सत्यमेव जयते
हिमाचल प्रदेश सरकार

26th STATE LEVEL HIMACHAL PRADESH CHILDREN'S SCIENCE CONGRESS 2018

9th-12th October-2018 "Chamba Chaugan" Distt. Chamba, H.P.

ABSTRACT BOOK

FOCAL THEME:

"Science, Technology & Innovation for Clean, Green & Healthy Nation

A programme of

NCSTC
SUPPORTED & CATALYSED BY NCSTC, DST, GOVT. OF INDIA

Organised by

HIMCOSTE
1986
H.P. Council for Science, Technology & Environment
हि.प्र. विज्ञान, प्रौद्योगिकी एवं पर्यावरण परिषद

26th HIMACHAL PRADESH
STATE LEVEL CHILDREN'S SCIENCE CONGRES-2018

ABSTRACT BOOK

FOCAL THEME:
"Science, Technology & Innovation for Clean, Green & Healthy Nation

A programme of
National Council for Science & Technology Communication (NCSTC)
Department of Science & Technology (DST), Govt. of India, New Delhi

Organised by

HP Council for Science, Technology & Environment (HIMCOSTE)
B-34, SDA Complex, Kasumpti, Shimla- 171009, Himachal Pradesh

in collaboration with

Sarv Shiksha Abhiyaan (SSA), Department of Education, Himachal Pradesh

At
"Chowgan Chamba" District Chamba w.e.f. 9th to 12th October 2018

H.P. Council for Science Technology & Environment
34 – SDA Complex, Kasumpti, Shimla – 171009
Ph. No. 0177-2621992, Fax 0177-2620998

FOREWARD

National Children Science Congress (NCSC) is a flagship programme of National Council for Science & Technology Communications (NCSTC) and Department of Science and Technology (DST), Government of India, New Delhi. Children Science Congress aims to develop the scientific aptitude of children through project activities in tune with the principle of 'Learning by doing'. It gives me immense pleasure to release the proceedings of the 26th Himachal Pradesh State Level Children's Science Congress - 2018. The students of different categories were assigned the task of preparing the projects on the theme "Science, Technology and Innovation for Clean, Green & Healthy Nation" for the 27th NCSC.

The students showed keen interest in understanding the issues related to energy through these projects. 463 projects were displayed at District Level, 116 projects were depicted at State Level, while 16 projects were presented at National Level. One project was selected among the best 16 projects at the National Level and two projects were presented during the Indian Science Congress held at Lovely Professional University, Jalandhar - Delhi G.T. Road, Phagwara, Punjab from 3rd-7thJanuary, 2019. NCSC has been providing an astounding opportunity and motivate students to take up science as their career option.

These proceedings give an account of the scientific work carried out by the Young Scientists as a part of NCSC during the year 2018 in the state of Himachal Pradesh. It comprises of the details of the events performed at State level and also at the National level.
My heartfelt congratulations to all the Project Leaders, Guide Teachers, District Academic Coordinators, District Coordinators, District Educational Officers and the entire NCSC fraternity including the host for the State Level Event i.e. Govt. Sr. Sec. School, Chamba, District Chamba, Himachal Pradesh for their active participation at various levels and making the 26th Himachal Pradesh State Level Children's Science Congress fruitful.

I take the opportunity to thank the Secretary, DST, New Delhi, Head & Officials of NCSTC, DST, Govt. of. India and the Principal Secretary to the Govt. of Himachal Pradesh, Department of Environment, Science & Technology, Department of Education and NCSTC Network, New Delhi for their kind support and guidance in making this event a great success.

Shimla, Himachal Pradesh

D.C. Rana
Member Secretary

Contents

List of 16 best Scientific Project Report selected for National Children Science Congress

NCSTC – DST, Government of India

NCSTC, NEW DELHI, is an apex body set up with the objectives of popularization of science and technology (S&T) and stimulation of scientific and technological temper amongst the people. Among other things

- NCSTC catalyzes and supports research and development in the area of S&T communication.
- NCSTC supports development of software in different languages in the forms of films, radio and television programmes and supports popular S&T books and magazines in different languages.
- NCSTC organises field projects by involving other agencies. These can be in the forms of jathas, melas, science exhibitions seminars etc.
- NCSTC helps prepare competent science communicators, through and long-term courses.
- NCSTC encourages and recognize outstanding communicators and institutions involved in S&T popularisation, through national awards.
- NCSTC maintain up-to-date database in areas of relevance to S&T communications. It also orchestrates and coordinates S&T popularization programmes and activities nationally

Where can we get details of the CSC?

A central point of reference is the National Council of Science & Technology Communication, Department of Science & Technology, Govt. of India, New Delhi. Each district and state and has a coordinator who can guide you and provide details of the teacher, training camps, availability of guidebooks and schedule of districts and state level CSC

Himachal Pradesh Council for Science, Technology and Environment

The Himachal Pradesh State Council for Science, Technology and Environment, Shimla is the nodal agency for the promotion of Science & Technology and creation of Environment Awareness in State. The State Council for Science, Technology and Environment, H.P. Shimla, was established during the year 1986 by the Department of Science & Technology, Govt. of Himachal Pradesh under the national Programme of Department of Science & Technology, Govt. of India under Societies Registration Act XVI-1860 in the State.

The Council was established at Shimla by Govt. of Himachal Pradesh on January 3, 1986 under the country wide programme of the Department of Science & Technology, Govt. of India to promote Science & Technology.

Apex Body of the council is General Body and Chief Minister is the President of General Body. This body was reconstituted on STE-B(15)-7/2005-loose dated 2, 03-6-04-2013 There are 45 members consisting of PWD, irrigation Public Health, Forest, agriculture, Rural Development, Ayurveda, Industrial and technical education. In addition, 4 vice-chancellors from universities. Representatives from national level research organizations CSIR, ICR, IIRS, ICFRE, SAC, NRDC, TERI, Wadia Institute of Himalayan Geology, Indian Institute of Science. The second important body is Executive Committee and Chairman is Minister of Science & Technology Department., comprising of MLA, educationist, scientist and principal secretaries etc.

The second important body is Executive committee comprising 7 members and Chairperson is Principal Sectary (Env., S&T) to the Govt. of H.P., Director (Env. & ST), H.P. Shimla-2, CEO, HIMURJA Director of Education, Principal Secretary Finance/Spl. Secretary Env. S&T.

OBJECTIVES OF COUNCIL

The functions of the council are confined to the following areas:

- To advertise State Govt. in formulating science and technology policies and programmes.
- Development and transfer of appropriate technologies.
- Pooling and exchange of scientific knowledge.
- Promotion, popularization, research development and dissemination of information related to science technology and environment in Himachal Pradesh.

It encompasses the HP Remote Sensing Centre, ENVIS Centre, Arya Bhatta Geo-informatics & Space Application Centre (AGiSAC), State Centre on Climate change Patent Information Centre, Centre for Science Learning and Creativity & HP State Biodiversity Board

NCSTC – Network, New Delhi

The NCSTC-Network is a registered organisation established in the year 1991 it provides a forum for likeminded people and organisation to popularise science, keeping the spirit of science and scientific temper alive which alone could help in rebuilding the community and nation at large achieving rational development and the well being of the people.

NCSTC-Network with more than 79 member organisations has a governing Body which draws up programmes and projects to sensitise beneficiaries on values of science and scientific method. In close liaison with NCSTC-DST, Govt. of India, it is the prime mover of the National Children's Science Congress including its themes, logistics of programme at state levels and running the programme at national level.

Started in the year 1993, the NCSC has been inversed with themes of immediate interest so that the young scientists/conduction the experiment would understand the significance of the theme and develop scientific temper. And also in the process, learn to logicalise situations, User reasoning which could stimulate thinking and inferencing.

