42	82.23	0	14.35
OBC	35.35	52.01	1.02	11.62
Sex category				
Male	60.25	34.36	3.45	1.94
Female	68.35	27.20	1.23	3.22

5.1 Job opportunity

Caste category	Job opportunity satisfaction	Sex category	Job opportunity satisfaction	Monthly Income of the family	Job opportunity satisfaction
GEN	3.14	Male	2.82	<10000	3.09
SC	3.18	Female	3.22	10000 - 20000	3.08
ST	3.00			>20000	3.24
OBC	2.81				

5.2 Pressure of private tuition

Caste category	Private tuition pressure score	Sex category	Private tuition pressure score	Monthly Income of the family	Private tuition pressure score
GEN	1.89	Male	1.55	<10000	2.09
SC	2.45	Female	2.24	10000 - 20000	1.93
ST	2.50			>20000	2.38
OBC	2.00				

6.1. Social and Demographic condition

6.1. a Caste and sex category wise distribution of students

Caste category	No of students	% of students	Sex category	No of students	% of students
GEN	69	47.92	Male	37	25.69
SC	45	31.25	Female	107	74.31
ST	2	1.39			
OBC	28	19.44			

6.1.b Age group wise distribution of population

Age group	No of population		% of population	
	Male	Female	Male	Female
<10	4	7	2.03	3.45
10 - 20	42	48	21.32	23.65

20-40	24	108	12.18	53.20
40-50	85	34	43.15	16.75
>50	42	6	21.32	2.96

6.1.c Educational status of households

Age group	Educational status of households			
	Primary	Secondary	H.S.	Graduation
<10	14			
10 - 20	15	26	18	35
20-40	37	41	10	25
40-50	47	53	16	4
>50	12	9	4	4

6.2. Economic condition of households

6.2.a Monthly income of the family

Monthly income	No of Households
<10000	44
10000-20000	75
>20000	25

6.2.b Occupational structure of the Households

Occupational structure	No of Households
Agriculture	104
Businessman	31
Service holder	8
Others	187

Chapter- 3

Chapter-3:- Socia Ecomomic Factors and its Relations among students Enrolknment and Attendence

Amount of Students Expenditure :-

We collected perday expenditune of each and every student. Hear to the number of respondents is 144 (some of all deparments) After that we Grouping the studens based on caste catagori (General, SC, ST, OBC) sex catago-ri (male Female). Monthly income of the Family (belew 10000 - 20000) aand > 20000. The results show that the student belong OBC catagori has Higest expenditune perday (36.05 Ruppess). This stude-nt family income is more them 20000 ruppes. It is also noticed thut male student are has per day) expenditure incomfare to Female student. The deteus desenption of data is given on table 3.1.

College distance from hoose :-

We collected the data of college distance from home for 144 respondents. It is observed thut the studend betows in genenal catagori travel maximum distence (13.97 km). For coming to the college. It is also noticed that the students family income belows in abore 20000 catagori toraval maximum distance (12.95 km). The ST students are menty comes nearly 2.33 Km.

Chapter-4

Chapter-4 : Infrastructural Factor

· College Intrastructural Situation :-

We surveyed the students statisfaction regarding college intrastructural by using rating scale 0-5. Here, satousfation 5 value demotes gratter statisfaction and 0 demotes statisfaction. the desust of the study soom that OBC students are highly satisfied the satisfacation is low in case of ST student (3.00). It is also noticed that female student (3.58) and the samily with obove 20000 monuthly income has higest statisfaction value despectively 3.58 and 3.52

Refresment and samitation of opprtunity :-

The college refresment and opportunity is one of the mason factor of intrastructoral sanita-tion we collected the satisfaction of inroll Stud-ent. It is observed that genenal student are highty satisfied (2.62) but OBC student are satis-fied (1.43) very low. Those students have monthaly income with more then 10,000 Reppes (2.52).

Avibility of Transport Facility :-

For the perpas present study we collected the data regarding avibility of trarsport sallty on the mode of trairsporation used by students. It is shown that nast of the student of this college used cycle for arlving to the college. Based on the caste catagoni genenal students are monthely used base but SC. ST and OBC stadents are monthely used cycle for the purpose. In case of male and Female students they monthly used bas service.

Chapter- 5

Chapter-5:- Other Factor:-

Job opportunity :- Job opportunity is one of the other external factors. This factor effect negetively for college student admission and attendence. Not only for this college but also in all other college effect negetively. We collected students feedback regarding whether job opportunity has negetive impact regarding college admission and negetive impact regarding college admission and negegeney of physical. It is observed that job apportunity satisfaction value of General/SC/ST/OBC student's are respectively 3.14/3.18/3.00/2.81. Job olportunity satisfaction for below 10.000%. 10000-20000> 20000% monthly income family is respectively 3.09, 3.08, 3.24.