26th HIMACHAL PRADESH CHILDREN'S SCIENCE CONGRESS-2018

Introduction

The HP Council for Science, Technology & Environment (HIMCOSTE) is promoting the scientific and technological innovations among the school children in the State so as to bring out the hidden talent in the young minds. To achieve this objective, the council has been organizing *Vigyan Melas* (Science fairs/Competitions) for school children since 1996. To ensure more involvement, particularly from rural areas, these Melas were extended to Block, District and State level from the year 1991. The feedback received from these programmes has revealed that such programmes have created the interest of students and teachers in science. The National Council of Science, Technology & Communication (NCSTC), Department of Science & technology (DST), Government of India and NCSTC-Network, in the recent years, introduced the concept of Children Science Congress that is being held at National Level. In the year 1993 *Vigyan Mela* programme was restructured & renamed as Bal Vigyan Sammelan or **Children's Science Congress**. The programme is now held every year in the State and new activities are incorporated so as to make it more effective and useful for the students, teachers and the community at large. Every year CSC is organized at four different levels i.e. Sub-division, District, State and National Level. The programme is organized in collaboration with NCSTC, DST, NCSTC-Network,Sarv Shiksha Abhiyaan, Department of Education, Himachal Pradesh and Rashtriya Vigyan Evam Prodyogiki Sanchar Parishad, DST, Govt. of India, New Delhi for the students studying in 6th-12th classes. It provides forum for the children between 10-17 years of age to undertake study in their locality applying the methods of science under the prescribed theme. The outcome of the study is presented through project reports along with posters at different levels of CSC. In this programme, emphasis is laid on learning by doing and on field projects to be undertaken by children under the guidance of teachers. The programme has been successful in creating interest in science among students & teachers. Up to District level, the programme is organized by the Department of Education, through Deputy Director (Education), Science Supervisors/Science consultants as per the programme guidelines. However, the students are selected for National Level CSC at State Level Science Congress.

Orientation workshop for District Science Supervisors on formulation of Innovative Research Project and Scientific Reporting was held on 27th April,2018 at Conference Hall, HIMCOSTE,Shimla in which 15participants of 12districts participated.

The 26th HP Children's Science Congress -2018 has been organised at Sub-division, District and State level as per the schedule finalized during the meeting of District Coordinators held on 27th April,2018 under chairmanship of Sh. Kunal Satyarthi, IFSMember Secretary in the office of HIMCOSTE. Sh. Manmohan Singh, Director-Elementary Education, Shimla and State Project Director SSA/RMSA,Sh. Ashish Kohli were also present in the above meeting.This year 26thHimachal Pradesh Children Science Congress was organised by HIMCOSTE in collaboration with SSA/RAA, Department of Education, DST and NCSTC, GOI.

Schedule for 26thHP Children's Science Congress-2018

Sub-Division Level	20th Aug -20th Sept, 2018
District Level	24th -29th Sep, 2018
State Level	9th -12th Oct, 2018 (Chowgan,Chamba)
26th National Level	27th - 31stDecember, 2018 (Shiksha 'O' Anusandhan University, Bhubaneswar)
106thIndian Science Congress	3rd – 7th January, 2019

As per guideline and instructions issued during the meeting of District Science Coordinators, the HP Children's Science Congress was initiated at Sub-Division Level in all 66 Sub-Divisions of the state.

The Focal theme of 26th HP Children's Science Congress was **"Science, Technology & Innovation for Clean, Green & Healthy Nation".**

The sub-themes for the Children's Science Congress-2018were:

SUB THEMES:-

I. **Ecosystem and Ecosystem services**
II. **Health, Hygiene and Sanitation**
III. **Waste to Wealth**
IV. **Society, Culture and Livelihoods**
V. **Traditional knowledge systems (TKS)**

Children's Science Congress at Sub-Division Level

Sr. No.	District	No. of Sub-Division	No. of Participants	Activities organised
1.	**Bilaspur**	4	1413	Science quiz, Mathematic Olympiad, Activity corner, Science Model
2.	**Chamba**	7	1027	
3.	**Hamirpur**	5	2319	
4.	**Kangra**	9	3192	
5.	**Kinnaur**	3	405	
6.	**Kullu**	4	1163	
7.	**L&S**	3	0	
8.	**Mandi**	10	3500	
9.	**Shimla**	8	2600	
10.	**Sirmour**	5	1083	
11.	**Solan**	4	2235	
12.	**Una**	4	960	
	Total	66	19,897	

CSC-2018 at Subdivision and District Level (Hamirpur)

CSC-2018 at Subdivision and District Level (Bilaspur)

CSC-2018 at Subdivision and District Level (Chamba)

CSC-2018 at Subdivision and District Level (Kangra)

CSC-2018 at Subdivision and District Level (Kinnaur)

CSC-2018 at Subdivision and District Level (Mandi)

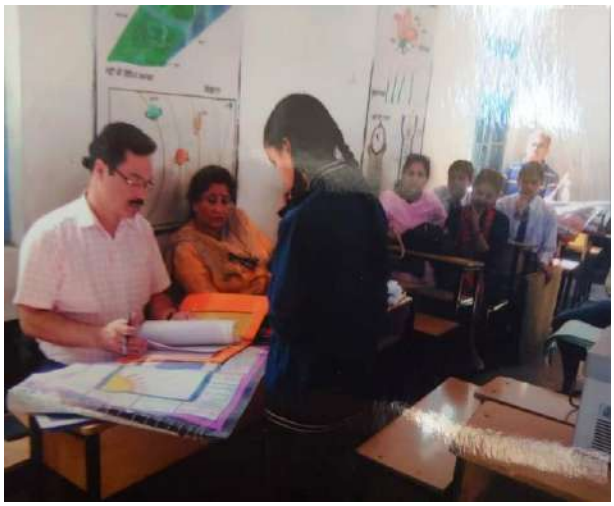
CSC-2018 at Subdivision and District Level (Shimla)

CSC-2018 at Subdivision and District Level (Sirmour)

CSC-2018 at Subdivision and District Level (Solan)


SCIENCE Congress
SOLAN
Organized


Children
SCIENCE Congress
SOLAN



CSC-2018 at Subdivision and District Level (Una)

Thereafter, the District Level Children's Science Congress was organized w.e.f. 24th September to 29th September 2018 at 11 Districts.

Children's Science Congress at District Level

Sr. No.	District	No. of Sub-Division	No. of Participants	Activities organised
1.	Bilaspur	4	266	Science quiz, Mathematic Olympiad, Activity corner, Survey report,Innovative Science model, Science Skit.
2.	Chamba	7	202	
3.	Hamirpur	5	550	
4.	Kangra	9	296	
5.	Kinnaur	3	230	
6.	Kullu	4	200	
7.	L&S	3	0	
8.	Mandi	10	300	
9.	Shimla	8	235	
10.	Sirmour	5	218	
11.	Solan	4	516	
12.	Una	4	139	
Total		66	3,152	

26th State Level Children's Science Congress-2018

26th State Level Children's Science Congress-2018 was organised at "Chowgan Chamba" Distt. Chamba H.P. w.e.f. 9th October-12th October 2018. Chamba district are of the 115 aspirational districts launched by Hon'ble Prime Minister of India in January 2018, the transformation of aspirational district programme aims to quickly and effectively transform these districts. The programme will focus on the strength of each district, identify low hanging fruit for immediate improvement, measure progress and rank districts.

Inaugural Ceremony

The 26th Himachal Pradesh State Level Children's Science Congress-2018 was inaugurated on 9th October 2018 by **Sh. Ram Lal Markanda, Hon'ble Agriculture Minister HP,** Sh. Pawan Nayyar, MLA Chamba; Sh. Vikram Jaryal, MLA Bhattiyat; Sh. D.S. Thakur, Distt. BJP President Chamba; MC Chamba,Prof. Tej Pratap, Vice Chancellor APG University Shimla; Sh. Hemraj Bhairwa IAS, Additional Deputy Commissioner Chamba and Dr. Monika IPS, SP Chamba werepresent as Guest of Honour and special guest.

Sh. Kunal Satyarthi, IFS Member Secretary, HIMCOSTE welcomed the Chief Guest, dignitaries, participatingChild Scientists and teachers. Sh. Kunal Satyarthi, IFSMember Secretary highlighted the preamble and features of the programme of 26th HPCSC – 2018.

The Chief Guest, Sh. Ram Lal Markanda Hon'ble Agriculture Minister Himachal Pradesh, said it is unique opportunity for the young students in the age group of 10-17 years from all over the state to improve the scientific temperament. In his speech, Agriculture Minister said knowledge should be used to help the society, find solutions and to progress appealing the scientists to empower the society and reach to the unreached. He said the focal theme of the Congress would help participants think in terms of applying science to societal needs and problems.

He also appreciated the efforts, creativity and innovative ideas of Child Scientists after visiting the exhibitions displayed by Students of 11 districts. He also awarded the 12thScience students of first ten rank holders of HPBOSE under Yuva Vigyan Purskar Yojna-2018.

About 700 delegates comprising of Child Scientists, Guide Teachers, District Coordinators, Jury members, Staff of HIMCOSTE and other officers of the State Government attended the four days deliberation from 9^{th} – 12^{th} October 2018.

The exhibitions covering various fields of science and technology were organised by different State and National Level organisations as per details given below. These exhibitions were the main attraction of the Science Congress and were appreciated by people from all walks of life of Chamba district.

List of main Exhibition

S. No.	Exhibitions
1.	H.P State & Pollution Control Board, New Shimla
2.	Appropriate Technology Centre Sundernagar, Mandi
3.	Agriculture Department, Chamba
4.	Superintendent of Police Office, Chamba
5.	Eco Club School Kangar, Una
6.	Bhuri Singh Museum, Chamba
7.	Regional Forensic Science Laboratory, Northern Range, Dharamshala
8.	NCC Unit Dalhousie, Chamba
9.	District Child Protection Unit, Chamba

10.	Forest Department, Chamba
11.	Eternal University, Baru Sahib, Sirmour
12.	Pushpa Gujral Science City Kapurthala
13.	Kangra Tea
14.	Chamba Rumal
15.	GB Pant University Mohal, Kullu
16.	Arni University, Kangra
17.	CSIR- Istitute of Himalyan Bio Resource Technology, Palampur

Besides exhibitions a number of science competitions viz. (Survey Report, Science quiz, Mathematics Olympiad, Science models, Science Skit and Activity Corner) were organised during the congress. These competitions were conducted on 10th& 11th October, 2018.

Exhibitions at “Chowgan Chamba”

The following activities were performed during 26th HP Children's Science Congress - 2018

1 Science Activity Corners

Science Activity corners on Physics, Chemistry, Biology, Science puzzle, Origami, Media/ Communication, Mathematical Olympiad, Miracle, Computer (Information Technology), etc. were organized. The Quiz was organized for different categories, as, Senior Secondary Group (Class 10th& 10+2), Senior Group (Class 9th&10th) and Junior Group (Class 6th to 8th). Scientific skit and plays were regularly organized in the evening by all the participating schools.

2. Scientific Project Reports by students

168 projects reports on the theme "Science, Technology & Innovation for Clean, Green & Healthy Nation" were presented by child scientists from different schools of the State covering 11 Districts during 26thHP Children Science Congress - 2018.

3. Innovative Science Model

Innovative Science Models prepared by the students of different schools of the State on the theme: "Science, Technology & Innovation for Clean, Green & Healthy Nation" was displayed during the event in Chowgan Maidan.

4. Science Quiz Competition

Science Quiz Competition was organized, the students selected at the Districtlevel Children's Science Congress – 2018 participated in the Quiz competition.The Science Quiz covered all the branches of Science including knowledge about scientific discoveries/ inventions.

5. Mathematical Olympiad

A Mathematical Olympiad was organized during the HP Children's Science Congress – 2018. The students selected at District Level Mathematics Olympiad participated in the State Level Children's Science Congress – 2018.

Prize Distribution/ Closing Ceremony

The prize distribution was held on 12thOctober 2018. The closing ceremony was presided over by Sh. Hans Raj, Hon'ble Deputy Speaker Vidhan Sabha Himachal Pradesh. The Chief Guest visited the science exhibitions, interacted with students about project work on a variety of highly relevant local issues and the scientific models prepared by them and praised their efforts.

Sh. Hans Raj, Hon'ble Deputy Speaker Vidhan Sabha in his speechsaid Children Science Congress is an important event of the Indian Science Congress, which provides a unique opportunity to children of the age group of 10-17 years to use their scientific temperament and knowledge and to quench their thirst for creativity by conducting scientific experiments to solve problems identified by them. He appreciated the creative ideas reflected during model demonstration programme. He also appreciated the way young scientist are using their Scientific knowledge to solve locally orientated problems with advance technology.He also congratulated the prize winners and all Science teachers for their commendable efforts.

Sh. Hemraj Bhairwa, IAS Additional Deputy Commissioner, Chamba & Dr. Monika, IPS Superintendent of Police Chamba were present as special guests.

On behalf of Himachal Pradesh Council for Science, Technology & Environment, H.P., Sh. Kunal Satyarthi, IFS Member Secretary, HIMCOSTE welcomed the guests, teachers, child scientists, judges and evaluators, presented a brief report of the activities and programme organized during 26th HP Children's Science Congress-2018.

In his speech, he delivered an inspirational message for young children and addressed them as the "Future of India". He also mentioned that science is important for the development of the society and the country.

Sh. Satyarthi expressed gratitude to Sh. Sanjeev Puri, Deputy Director Elementary Education, Chamba and Sh. Rajeev Mahajan, District Science Supervisor, Chamba and local organizing committee for making this programme a grand success.

26th NATIONAL CHILDREN'S SCIENCE CONGRESS – 2018

A Group of 16 child scientists, selected at the State level Children's Science Congress – 2018 held at "Chowgan Chamba" District Chamba H.P. w.e.f. 9th to 12th October 2018 participated in the National Children's Science Congress-2018 at Shiksha 'O' Anusandhan University, Bhubaneswar Odisha as per following details.

S. No.	Name of Child Scientist	Age	Title Of Project	Name of Guide Teacher	School	District
1.	Diksha Bhardwaj	12	Preservation of Grains And Food Items Through Natural Protectants	Sapna Kumari	Shivalik Valley School Kirpalpur, Nalagarh Solan Pin Code 174101	Solan
2.	Simran Singh	15	Pyrolysis of Biomass for Making Smokeless Fuel Blocks	Kiran Dang	Trinity Public School Banjar, Kullu Pin code 175123	Kullu
3.	Akshita	11	To Make Natural Colors and Creating Awareness among Locals Of Gahhan	Rakesh Kumar Walia	Government Senior Secondary School Gahlian, Nurpur Kangra Pin Code 176029	Kangra
4.	Thavinder Kumar	17	Waste to Wealth	Ravinder Kumar	Government Model Senior Secondary School Anni, Kullu Pin code 172026	Kullu
5.	Ojaswini Sachdeva	16	Earning Analysis of Vendoors Selling Single Items like Tea, Siddu, Pakora Etc. In The Locality of Kullu Area	Raina Verma	Cambridge International School Mohal, Kullu Pin code 175126	Kullu
6.	Adrija	11	Reuse the Waste	Akshay Kapoor	Himalyan Public School Chowari, Chamba Pin Code 176302	Chamba
7.	Priya Chauhan	16	To Explore the Auyrvedic Knowledge Degradation At Sub Cadre Sangrah	Tilak Raj Rana	Government Senior Secondary School Sangrah Sirmour Pin code 173023	Sirmour
8.	Aabha Sharma	10	Traditional Knowledge And Its Conservation	Jyoti	Green Field Public School Sihunta, Chamba Pin Code 176207	Chamba
9.	Disha	16	Waste Management Practices	Munish Verma	Rainbow International School Nagrota Bagwan Kangra Pin Code 176047	Kangra
10.	Jyoti	13	Problem of Plastic And Thermocol Garbage In Kot	Anil Kumar	Government Senior Secondary School Kot Tungal, Mandi Pin Code	Mandi

			Village And Solution		175003	
11.	Swastik Chaudhary	14	To Study the Water Samples Around Nurpur and Its Impacts On The Human Health	Akhil Mahajan	M C M D AV Senior Secondary Public School Baghni, Nurpur Kangra Pin Code 176202	Kangra
12.	Anmol Katoch	15	Low Cost Plantable Paper from Waste	Aishwarya Jyoti	Government Girls Model Senior Secondary School Nadaun, Hamirpur Hamirpur Pin code 177033	Hamirpur
13.	Harsh Saini	16	Punarnava A Herb That Rejuvenate the Kidneys & Harmful Effects Of Painkillar on Human Kidneys	Rakesh Kumar	Government Senior Secondary School Dushera, Una Pin code 174303	Una
14.	Sakshi	15	Integrated Waste Management in Nadaun Town	Aishwarya Jyoti	Government Girls Model Senior Secondary School Nadaun , Hamirpur Pin code 177033	Hamirpur
15.	Kashish Negi	14	Waste to Wealth	Shanno Thakur	MRA DAV Public School Solan Pin Code 173212 P	Solan
16.	Astha Chopra	15	Personal Hygiene of Girls in My School	Ravi Kumar Karwa	D A V Public School Manali, Kullu Pin Code 175131	Kullu

State Academic Committee Himachal Pradesh

- **State Coordinator:-**Mrs. Parnita Thakur, Senior Scientific Officer , (M. Sc. Physics)
- **State Academic Coordinator:-**Sh. Shashi Dhar, Senior Scientific Assistant, (M. Sc. Physics)
- Names & academic qualification of the members of the State Academic Committee (other than the State Coordinator and State Academic Coordinators)
- 1. Dr. Kehar Singh (PhD), Scientist Agriculture, Krishi Vigyan Kendra Saru (Chamba)
- 2. Dr. Hemant Pal (PhD), Assist. Prof. Physics, Govt. Degree College Chamba
- 3. Sh. Pankaj Verma (M.Sc. Evs. Eng.) TGT (NM) Govt. Sr. Sec. School Bajaura Kullu