Pressure of Private tution :-

Pressure of private tution is also an impotant factor for college enrollment and attendence. We collected student perception view on it is observed that private tution pressure scare for Grenard/SC/ST/OBC is respectively 1.89/2.45/2.50/200

Chapter-6

Chapter - 6

6.1 - Educational Status of households

With the help of the data presented from the survey area, it is understand that among the primary, secondary and Its and graduation or its equivalenh, the lowest educational stat -us as graduation age of 40-50 (1 person) and the highest is the age of 40-50 (5/3 persons) at secondary label.

6.2 - Economic Condition

Economic condition are the present of affair in the overall economy of a students households or geographyeal perspective

6.2 (a) - Monthly income of the famil

According to the information obtained from the survey in the adjacent, box, all the bottom 25 people earn 2 otherwyand or more, on the side the highest 75 person earn between to to 2 othousand rupeas per manth.

6.2 (b) Occupational Structure of the Households

According to the statistics in the above table, it is understood through the information presented that and people are worning inservie holder and highest other level (House wife, Pries -tetd) total 187 people are working in new way.

Chapter - 7

Chapter-7 Conculation :-

Findings :- The Findings of the study area ___

(a). we should that student enrollment in the college is diersing. The rate is ___ % from ___ to ___ years. at an equal rate of ___ %.

(b) In compare to caste catagory we should that.

(c) we examine that socio economic condition at the lowse should, college infenstructure sduation Job enisis are the main factors that ted to decris in student ennalment and attendence.

(d) If infenstnactunal situation in college and transport facility will improve then student enrollment and attendence will incnese.

(e) Based on the respons of the college teachers we should that if the college. intanstrudura number of training courses. incases, new rules to college student admission fees then the student enrolment and attendence.

কলেজের বাইরের ছাত্র/ছাত্রী

মৌলিক তথ্য

▷ ছাত্র / ছাত্রীর নাম...

▷ গ্রাম...

▷ শিক্ষাগত অবস্থা...

▷ এই কলেজে ভর্তির আবেদন করেছিল কী না ? ...

▷ এই কলেজে ভর্তি না হওয়ার কারণ কী ?...

- বাড়ির থেকে দূরত্ব বেশি। ☐
- পরিষেবা নেই. ☐
- যাতায়াতের সুযোগসুবিধা কম. ☐
- ভর্তির ফিস বেশি. ☐
- অর্থনৈতিক অবস্থা খারাপ. ☐

পরিবারের প্রধান / বাবা / মা

▷ নাম ...

▷ বয়স ...

▷ গ্রামের নাম ...

▷ ছেলে মেয়ে কোথায় পড়াশোনা করছে ?

▷ কোন বিষয়ে পড়াশোনা করছে ?

▷ ভর্তি না করানোর কারণ কী ?

TEACHER'S SURVEY

NAME OF THE TEACHER'S -

.....

DEPARTMENT -

.....

1. ছাত্রদের ভর্তি করে যাচ্ছে তাঁর কারন কী বলে আপনার মনে হয়?

→

2. ছাত্রদের ভর্তি বাড়ানোর জন্য কী কী পদক্ষেপ নেওয়া উচিত বলে আপনার মনে হয়?

⇒

3. ছাত্রদের উপস্থিত বাড়ানোর জন্য কী কী পদক্ষেপ নেওয়া উচিত বলে আপনার মনে হয়?

→

❖ QUESTIONNIER FOR COLLEGE STUDENT:-

❖ BASIC INFORMATION:

- ছাত্র/ছাত্রীর নাম –
- গ্রাম –
- পোস্ট–
- গ্রাম পঞ্চায়েত–
- জাতি–
- ধর্ম–
- বয়স–
- লিঙ্গ–
- পরিবহন এর মাধ্যম – সাইকেল/বাস/বাইক/হেঁটে।
- প্রত্যহ ব্যায় -
- কলেজে সপ্তাহিক উপস্থিতি –

❖ HOUSEHOLD SURVEY :

➢ Educational Status ;

পরিবারের সদস্যদের নাম	বয়স	লিঙ্গ	পেশা	যোগ্যতা				
				প্রাক প্রাথমিক	I-VI	VII-X	XI-XII	স্নাতক

➢ Economic status;

○ পরিবারের মাসিক ব্যায়:

1. শিক্ষা -
2. স্বাস্থ -
3. খাদ্য -
4. বস্ত্র -
5. বিদ্যুৎ -

প্রয়োজনীয় জিনিস	TV	FRIZE	CYCLE	BIKE	MOBILE PHONE	COMPUTER
সংখ্যা						

❖ QUESTIONNIER :

1. কলেজ থেকে বাড়ির দূরত্ব কত (km) ?
   ➢

2. বাড়ি থেকে কলেজ আসতে তোমার কতক্ষন সময় লাগে ?
   ➢

3. কলেজ আসতে মোট ব্যায় কত হয় ?
   ➢

4. সপ্তাহে তুমি কতদিন কলেজে উপস্থিতি থাকো ?
   ➢ < 1 /2 /3 /4 /5 > |

5. তোমার কলেজের পরিকাঠামো কেমন লাগে ?
   ➢ সবথেকে খারাব 0/1/2/3/4/5সবথেকে ভালো |

6. প্রতিদিন কলেজে না আসার কারণ কি ?
   ➢

7. কলেজের পঠনপাঠন তোমার কেমন লাগে ?

   ➢ সবথেকে খারাব 0/1/2/3/4/5 সবথেকে ভালো |

8. তোমার কলেজে না আসার কারণ হলো বর্তমান চাকরির সংকট , তোমার কি মনে হয় ?

➤ অসমর্থন 0 /1 /2 /3 /4 /5 সমর্থন।

9. তোমার কলেজে না আসার কারণ হলো প্রাইভেট টিউশন এর চাপ ?

➤ অসমর্থন 0 /1 /2 /3 /4 /5 সমর্থন।

10. তোমার কলেজে না আসার কারণ হলো ক্যান্টিন ও অন্যান্য সুযোগ সুবিধা না থাকা ?

➤ অসমর্থন 0 /1 /2 /3 /4 /5 সমর্থন।

11. কি কি পদক্ষেপ নিলে কলেজে ছাত্র ভর্তি বাড়তে পারে ?

➤

12. কি কি সুবিধা করলে তোমরা প্রত্যহ কলেজে আসবে ?

➤

NARAJOLE RAJ COLLEGE

This project falls on the field work – Visit to an area to document environmental assets (forest/ flora)

Total no. of Examinees- 43

Name and designation of supervisor- Dr. Arpita Chakraborty

State Aided College Teacher-I

Department of Botany

Narajole Raj College

Objectives of the project work-

1. The World Health Organisation (WHO) suggested that as many as about 80% of the World population depend on traditional medicine for their primary health care need.
3. Allopathic treatment is effective but the treatment process is expensive and containing many side effects. So, it should be avoiding some times.
4. It has been revealed that People can safely survive with the help of proper traditional low-cost medicine
5. But the traditional knowledge about plants is transmitted by local vaidyas, ojhas, herbal healers, gunins, etc. through orally only.
6. Young generations are less interested about this ancient knowledge.
7. So being a student of Environmental study, Knowing and documenting the traditional knowledge will give new path to the diseased people of the society.
8. This documentation will greatly help in enriching the data in Traditional Knowledge Digital Library (TKDL) and People's Biodiversity Registers (PBRs).

Out come of the project work-

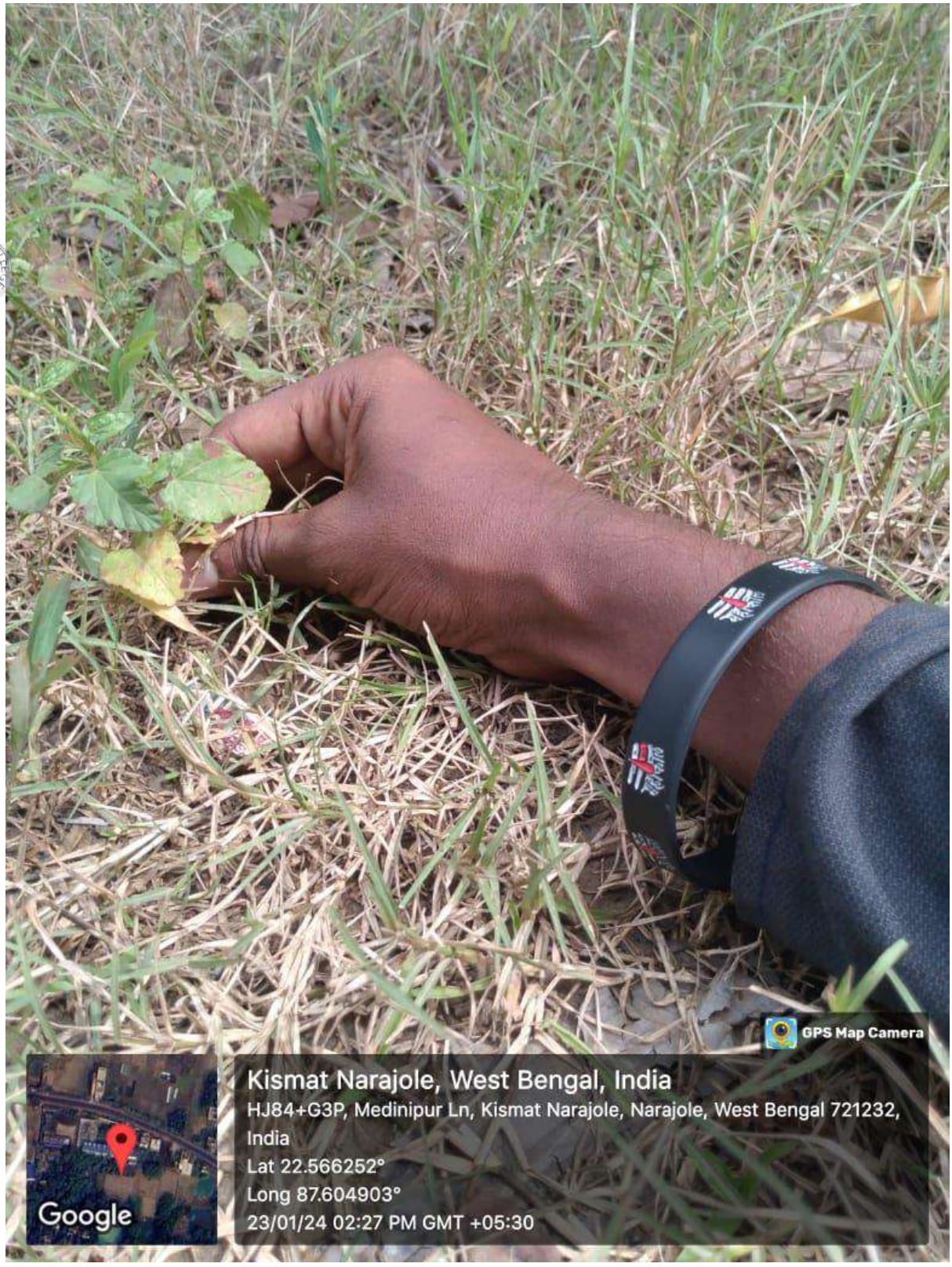
From our short-term work, it can be concluded that ethnomedicinal survey and its proper documentation is a promising method for medication and for the proper identification of plants to the botanist and common people also. In case of medication, from economic point of view, our work is beneficial also. It is an important of Indian Biodiversity Act, 2002 that documentation of traditional knowledge and make it to a patent to the stakeholders which yet to be authorized till now. This documentation of traditional knowledge will also give a recognition to the holders and ultimately preserve their knowledge under Intellectual Property Rights (IPRs). There are different IPRs tools to protect legally the traditional knowledge of ethnomedicinal plants. Further, this traditional knowledge is utilized to make People's