State Organizing Committee Himachal Pradesh

- **State Coordinator:-**Mrs. Parnita Thakur, Senior Scientific Officer , (M. Sc. Physics)
- **State Academic Coordinator:-**Sh. Shashi Dhar, Senior Scientific Assistant, (M. Sc. Physics)
- Sh. Sanjeev Puri, Deputy Director of Elementary Education Chamba
- Sh. Ajay Sharma, President HP Science Master Association
- Sh. Amrit Mahajan, District Science Supervisor Bilaspur
- Sh. Sanjeev Thakur, District Science Supervisor Mandi
- Sh. Rajeev Mahajan, District Science Supervisor Chamba
- Sh. Amrish Sharma, District Science Supervisor Solan
- Dr. Kehar Singh (PhD), Scientist Agriculture, Krishi Vigyan Kendra Saru (Chamba)

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :SCIENCE INNOVATION AND TECHNOLOGY FOR CLEAN GREEN AND HEALTHY NATION

Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: RUKSAR, (Group Leader), AJJWAL MEHTA

Name of School: GMSSS PORTMORE

Address of School: PORTMORE SHIMLA

District: **SHIMLA**

State: HIMACHAL PRADESH

PIN: 171009

ABSTRACT

To complete the survey report under the topic "**Science, Technology and Innovation for clean Green and Healthy Nation**" and Sub Theme:- "**Health, Hygiene and Sanitation**", I have selected personal hygiene and menstruation as the most emphasized topics am I want to relate my survey with Swachch Bharat Abhiyan Started on 2nd October, 2014 and going to be complete in 2019.

For personal hygiene I conducted various surveys in Himland, Chhota Shimla and Sanjauli area and made children aware to take care of personal hygiene i.e. stress given

on taking bath daily, bursting teeth twice a day, cutting nails, washing cloths and specially washing hands before and after curry meal. I also conducted counselling to my younger sisters in the school i.e. student of 6^{th} and 7^{th} class to make them aware of personal hygiene and menstrual problems. I again conducted survey in Sanjauli and Dhalli Area on very important topic menstrual hygiene. During the survey, I communicated with females and enquired about the material used during their menstrual periods, duration of napkin uses about difficulties faced by them during their periods. I collected the data and made them aware of how too use sanitary napkins and how to dispose them to make sterile ash. I also made them aware about the harmful effects of using synthetic napkins for long time and train them to make sanitary napkins at home and how to dispose them off to reuse the environment friendly napkins.

Name & Address of Guide Teacher:RENU CHANDEL, LECT. CHEMISTRY, RENU CHANDEL DOCTORS RESIDENCES, SET 03, NEAR KNH, THE MALL SHIMLA, Phone: 9418454059, PIN: 171001

26th National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :TO STUDY A SACRED GROVE AS ECOLOGICALLY IMPORATANT CONSERVED AREA

Sub Theme:-

Team Members: ANKIT KASHYAP (Group Leader)

Name of School: GOVT. SEN. SEC. SCHOOL CHOTTA, SHIMLA

Address of School: KASUMPTI, SHIMLA

District: **SHIMLA**

State: HIMACHAL PRADESH

PIN: 171009

ABSTRACT

The existence of sacred grove in India and their documentation dates back to as early as 1800s. Sacred groves can be considered as a part of forest left untouched by local community and protected by the village folk deities. These are rich in biological and cultural biodiversity which is protected by local communities because of their religious beliefs and traditional rituals that run through several generations. The degree of sanctity of the sacred forests varies from one grove to another.

Himachal is known as ‘dev bhumi’ due to presence of numerous temples and places of worship. Sacred groves in Himachal Pradesh are called ‘dev-vans’ or Devta ka jungle’. They are dedicated to particular deity. Temples are usually located inside the sacred grove and surrounded by thick forests. No on is allowed to cut the trees or even extract dry leaves from the area. Traditionally, wild species were protected and conserved in the sacred groves with often strict penalties for breaking the laws. To preserve these sacred grove is becoming a challenge due to some threats like tourists influx or development works like construction of roads etc. So I felt the need to document one such grove in my project report. It is situated in Shurala of District Shimla. I visited the area and collected as much information as I could about its biodiversity and ecosystem services.

Name & Address of Guide Teacher:SUNITA RANA, LECTURE BIOLOGY G.S.S. SCHOOL, CHOTTA SHIMLA, Phone: 0177-2620511, PIN: 171009

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :LET THE ECOSYSTEM STAY UNCHANDED AGAINST CLIMATE CHANGE

Sub Theme:-ECOSYSTEM AN ECOSYSTEM SERVICES

Team Members: SHRUTIKA DHIMAN (Group Leader), DASHMEET SINGH, INJOT SINGH, ANSHIKA MALHOTRA, AYUSHI SHARMA

Name of School: GURU NANAK MISSION PUBLIC SCHOOL

Address of School: SHUBKHERA, PAONTA SAHIB

District: **SIRMOUR**

State: HIMACHAL PRADESH

PIN: 173025

ABSTRACT

Healthy ecosystems provide a base for a wide range of economic, aesthetic and environmental activities. The products obtained from ecosystem processes are termed as ecosystem services. A healthy ecosystem purifiers air and regulated climate.

- Title of my project was, 'LET THE ECOSYSTEM STAY UNCHAGED AGAINST CLIMATE CHANGE'. The purpose of my project was to calculate the amount is SULPHUR DIOXIDE in rural, urban and industrial area respectively. Sulphur Dioxide is a major pollutant in the air. It caused tightness in chests, chokes our lungs and irritated our nose. The major source for the emission of Sulphur Dioxide is the consumption of fuel. So we planned and evolved the

strategies to reduce the amount of Sulphur Dioxide present in the atmosphere. For this we surveyed 80 houses of urban area of Ekta Colony, 80 houses of rural area of Shipur, Bherewala and Shubh Kherea and 5 Industries of Gondhpur. As we calculated the amount of Sulphur Dioxide we found the Sulphur Dioxide was in quite high amount, so we evolved strategies to reduce it. In case of rural and urban area we suggested people the plantation of chrysanthemum plants, Chrysanthemum Plants are Daisy-like plants which grow best n spring season but they can be planted in all seasons. Chrysanthemum plants very effectively absorb 40 % of Sulphur Dioxide emitted by one liters of fuel. So we encouraged people to plant more chrysanthemum plants. In care of Industries we suggested the use of scrubbers. Scrubbers usually use a Water Spray that sprinkles water droplets on crushed limestone and then it reacts with the Sulphur Dioxide and removes it out. A scrubber very effectively absorbs 97% of the Sulphur Dioxide emitted by one litre of a fuel. So we suggested the industrialists to install scrubbers and start using it.

- Then we have also prepared a model of a scrubber which demonstrated the working of a scrubber. There is an intel for Sulphur Dioxide which then reacts with the mixture of water and crushed limestone and eliminated it. Thus, if we plant chrysanthemum plants and use scrubbers then the fact of our ECOSYSTEM would be rally something else.
- People need to know that they all have the tools within themselves-self awareness which means awareness about body, awareness about mental space and awareness of their relationships not only with others but also with the ECOSYSTEM
- So why not we take these small steps to improve our relationship with the ECOSYSTEM.

Name & Address of Guide Teacher:NEHA MAHAJAN, GURU NANAK MISSION PUBLIC SCHOOL, SHUBHKHERA, PAONTA SAHIB, Phone: 9882812328, PIN: 173025.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH .

Language: HINDI
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :TRADITIONAL SYSTEM IN ASPECT OF ENERGY CONSERVATION

Sub Theme:-TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: RITIKA (Group Leader), SALONI, JYOTI TIWARI

Name of School: G.S.S.S. MAGINAND
Address of School: NAHAN, SIRMOUR
District: **SIRMOUR**
State: HIMACHAL PRADESH
PIN: 173030

ABSTRACT

हम तीन त्रों ने अलग– अलग कार्बोनिक पदार्थों का किसान मित्र केंचुए की जनसंख्या का विश्लेषण करने के बारे में अपना प्रोजेक्ट तैयार किया है।

हम जानते है कि भारत एक कृषि प्रधान देश है। अधिकतर भारत की जनसंख्या कृषि पर निर्भर है। यह भारत की GDP का 24% हिस्सा बनाती है। पर समय बढने के पश्चात धीरे–धीरे लोगों में कृषि की तरह रुझान कम हुआ है। अत;हमें ऐसे आयाम दूढने की आवश्यकता है जिसमे कि किसानों का अधिक – से– अधिक लाभ हो और किसानों कम खर्च मे अधिक–से– अधिक उत्पादन कर सके। किसानों

को खाद और कीटनाशकों पर ही अपनी आय का 60% हिस्सा खर्च करना पडता है। अत; कोई ऐसा विकल्प चाहिए कि वह अपनी आय का कम –से–कम हिस्सा खर्च कर सके।अत;हमने इस खर्च को कम करके एक ऐसे विकल्प की तरह हाथ बढाया है जिसमे

अत; हमे अलग –अलग

अधिक उत्पादन हो सकता है। इसके लिए हमने एक किसानों के खेत को लिया और अलग मौसम में तीन –तीन नमूने तैयार किए तथा

अधिक उत्पादन होतर है। इसके बाद हमने अलग –अलग क्षारीय तथा अम्लीय मिट्टटी में जो कि प्रयोग शाला में तैयार किया गया था मे 5 सप्ताह तक जनसंख्या जानी

Name & Address of Guide Teacher:SH. SAHJEEV ATTRI, GSSS MOGINAND, SIRMOUR Phone: 9736622004, PIN: 173030.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :SCREFN DEPENDENCY DISORDER

Sub Theme:-

Team Members: VANSH KUMAR (Group Leader), DIVYESH THAKUR

Name of School: GMSSS, DULEHAR
Address of School: DULEHAR, UNA
District: **UNA**
State: HIMACHAL PRADESH
PIN: 176601

ABSTRACT

The study is based on the extent of mobile phone use amongst students and youngsters. In addition, the study is concerned with personal and family factors associated with the cell phone use and, the link between problem cell phone use and psychological health of the youth. It focuses on exploring the pattern of mobile usage among youth. For this purpose questionnaire were accustomed to elicit the response of youth. School Students were selected as population and simple anthropological research techniques and detailed interviews were used. Findings of this study discovered that majority of responsibilities and commitments and their mobile phone usage the they are showing showing continuously intense addictive behave and restlessness. Only a few are those who are not often inclined in addictive usage patterns. Thus, most youngsters use their cell phone on

extreme limits and tend towards extreme addictive cellular phone usage and it causes internes and savior effects over their health..

Name & Address of Guide Teacher:SANDEEP VASUDEV, VILLAGE PUBOWAL, TEHSIL HAROL, UNA, Phone:9817366195, PIN:176601.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :HOUSE SPARROW IN DANGER

Sub Theme:-ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: AISHWARYA THAKUR (Group Leader), AMANPREET KAUR

Name of School: SD PUBLIC SEN SEC SCHOOL

Address of School: SANTOKUGARH, UNA

District: **UNA**

State: HIMACHAL PRADESH

PIN: 174301

ABSTRACT

House Sparrow (Passer domestics), a very beautiful bird which was once very common, its population is dismissing day by day, no one is there who can keep on eye on the population of sparrow. Unfortunately, man is more conscious about life on mores or ay other planet rather than to save earth's biodiversity. The anthropogenic interference (tower radiations, Agrochemicals destruction of forests, etc) is main reason behind its cleaning population by alarming rate history witnessed that it takes very long time for humans to understand the consequences of their steps until its very hard to recover.

Key Words: dismissing, Agrochemical, Anthropogenic, interference consequences, biodiversity

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :WASTE TO WEALTH
Sub Theme:-WASTE TO WEALTH

Team Members: MOHIT RANA (Group Leader), PRANAV RAJAN

Name of School: DAV SR. SEC. SCHOOL UNA

Address of School: WARD NO. 04 VIAKS NAGAR, UNA

District: **UNA**

State: HIMACHAL PRADESH

PIN: 174303

ABSTRACT

"Urbanisation" and "Change in the lifestyle of people" is the main cause of problem of solid waste. Till now, the common waste disposal particle adopted by the Municipal Corporation is the landfilling and burning of waste in open places. Both of theses materials and methods are harmful especially for plastic disposal from our present study emerged. Various models of waste managements which includes municipality alone followed by treatment at source then if they are organic in origin to convert them into useful materials which mainly includes composting. Through this study vermicomposting seems to be most efficient method of waste management.

By recycling of the household products only this, our study has developed eco-friendly solution to utilize waste by cheapest method and to provide environmental friendly valuable fertilizers.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :WASTE MANAGEMENT TOWARDS A CLEAN INDIA

Sub Theme:-WASTE TO WEALTH

Team Members: ABHINAY (Group Leader), ASIF BUTT

Name of School: DAYANAND BHARTIYA PUBLIC SR. SEC. SCHOOL

Address of School: JOGINDER NAGAR, MANDI

District: **MANDI**

State: HIMACHAL PRADESH

PIN: 175015

ABSTRACT

In countries, especially like in India in which wastage is way more that production, we need some way to generates 150 million tonnes of waste everyday. It's not that this waste is just all useless and con't be sold again or recycled to form better productions, off course it can be.

In this 150 million tonnes of waste produced by India everday, there is all domestic, industrial natural, factorial and many other kinds of waste.

So, the question arises here how waste ne converted into wealth? Well it can be done by neutralizing our daily wastage, if that can be left untreated and would act as a 'lability' to our nation.

In all the above cases I mentioned, some parts of industrial and factorial waste could be treated to from new products, which would act as an extra earning for the nation from this we will have two benefits.

- The waste would not site and intern pollute environment.
- The money made by selling the recycled products will act as a source of extra income for the nation.

To sum up all I will like to say that, waste could be made wealth if we treat/recycled the waste and intern contribute a little more to the national income by the money made by selling the recycled products.

Name & Address of Guide Teacher:SUNITA THAKUR, C/O SH. EX CAPT BALDEV SINGH VILLAGE GARORU PO AND TEH. JOGINDERNAGAR, MANDI, Phone:9459337568, PIN:175015.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :BENEFICIAL ASPECTS OF PARTHENIUM HYSTEROPHORUS

Sub Theme:-

Team Members: AAKASH ARRARWAL (Group Leader), VISHAL KUMAR, KARAN AGGARWAL

Name of School: BL CENTRAL PUBLIC SCHOOL

Address of School: BADDI, SOLAN

District: **SOLAN**

State: HIMACHAL PRADESH

PIN: 173205

ABSTRACT

Parthenium Hysterophorus also known as congress grass, carrot used, chetak chandni is invasive exotic used. It is considered among the top 10 worst toxic needs of the would. There are many harmful impacts of Parthenium on almost everything on this planet i.e. agricultural productivity, bio-diversity, animals, plants and human beings. The pollen grans of parthenium are responsible for various skin allergen vats to various diseases such as Asthma, Bronchitis..

No doubt. There are its many adverse effects but beside these impacts, there's also a bright phase of Parthenium Hysterophorus. Due to various chemical constituents present in it, ot shows insecticidal, nurbuidal, antifeedant, antibacterial, antiviral Propertius moreover, it is a key to get back our nutritional amount to the soil. As it is considered among the top worst and toxic wards and control is extremely important.

One of the best and effective methods of its control is by making its agricultural compost. According to various researches, we say that after harm to crops and their productivity an fact, it is more beneficial to the crops than the normal farm yard manure, generally used in fields. The NPK concentration of this compost is were of threat normal FYM. Besides its agricultural aspects, it also shows some medicinal aspects. So, our main aim of this study is to aware people about its bright side which should be recognized and given importance.

"EVERY PLANT HAS MEDICINAL VALUE"

Name & Address of Guide Teacher:KARTIK SHARMA, #233, HOUSING BOARD, PH-3, BADDI, SOLAN, Phone:9816086869, PIN:173205.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :COMPARISON OF SOIL BIOTA IN ORGANIC FARMS AND OTHER KIND OF FARMS

Sub Theme:-ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: SRISHTI RAJDEV (Group Leader), NANDINI

Name of School: SHIVALIK VALLEY SCHOOL

Address of School: KIRPALPUR, NALAGARH

District: **SOLAN**

State: HIMACHAL PRADESH

PIN: 174101

ABSTRACT

India is one on the agriculture based country with more than 58 % of the population engaged in faming. The method of farming before 1960 was totally different, when farmers used natural materials in the fields to grow weeks. At that time there were no health hazards as compared to present time. But, after 1960 the demand for increasing production was felt and with the help of American farming technology we became self sufficient to satisfy the need or of food through green revolution but it imposed great input of pesticides and fertilizer due to which word degradation occurs, which results in poor food quality which leads to serious health hazards. so we have to poly more attention to improve the quality of soil to achieve it " Organic farming is one of the bent option to increase the quality of Soil because it mainly relies upon crop rotation organic manure, bio pesticides and integrated pest management.