Biodiversity Register (PBR's) and also input information in Traditional Knowledge Digital Library (TKDL). A people's Biodiversity Register generally gives information to all about the knowledgeable persons present in a particular geographical area with their expertization. To follow up the Biodiversity Act, 2002 preparation of PBR's is an important step. After recording of traditional knowledge in TKDL, legally it will be a part of public domain knowledge. According to patent act, in case of giving any ethnomedicinal formulation, priority act will be applicable. Likewise, the same information given by a second knowledgeable person will not be patentable. The patent act is always helpful in society to prevent bio-piracy.

During field visit……

During plant specimen collection-

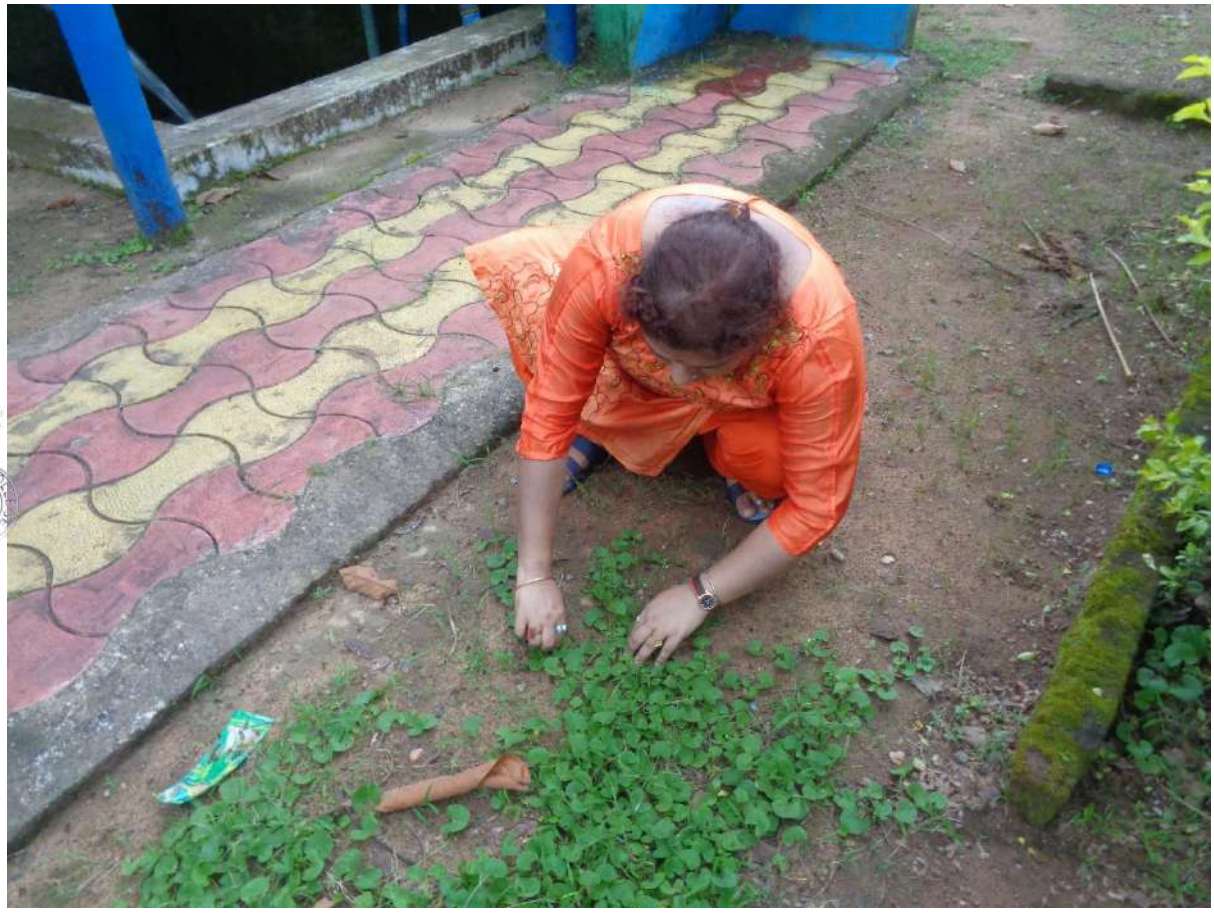
Field visit adjoining the campus-



Plant specimen collection……

Medicinal plant *Euphorbia hirta* found during field survey-

Plant collection for preparation of herbarium sheet-



Teacher….Dr. Arpita Chakraborty, collecting *Centella asiatica* plant in the field during survey-

- Title:-Ethnomedicinal plants used for different diseases in Narajole village of Paschim medinipur district -a documentation report

Project submitted for the partial fulfillment of degree of BA (General) (SEM-1)

By

Nisha Bag

Roll- 4341130 No- 2324388

Reg. No- VU2313 00410 of 2023-2024

Narajole Raj Collage

(Affiliated to vidyasagar university).

Session-2023-2024

Narajole Raj College

Paschim Medinipur

(Affiliated by Vidyasagare University)

(NAAC Accredited 'B' Grade Collage

ESTD-1966

Certificate

This is to Certify that the project work entitled " Title:-Ethnomedicinal plants used for different diseases in Narajole village of Paschim medinipur district -a documentation report." has been carried out by Nisha Bag for partial fulfillment of the degree of Bachelor of Arts General as proposed by the Common Courses under Curriculum & credit frame work for under graduate programme (CCFUP) 2023 & NEP-2020 of vidyasagar University under my supervision.