Keeping this in mind we chose our project " Comparison of soil biota in organic farm and other kind of farm " under sub theme is ecosystem and ecosystem services and focal theme " Science technology and innovation for a clean, queen and healthy nation by farming group under the guidance of our guide teacher MrsShivani Sharma and proper supervision of our principal madam Mrs. Kavita Bansal.

Name & Address of Guide Teacher:MRS SHIVANI SHARMA, VILLAGE DATTOWAL PO NALAGARH, SOLAN, Phone:7018609415, PIN:174101.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :ECOSYSTEM AND ECOSYSTEM SERVICES

Sub Theme:-ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: DEEPANSHITHAKUR (Group Leader), SIMRAN MEHTA

Name of School: DOON VALLEY PUBLIC SCHOOL

Address of School: PEERSTHAN, NALAGARH

District: **SOLAN**

State: HIMACHAL PRADESH

PIN: 174101

ABSTRACT

An agroecosystem is the basic unit of study in agroecology, and is somewhat arbitrarily defined as a spatially ecosystem.

Ecosystem services approaches to conservation are using championed as a new strategy for conservation under the hypothesis that they will broaden $ deepen support for conservation, under the biodiversity problem / protection, where traditional approaches focus on setting aside land by purchasing property rights, ecosystem service approaches to conservation and protection / production.

Through the media of this project I want to inform you all about Ecosystem $ its services. This is the main aspect of our environment, and in my survey I came to know that many people do not know about ecosystem. My main coverage area is agroecosystem. People being the farmers do not know about the bad effect of fertilizers $ pesticides, $ their hazardous quantity.

People think it as boost to their crops and agriculture. An agroecosystem can be viewed as a surest of a conventional ecosystem. As the name implies, at the core of an agroecosystem the human activity of agriculture.

Some major organizations are hailing farming within agro-ecosystem as the way forward for mainstream agriculture. In soil due to current farming methods have resulted in over stretching of water resources, high levels of erosion and reduces soil fertility. According to report by International Waste Managements. The report suggested assigning value to ecosystem, recognizing environment and livelihood tradeoffs.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :EVALUATION OF WATER QUALITY BY USING MACROINVERTEBRATES

Sub Theme:-

Team Members: ARYAN CHAUHAN (Group Leader), MANAV CHAUHAN

Name of School: CHINMAYA VIDYALAYA DR. Y.S. PARMAR UNIVERSITY

Address of School: SOLAN

District: **SOLAN**

State: HIMACHAL PRADESH

PIN: 173230

ABSTRACT

This survey was conducted to evaluate water quality of streams using benthic macroinvertebrates on aquatic system. We choose two streams for checking the water quality. Stream are present around the Solan area. We checked the area around the streams and particulates present in it. Macroinvertebrates sampling was done using Surfer's sampler. Many activities like intensive agriculture and grazing along the streams or water bodies result in deuteration of water which resulted innless number of invertebrate was in agriculture land stream as compared to forest land system. Benthic macroinvertebrates are small animals living among stone, logs, sediments and aquatic plants on the bottom of streams, rivers and lakes. They are large enough to be seen with naked eye and have no backbone. There are popularly named as pollution indicator. Benthic macroinvertebrates are top indicators for bioassessment and are used as

bioindicators in streams. Indirectly they affect the lines of people as they indicate the pollution.

Name & Address of Guide Teacher:NEHA SHARMA, CHINMAYA VIDYALAYA NAUNI, SOLAN Phone:7018056272, PIN:173230.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :RECYCLED HERBAL PAPER AND PAPER PRODUCTS

Sub Theme:- WASTE TO WEALTH

Team Members: SPARSH RATTAN BHARDWAJ (Group Leader), SHWETA THAKUR

Name of School: ADARSH VIDYA NIKETAN PUBLIC SEN. SEC. SCHOOL

Address of School: NAYA BAZAR, NAHAN, SIRMOUR

District: **SIRMOUR**

State: HIMACHAL PRADESH

PIN: 173001

ABSTRACT

Paper Industry is considered as one world's largest consumer of fossil fuels and is responsible for massive deforestation around the world. Worldwide paper consumption has increased by 400% in past 40 years. Paper waste constitute as much as one forth of solid waste. So it is wakeup call for all concerned to cut down paper consumption and adopt paper recycling. Use of recycle, reuse and recover strategy of waste management can protect environment, conserve natural resources and generate revenues. Recycled paper with natural additive can be used as effective pests repellent. Incision by pass is a common household problem and they are responsible for transmission of number of diseases and property damage. The commonly used pests controller are toxic and disease causing. So it is better to use safe environment friendly natural products. The

effectiveness of recycled paper with natural additives is studied on common household pests, cockroach. Also effectiveness of two additives has been compared.

The experiment was carried out in two steps:-

- Preparation of herbal paper i.e. recycled paper with natural additive in different concentration.
- Investigation of effectiveness of herbal paper on pests.

An observation box is prepared to study the efficacy of herbal paper with different concentration of additive in it and behavior of cockroaches was observed in controlled condition. Also their behavior is observed in their natural environment as home. The time spent by cockroaches on the paper was noted. The same experiment was repeated using papers of different concentration and different additive. It is observed that herbal paper is effective pests repellent and their efficacy is related to the concentration of natural additive. It is also observed that neem paper is more effective pest repellent then by paper.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :HERBAL MEDICINES

Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: PRIYANKA THAKUR (Group Leader), RASHI

Name of School: ASCENT PUBLIC SR. SEN. SCHOOL

Address of School: PADHAR, MANDI

District: **MANDI**

State: HIMACHAL PRADESH

PIN: 175012

ABSTRACT

- Area of Gawali, Urla and Kotropi taken as reference for study.
- The idea of being able to preserve the herbal medicines and making its use more common in the locality.
- Detailed Invertigation:- The no. of people knowing how herbal medicines are used and people interested to continue these practices.
- Survey to identify the various problems faced by local people and their solutions.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :TRADITIONAL MEDICINAL PLANTS IN OUR LOCALITY

Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: PRATIMA BHARDWAJ (Group Leader), JYOTI PRIYA SONALI

Name of School: DAV PUBLIC SCHOOL

Address of School:GOHAR, MANDI

District: **MANDI**

State: HIMACHAL PRADESH

PIN: 175029

ABSTRACT

A study has been made to evaluate the traditional knowledge of the medicinal and herbal plants in our locality. the data survey has been analysis and found that people of Gohar, Bassa, khyod and Chailchowk have etmobothanical knowledge of various plants such as tulsi, amla, brahmi etc. There are total 38 medicinal plants, the people of various villages have a lot of knowledge about all the traditional medicinal plants

Name & Address of Guide Teacher:BHIM SINGH THAKUR, VILL GOHAR PO DAL TEH. CHACHIYOT, MANDI Phone:9817306521, PIN:175029.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :STUDY OF THE GARBAGE COLLECTION UNDER SURVEY AREA AND HOW TO RECYCLE IT
Sub Theme:- WASTE OF HEALTH

Team Members: SACHIN VERMA (Group Leader), RISHI BHARDWAJ

Name of School: SARASWATI PARADISE INTERNATIONAL SCHOOL

Address of School: SANJAULI, SHIMLA

District: **SHIMLA**

State: HIMACHAL PRADESH

PIN: 171001

ABSTRACT

Science Tech. and innovation plays very important role for making our nation clean green and healthy. For this we can adopt many strategies in field of waste to wealth waste is a man – mage substance in a given tome and place which in actual state is not useful. Recycling is best option to meet with the problem caused by more waste generation, Recycling rubbish material is also away to conserve natural resources main objective of doing this survey is to make people aware about waste management. After selectin the site for our survey we discussed methodology for our survey report and made questionnaire and collected info, during analysis the collected data from our secondary and primary resources our team found that waste management or recycling of waste material is only way to reduce the risk of getting affected by more waste generation. Amount of waste generation is almost 100 % over the past 100 years. Waste generation in urban areas of India is 0.7 kg per person per day. Management of waste will play a major

role in maintaining city clean, keeping people healthy, creating job for poor and so on many natural resources like trees, gas etc are running out. So to save natural resources for our future generation recycling and waste management is very important. Accordingly, to the research about 62 million tones of waste is generated out of which only 28% is recycled and 72% is left on the roads and landfill areas of years to years which is very bad. So, in order to reduce to waste generation waste management should be done properly so that our future generation will also get clean green and healthy nation in stead of getting a deteriorated environment.