The result incorporated here has not been submitted for any other degree/diplomas.

Further Certified that Miss Rinki Dolai has followed the rules and regulations Compiled by vidyasagar University for carrying out the project work.

Arpita Chakraborty. 13/7/2024

Dr.Arpita Chakraborty

State Aided College Teacher (SACT-I)

Department of Botany

Narajole Raj College

Narajole, Paschim Medinipur.

W.B., India,pin-721211

- Title:-Ethnomedicinal plants used for different diseases in Narajole village of Paschim medinipur district -a documentation report

Project submitted for the partial fulfillment of degree of BA (General)(SEM-1)

By

Rupali Manna

Roll- 1341130 No- 2329913

Reg. No- VU2313004S1 of 2023- 2024

Narajole Raj Collage

(Affiliated to vidyasagar university).

Session-2023-2024

Narajole Raj College

(Affiliated by Vidyasagare University)

(NAAC Accredited 'B' Grade Collage

ESTD-1966

15/07/24

Certificate

This is to Certify that the project work entitled " Title:-Ethnomedicinal plants used for different diseases in Narajole village of Paschim medinipur district -a documentation report." has been carried out by "Rupali Manna" for partial fulfillment of the degree of Bachelor of Arts General as proposed by the Common Courses under Curriculum & credit frame work for under graduate programme (CCFUP) 2023 & NEP-2020 of vidyasagar University under my supervision.

The result incorporated here has not been submitted for any other degree/diplomas.

Further Certified that Miss Rupali Manna has followed the rules and regulations Compiled by vidyasagar University for carrying out the project work.

Arpita Chakraborty.

7/5/2024

Dr.Arpita Chakraborty

State Aided College Teacher (SACT-I)

Department of Botany

Narajole Raj College

Narajole ,Paschim Medinipur.

W.B., India, Pin-721211

Title:-Ethnomedicinal studies of some plants used in curing diabetes of in ghatal sub-division of paschim medinipur district-A review report.