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Name & Address of Guide Teacher:RAKESH THAKUR, PGT PHYSICS SPIPS ANDJAULI, SHIMLA Phone:8219729788, PIN:171001.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :WET GARBAGE TO COMPOST
Sub Theme:- WASTE OF HEALTH

Team Members: SEJAL (Group Leader), REETIKA RANA

Name of School: MINERVA SR. SEC. SCHOOL

Address of School: NEAR BUS STAND

District: **BILASPUR**

State: HIMACHAL PRADESH

PIN: 174303

ABSTRACT

This survey project examined the current household garbage (Solid waste) management with a case study of the residents of Ward1,4,5,6, and some og Ghumarwin around my school. Data collection involved face to face questionnaire administration to different household generators.

A total of 50 Households were interviewed using the questionnaire which was randomly administered among the different household. The result indicated that majority of residents are very much concerned about the poor state of environment due to improper and inappropriate garbage management in township. Very few of the residents knew little about recycling and composting. The rsidents are clearly dissatisfied with the services of the environmental Health protection Authorities with regard to garbage management in village and town Ghumarwin. Some locally effective management strategies have been suggested. I also suggested a model which is able to manage the garbage effectively. This

model involved a plyhouse to store the garbage till whole the garbage get sotted. The rotted garbage can then be separated by separator to separate the manure and other particles. Mu garbage management model can be applied on small or large scale.

During the survey I found that majority of people are well aware by the diseases and health risk caused by the mismanagement of the household garbage. They are dissatisfied by the efforts of the local government mage for the management of the garbage I obtained a certificate from the executive officer municipal council Ghumarwin in which it was been Shawn that there are total 40 dustbins in Ghumarwin town and these are 17 workers who engaged to clean the dustbins. But these are not sufficient as the garbage produced daily in Ghumarwin town is so much in large scale.

Name & Address of Guide Teacher:ASHISH SHARMA Phone:9736360778, PIN:174303.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :**USE OF WASTE PLASTIC MATERIAL AT HOME**
Sub Theme:- WASTE OF HEALTH

Team Members: ABHISHEK KUMAR (Group Leader), ANSHUL

Name of School: GSSS CHALEHLI

Address of School: NEAR BUS STAND

District: **BILASPUR**

State: HIMACHAL PRADESH

PIN: 174003

ABSTRACT

A large number of plastic waste is dumped in open areas. People don't think how this dumped plastic material is a danger for us. It blocks the water lines, seawage and other waste water pipes conducted to sewage's by this the water come on the road and stay there and become a place for mosquito's to laying eggs. In this waste plastic the polyphon bag's, plastic bottle's broken cups, plates and rappers of sweet are priest. People thinks that all of this material is useless but they don't think how we make them useful. This is the biggest problem that is making these plastic material a waste. In survey I ask the questions from the people that how much things at your home are of plastic, they assured 60-70 %. The next question is that how much plastic material they throw away every day.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :HEALTH SANITATION REGARDING WOMEN
Sub Theme:- WASTE OF HEALTH

Team Members: AKRITI THAKUR (Group Leader), AAKRIT SHARMA

Name of School: MINERVA SR SEC SCHOOL

Address of School: GHUMARWIN

District: **BILASPUR**

State: HIMACHAL PRADESH

PIN: 174021

ABSTRACT

Menstrual hygiene is one of the most, yet neglected health issues in the developing world. In India approximately 70% of all the reproductive diseases are caused by poor menstrual hygiene. So, it is becoming essential to aware women about menstrual hygiene.

Innovations in this filed can be significantly contribute to protect10 billion would inhabitants by resisting all the reproductive diseases. But in the present ear, due to lack of guidance and awareness many rural women are suffering from reproductive diseases. As a result, it has adversely effect on human health. A unique study that 10% of Indian women believe that menstewation is disease.

In June 2013 we last our menstrual health and hygiene which remanded into Jharkand in 2015. Though this project we distributed low-cost sanitary pads to rural women and girls and raise awareness about the importance good menstural and personal health pratices in local school and village. More 6000 people attend each year these sessions.

Hygiene is asset of personal practice that contributed to good health Government have to start public awareness programme to enhance the awareness about menstrual hygiene among women as well as the citizens of our country

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :HOME WATER AUDIT AND ITS MANAGEMENT
Sub Theme:- WASTE OF HEALTH

Team Members: SHIVANI THAKUR (Group Leader), RIYA CHAUHAN

Name of School: MINERVA SR SEC SCHOOL

Address of School: GHUMARWIN

District: **BILASPUR**

State: HIMACHAL PRADESH

PIN: 174029

ABSTRACT

Water shortage in town of H.P. has been making news headlines at the start of summer season. Waterman of India, Rajendra Singh has recently warned the state government and opined that it needed to dense a mechanism for proper utilization of rain water for future. The ground water level is on continuous decline in the state and has emerged as a key issue. Its ramification is visible in many parts of this hilly state because of huge urbanization and industrialization coupled with changes in ground water quality. At present the question is not of decline in ground water level but also the worsening of water quality. It also hits the hotel and tourism industry. The trend was observed in recent years and it puts a question mark about availability of portable drinking water in future. Residents of some parts said what to talk about bathing, they are purchasing water for cooking. Water from other sources is not of good quality. Urbanization of state leads to scarcity of water especially during summers to meet them and tap water supply to towns

create water famine in villages. Nearly 80% of rural population of H.P. used ground water for drinking and major health hazard among rural populations. According to third minor irrigation census conducted by the ministry of water resources, there are 43 water bodies in H.P. and out of these 8 have dried up. Once H.P. is known for its abundance of water availability has now observed depletion in water level and quality.

We choose this project to know the root cause of scarcity of water. We want to know that it is natural or manmade. In this project we took 10 houses of each ward for sample and 30 houses of village matwana. We prepare a questionnaire and interviewed 100 households regarding their routine water use practices.

The survey is focused on following key aspects:

- To get an idea of the amount of water used by an average household.
- To get an idea of the average composition of household water usage.
- In addition, members of these households were also asked a few questions pertaining to their usual behavior and their knowledge and attitudes towards water conservation. We measure the water flow rate of their taps, flush volume and calculate the water use in each activity. We calculate water used @ per person per day in each sample and compare it with the present water supply rate @ 135 per person per day in urban and @ 70 per person per day in rural area. We calculate water wasted in each ward. After calculation we find out major water using areas. Then we plan and think about such methods which are water conserving. We discuss these methods with the people and make them aware of wastage they did in daily routine. Also we find out roof area of each household and calculate water holding capacity and make people aware of this.

Through this project we make a little effort to join people together to deal with clean water scarcity through various best and most suitable methods by making the motto 'SAVE WATER, SAVE LIFE AND SAVE THE EARTH'.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :TRADTIONAL HERBS IN KANGRA VALLEY
Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: ADITI (Group Leader), SHAINA

Name of School: GREEN FILEF SEN. SEC. SCHOOL

Address of School: CHANRI, NAGROTA BAGWAN

District: **KANGRA**

State: HIMACHAL PRADESH

PIN: 176047

ABSTRACT

The main objective of our survey is to draw out the traditional knowledge regarding herbs from old people and inherit that to the youth and to do the review of literature of all the traditional medicinal knowledge available in indigenous and local communities. To conduct the survey through questionnaire and these questions based on the Traditional Herbs in Kangra Valley. For this we did survey of 50 people so as to check their knowledge regarding the essence of herbs. In survey analysis we found 94% of population using herbs. For more clearance of our topic we took interview of Dr. Punam (Principal Scientist, Department Horticulture, Agroforestry) and Dr. RS Bhardwaj (Ayurvedacharya). We also conducted various experiments. In our first experiment we studied the effect of Ghutti on infants then-we studied effect of Haldi on wound, Chatni in various problems, Besan, oil and turmeric on skin and effect of decoction(Kada). From all these we got positive results without any sought of side effects. The main focus is to

revive the traditional knowledge of herbs in the society as they are more side effect free and easily available whereas allopathic medicines and modern methods are more side effect causing. We also want to aware people about the use of herbal plants and encourage them to use traditional methods of medical therapy. Another aspect of traditional knowledge is that it is both preVentive and curative . Traditional knowledge do not get modified as in case of modern applicants .Today herbs contribute about 80% in Indian medicines.