Project submitted for the partial fulfillment of degree of BA (General)(SEM-1)

By

Avick Samanta

Roll-4341130 No-2324348

Reg. No-VU231300350 of 2023-2024

Narajole Raj Collage

(Affiliated to vidyasagar university)

Session-2023-2024

Narajole Raj College

(Affiliated by Vidyasagare University)

(NAAC Accredited 'B' Grade Collage

ESTD-1966

Certificate

This is to Certify that the project work entitled " Title:-Ethnomedicinal studies of some plants used in curing diabetes of in ghatal sub-division of paschim medinipur district-A review report." has been carried out by "Avick Samanta" for partial fulfillment of the degree of Bachelor of Arts General as proposed by the Common Courses under Curriculum & credit frame work for under graduate programme (CCFUP) 2023 & NEP-2020 of vidyasagar University under my supervision.

The result incorporated here has not been submitted for any other degree/diplomas.

Further Certified that Mr Avick Samanta has followed the rates and regulations Compiled by vidyasagar University for carrying at the project work.

Arpita Chakraborty. 7/3/2024

Dr.Arpita Chakraborty

State Aided College Teacher (SACT-I)

Department of Botany

Narajole Raj Collage

Narajole,Paschim Medinipur.

W.B., India, Pin-721211

Field Work Report

Subject: Environmental Studies; Sem-I; Sessison: 2023-24; Subject Code: VAC-01

- **Details of Students:**

Sl. No.	Hons./ Gen.	No. of Students
1.	Sanskrit (H)	33
2.		

- **Name of Supervisor: Prof. Ishita Biswas**

Topic-1: Sources of pond water pollution in different village of narajole surrounding area

- **Objectives:**
  - To know about pond water pollution.
  - To identify the sources of pond water pollution.
  - To know how to preserve the quality of pond water.
- **Outcomes:**
  - Increase awareness among the local people about the impact of pond water pollution
  - Control pond water pollution in study area**.**

Topic-2: Impact of pond water pollution in different village of narajole surrounding area

- **Objectives:**
  - To know about pond water pollution.
  - To analyse the impact of pond water pollution.
  - To decrease the impact of pond water pollution.
  - To know how to preserve the quality of pond water.
- **Outcomes:**
  - Control water related disease in college surrounding area.
  - Increase awareness among the local people about the impact of pond water pollution.
  - Provide a healthy pond water ecosystem.

Sources of Pond Water Pollution

In Basanchak , Paschim medinipur

IMPACT OF POND WATER POLLUTION

In Dhamsai,Paschim Medinipur

sources of pond water pollution in purba thaur,paschim medinipur

Impact of Pond Water Pollution

In Gote gerya , Paschim medinipur

Certificate

15/07/24

This is to certify that Dipak Bhunia (Reg. No.- ....., Roll- ....., No-.....) of 1st Semester, Degree of undergraduate, Examination 2024 has prepared a ENVS project report on "Impact of Pond Water Pollution In Samarchak, Paschim Medinipur....." under my supervision. The work partially fulfills the requirement of environmental studies (AECC) of UG syllabus.

J. Biswas.

Signature of Supervisor

Certificate

This is to certify that ..Anushree Dalbera..... (Reg. No.- .....

Roll- ....., No-.....) of 1st Semester, Degree of undergraduate, Examination 2024 has prepared a ENVS project report on "..Impact of Pond Water Pollution In.....

..Banshgeriya , Paschim Medinipur.....

....." under my supervision. The work partially fulfills the requirement of environmental studies (AECC) of UG syllabus.

S. Biswas

Signature of Supervisor

Certificate

This is to certify that ...Susmita Bag............ (Reg. No.- ...., Roll- ...., No-............................) of 1st Semester, Degree of undergraduate, Examination 2024 has prepared a ENVS project report on "...Sources of Pond water Pollution. In Raikundu.... ...Paschim Medinipur.. ...." under my supervision. The work partially fulfills the requirement of environmental studies (AECC) of UG syllabus.

J. Biswas

Signature of Supervisor

Environmental Studies (ENVS)
Session: 2023-24; Semester: I; Subject Code: VAC-01; Unit 8: Field work
Visit to a local polluted site---Urban/Rural/Industrial/Agricultural
Supervisor: Dr. Parimal Dua

Field Work Report

- **Common Title: Visit to a local polluted site-Urban/Rural/Agricultural**
- **Name of Supervisor: Dr. Parimal Dua, Assistant Professor, Narajole Raj College**
- **Students Details:**

Sl. No.	Hons./ General	No. of Students
1.	History (H)	21
2.	Political Science (H)	10
3.	Philosophy (H)	07

- **Introduction:**

Introduction to a field visit to a local polluted site, whether it's in an urban, rural, industrial, or agricultural area, serves as a crucial learning experience to understand the environmental challenges faced by communities. Such visits provide first-hand insights into the impact of human activities on the environment and highlight the importance of sustainable practices and pollution mitigation efforts.

Pollution is a pressing issue globally, affecting various landscapes from densely populated urban centres to remote agricultural regions. Urban areas often contend with air pollution from vehicular emissions and industrial activities, while rural and agricultural regions face challenges such as pesticide runoff and soil degradation. Industrial zones, on the other hand, grapple with complex pollutants from manufacturing processes that can contaminate soil, water, and air.

Visiting these polluted sites allows participants to witness the direct consequences of pollution on ecosystems, wildlife, and human health. It provides an opportunity to observe pollution sources, assess environmental degradation, and understand the interconnectedness of ecological systems.

Moreover, such visits are instrumental in fostering community engagement and raising awareness about environmental stewardship. They empower participants to advocate for sustainable policies and practices that can mitigate pollution and promote environmental resilience.

In essence, a field visit to a polluted site serves as an educational journey that not only sheds light on environmental challenges but also inspires collective action towards a cleaner, healthier environment for present and future generations.

Environmental Studies (ENVS)
Session: 2023-24; Semester: I; Subject Code: VAC-01; Unit 8: Field work
Visit to a local polluted site---Urban/Rural/Industrial/Agricultural
Supervisor: Dr. Parimal Dua

❖ **Objectives:**

The objectives of conducting a fieldwork visit to a local polluted site, whether it's in an urban, rural, or agricultural area, can vary depending on the context and goals of the study. Here are some common objectives:

1) **Assessment of Pollution Levels**: Measure and assess the extent and types of pollutants present in the environment (air, water, soil) at the site. Assess the impact of pollution on the local environment, including soil, water, and air quality.
2) **Identification of Pollution Sources**: Identify and document sources of pollution contributing to environmental degradation at the site (e.g., industrial emissions, agricultural runoff, urban waste).
3) **Impact Assessment**: Evaluate the impact of pollution on ecosystem health, biodiversity, and human populations in the vicinity of the site.
4) **Understanding Environmental Processes**: Study the mechanisms and pathways through which pollutants enter and interact within the environment (e.g., bioaccumulation, dispersion).
5) **Risk Assessment**: Assess potential risks to human health and ecological systems posed by the presence of pollutants at the site.
6) **Community Engagement and Education**: Raise awareness among local communities, stakeholders, and decision-makers about the environmental issues associated with the polluted site.
7) **Data Collection for Research**: Gather empirical data and evidence to support scientific research on pollution and its effects, contributing to broader environmental studies and policies.
8) **Support Policy Development**: Provide scientific evidence and data-driven insights to support the development of policies and regulations aimed at mitigating pollution and improving environmental quality.
9) **Monitoring and Long-term Management**: Establish baseline data and monitoring protocols to track changes in pollution levels over time and assess the effectiveness of remediation efforts.
10) **Promote Sustainable Practices**: Advocate for and promote sustainable practices and technologies that can prevent pollution and restore environmental quality at the site and similar locations.

11) **Capacity Building**: Build local capacity for monitoring, managing, and addressing pollution issues through training and collaboration with local communities and stakeholders.
12) **Demonstrate Practical Solutions**: Showcase practical solutions and technologies for pollution control and environmental restoration that can be replicated or adapted in other polluted areas.
13) **Develop a comprehensive report:** Develop a comprehensive report outlining the field work results, analysis, and recommendations for future actions.

These objectives aim to not only understand the current state of pollution but also to inform actions and decisions that can lead to improved environmental health and sustainability in the affected areas.

❖ **Outcomes:**

Visiting a local polluted site, whether it's in an urban, rural, or agricultural area, can lead to several outcomes, both in terms of understanding the environmental impact and potential remediation efforts. Here are some possible outcomes:

1) **Awareness and Education**: Participants gain a first-hand understanding of the extent and nature of pollution in their community or region. This experience can raise awareness about environmental issues and their consequences among visitors.
2) **Data Collection**: Fieldwork often involves collecting data on various aspects of pollution, such as air quality, water contamination, soil health, and biodiversity impacts. This data can contribute to scientific research and policy-making.
3) **Identification of Pollution Sources**: By visiting the site, participants can identify specific sources of pollution, whether they are industrial, agricultural, or related to urban activities. This is crucial for targeting pollution control measures.
4) **Impact on Ecosystems and Human Health**: Observing the polluted site allows participants to see first-hand how ecosystems are affected and understand potential risks to human health from exposure to pollutants.
5) **Community Engagement**: Field trips to polluted sites can engage local communities, encouraging them to take action or advocate for cleaner environments. It can empower community members to collaborate with authorities and stakeholders for solutions.

6) **Policy and Advocacy**: The findings from fieldwork can support advocacy efforts for stricter environmental regulations or policies aimed at reducing pollution levels in similar areas.
7) **Planning Remediation Strategies**: Based on the observations and data collected, stakeholders can develop and implement remediation strategies to clean up the site and prevent further pollution.
8) **Long-term Monitoring**: Establishing baseline data from the fieldwork enables ongoing monitoring of pollution levels and the effectiveness of remediation efforts over time.
9) **Educational Resources**: The experience can serve as a valuable educational resource, providing case studies and examples for future environmental science classes or awareness campaigns.
10) **Behavioural Changes**: Witnessing the impact of pollution first-hand may inspire participants to adopt more sustainable practices in their daily lives or careers.

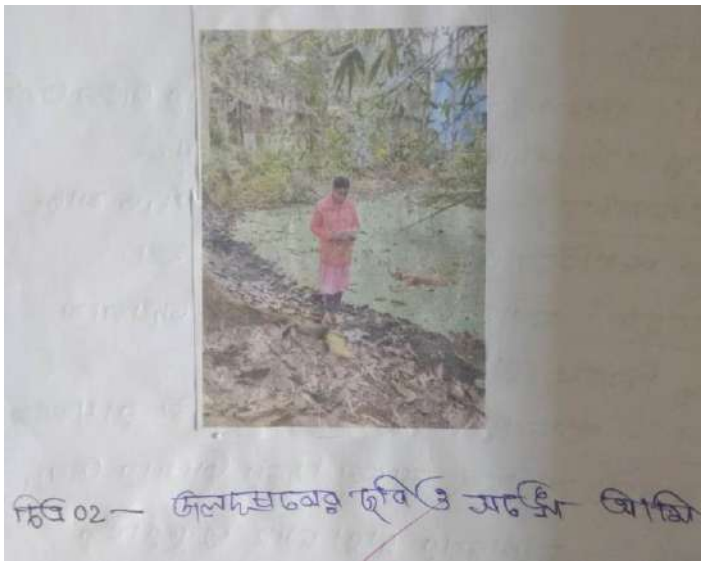
Overall, visiting a polluted site can be a powerful educational and motivational experience, leading to actions that contribute to environmental protection and community well-being.

Environmental Studies (ENVS)
Session: 2023-24; Semester: I; Subject Code: VAC-01; Unit 8: Field work
Visit to a local polluted site---Urban/Rural/Industrial/Agricultural
Supervisor: Dr. Parimal Dua

Photo Gallery

চিত্র: দূষিত পুকুর পর্যবেক্ষণ,

চিত্র: পর্যবেক্ষক



চিত্র 02— জলদূষণের ছবি ও সংক্ষিপ্ত আলোচনা

চিত্র: জলদূষণ ক্ষেত্রের একটি চিত্র,

VIDYASAGAR UNIVERITY

NARAJOLE RAJ COLLEGE

NARAJOLE, DASPUR, PASCHIM MEDINIPUR

FOR THE DEGREE OF UNDER GRADUATE (UG) ENVIRONMENTAL STUDIES

OBSERVATION OF POND WATER POLLUTION IN KALAGRAM VILLAGE UNDER KESHPUR POLICE STATION

SUBMITTED BY

PALASH PUILYA

DEPARTMENT : POLITICAL SCIENCE

SEMESTER : I

ROLL : STPLAR230004 NO: 04

REGISTRATION NO : YEAR : 2024

GUIDED BY

DR. PARIMAL DUA

DEPARTMENT OF PHYSIOLOGY, NARAJOLE RAJ COLLEGE

VIDYASAGAR UNIVERSITY

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E-mail: narajolerajcollege@rediffmail.com

Date: 28/04/24

Certificate

This is to certify that the field work entitled "OBSEVATION OF WATER POLLUTION IN GHOSEDIAA VILLAGE UNDER KESHPUR POLICE STATION"

submitted by Nilima Banerjee, a student of Semester I, for Environmental Studies (ENVS)_VAC-1 Examination 2024 has been carried out under my guidance and supervision. This is an original work and has not been published anywhere for any other purpose.

Parimal Dua

[Dr. Parimal Dua]
Assistant Professor & HOD
Department of Physiology

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Date: 03/06/2024

Certificate

This is to certify that the field work entitled "observation of water pollution in Sitarampur village under Chandrakona Police Sat/station"

submitted by Rahul Maity, a student of Semester 1, for Environmental Studies (ENVS)_VAC-1 Examination 2024 has been carried out under my guidance and supervision. This is an original work and has not been published anywhere for any other purpose.

Parimal Dua
03/06/2024

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Date: 30/01/24

Certificate

This is to certify that the field work entitled "OBSERVATION OF ~~WATER POLLUTION~~ on urine of pond IN AMARCHAK VILLAGE UNDER KESHPUR POLICE STATION"

submitted by Riya Mana, a student of Semester I, for Environmental Studies (ENVS)_VAC-1 Examination 2024 has been carried out under my guidance and supervision. This is an original work and has not been published anywhere for any other purpose.

[Dr. Parimal Dua]
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Date: 01/02/24

Certificate

This is to certify that the field work entitled "observation of pond water pollution in Harirajpur village under Daspur police station"

submitted by Priya Metya, a student of Semester I, for Environmental Studies (ENVS)_VAC-1 Examination 2024 has been carried out under my guidance and supervision. This is an original work and has not been published anywhere for any other purpose.

Parimal Dua

[Dr. Parimal Dua]
Assistant Professor & HOD
Department of Physiology