As a result we concluded that although people are well aware about the importance of herbs but yet they prefer modern inputs in all spheres which dominate herbal treatment. This domination needs to be restricted so as to promote a healthy nation. Traditional knowledge among people. -- Healthy Nation

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :**AGRO ECOSYSTEM ANALYSUS; SUSTAINBLE LAND USE SYSTEM FOR FOOD AND WOOD**
Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: ANSNIKA DHIMAN (Group Leader), ANSNIKA RANA

Name of School: GREEN FIELD SEN. SEC. SCHOOL

Address of School: CHANRI, NAGROTA BAGWAN

District: **KANGRA**

State: HIMACHAL PRADESH

PIN: 176047

ABSTRACT

The main-objective of the survey is to aware the people regarding the techniques used in agriculture and the knowledge regarding importance of new techniques and sustainable agriculture and also to motivate people to test their soil and to prosper with sustainable development. We have conducted two experiments to aware people regarding the basic need and to enhance productivity. The first experiment deals with the soil analysis test of the area of Hatwas which tells us the exact crops which can be grown to enhance maximum productivity. The second experiment deals with the latest technique of AESA in which we concluded that if we prefer this technique then this would help them to increase their production and its cost effect tive. We surveyed the area Hatwas in which we firstly went to the agriculture university and gathered the information regarding AESA ,Vertical Farming , Nano-Agriculture. These all techniques are helpful to farmers and after getting knowledge we went to local people to aware people regarding the new

techniques and also know about their awareness regarding control of crop yield reduction. From this survey we observed that the people had no knowledge and awareness regarding soil test and modern techniques. So, from all this we can say that there can't be any progress in agriculture until and unless the people have awareness among them. We came to know that people were very less aware. From this survey we concluded that people are moving from ecological based approach to market based approach. There is a strong need to revive the traditional methods.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :WASTE MANAGEMENT IN SULIALI REGION
Sub Theme:- WASTE TO WEALTH

Team Members: KETAKI (Group Leader), MEHAK

Name of School: GOVT. SEN. SEC. SCHOOL

Address of School: SULIALI

District: **KANGRA**

State: HIMACHAL PRADESH

PIN: 176211

ABSTRACT

The problem of waste generation and management as become a serious issue for all of the many scholocs studies . This project report critically examine the attitude of people of suliali region to the waste disposal and management . 50 Questionnaire were administrated to the residence suliali. Information such as the various type of waste and the method of waste evacation were obtained from the questionnaire . Fina y revealed that all types of waste is present in our area shocking that only 40% of polythene bags are thrown and 60% are burnt o 84% plastic bottles are given to kabariya for recycle while 16% are thrown away. 88% of wet kitchen waste is given to animals and dry waste is not illanged , 90% of paper waste is given foe recycling, 16% of leather waste is given to kabariya,-i 4% of electronic waste is given for recyolilg ,100% of iron waste is given to kabariya, glass waste is thrown anywhere(0%) Beside the environmental enlightment has changed people attitude toward waste generation and management in area . This was

affirmed in the oalculz:tion that people use to keep theirsurrounding clean but out skirts of village starts developing as a clumping area. Estimated plastic waste produced per month in the suliali region from govt supply as well as from local market is 368.50 kg. Rain water can be converted into wealth by storing it and after using it for household purposes In report we found that only 8% of people use rain water while 127774.4 of rain fall on the roof of suliali houses every year.Which is flown to the river lack of TALABS now a days also damaging the level of ground water.Rain water harvesting tank can be constructed in each house with help of government aid to resolve this problem.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :SCHOOL BASED SANITATION SURVEY
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: PANKAJ JARYAL (Group Leader), ASHWANI KUMAR

Name of School: GOVT. SEN. SEC. SCHOOL

Address of School: KHARGAT

District: **CHAMBA**

State: HIMACHAL PRADESH

PIN: 176207

ABSTRACT

"Environmental sanitation" is a major public health issue in India. Recent studies on environmental sanitation in India highlighted the importance of control strategies. Research related to the appropriate cost-effective intervention strategies and their implementation in Indian context is a big challenge. Environmental sanitation encounter promotion of health of the community by providing clean environment and breaking the cycle of disease. It depends on various factors that include hygiene status of the people, types of resources available, innovative and appropriate technologies according to the requirement of the community, socioeconomic development of the country, cultural factors related to environmental sanitation, political commitment, capacity building of the concerned sectors, social factors including behavioral pattern of the community.

India is still lagging far behind many countries in the field of environmental sanitation strategies. The need of the hour is to identify the existing system of environmental

sanitation with respect to its structure and functioning and to prioritize the control strategies according to the need of the country. These priorities are particularly important because of issue of water problems, environment-related health problems, rapid population growth, inequitable distribution of water resources, urbanization and industrialization, migration of population, and rapid economic growth.

We want to create awareness among villagers and students of our school regarding the importance of sanitation in our daily lifes and impact on our health .For this we decided to carry out a "Sanitation Survey" and thus form a group of 2 students of our school under the guidance of our guide teacher Sh. Sunil Dhiman PGT (Chemistry).We planned and divided our whole work regarding the conduct of our survey among the five students like who will prepare charts ,who will conduct survey, preparation of a Survey Questionnaire format ,analysis of data and result etc. At last we found satisfactory results regarding our survey and successded in creating the awareness among villagers regarding "Health ,hygiene and sanitation.".

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :HARMFUL CHEMICAL AND HEAVY METAL CONTAMINATION IN COSMETICS
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: RUPALI (Group Leader), NIKITA

Name of School: GOVT. GIRLS MODEL SR. SEC. SCHOOL

Address of School: NADAUN, HAMIRPUR

District: **HAMIRPUR**

State: HIMACHAL PRADESH

PIN: 177033

ABSTRACT

Cosmetic products are considered a part of routine body care. With its usage also come undesirable threats of effects of heavy metals, which are present in these products in levels exceeding the permissible limit, on human body. These heavy metals have been reported no known bio-importance and can be very toxic when consumed even at very low concentrations. The nature and effect could be toxic (acute, chronic, sub-chronic) neurotoxic, carcinogenic, mutagenic or teratogenic. Women are more affected by these heavy metals because they wear make-up or use cosmetics for a long time intervals in everyday. Moreover, due to the impact of media and advertisements more and more girls even of teenage and less than ten years wear these cosmetics loaded with toxic heavy metals. Results are very fatal in the form of low IQ levels, mental retardation, anaemia, nervous system problems, lungs infection, infectious digestive systems, infertility, onset of early menstruation, disturbed menstrual cycle and even more .So , it is a need of the

hour to make all women aware of that what they are wearing actually contain. So, we choose this project for our survey. In India, the situation is so worse because there is large market of local cosmetic. These local cosmetics are bought by a large class of Indian society due to easy availability and cheap rates. These products are not FDA certified. Besides these the cosmetics of branded companies contain many toxic chemicals and heavy metals. So in the present study we assess of Pb, Cr, Ni, Al and Hg in daily use cosmetics. In our survey, we found that there are three categories of women according to the use of cosmetics. Upper class means they use branded products of Lakme ,L'oreal , Revlon , Colorbar , M.A.0 etc. They spend Rs.3000/- per month on their cosmetics. Middle class use cosmetics of branded and local companies. They spend Rs.1500/- per month on their cosmetics. Third class use cosmetics of local brand and spend Rs.300-500/- per month on these. Besides, these teenage girls used mostly nail polish, hair color and glitters of local brands as they can't afford costly items from their pocket money. We collected samples of cosmetics from all these categories and send them to Auriga Research Laboratory, Baddi for heavy metal testing. This is the only one in H.P which is FSSAI accreditation. We selected 30 women for finger test for presence of Pb. We took sample from their finger tips and tested with Sodium Sulphide (Na2S) solution. The color of the swabs shows black/grey color which is the indication of presence of Pb. Then we told them to wash their hands using some hand wash. After hand wash we again tested their finger tips and result is same. This shows that Pb is almost not removed by any hand wash Our results show that all cosmetics contain Pb. Lipsticks contain nail polish Pb, shampoo, soaps, creams, foundation, kajal, mascara, eyeliner, sindhur, tooth-paste all contain heavy metals. We make women and teenage girls aware of these results and appeal them not to use cosmetics in large quantity as they are dangerous to our life and environment too. By this project we can lend a hand towards (Healthy India) and only if we are healthy we can contribute in the development our country.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :SCIENCE AND TECHNOLOGY FO A CLEAN, GREEN AND HEALTY NATION
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: PIYUSH (Group Leader), RAVI KANT

Name of School: GOVT. BOYS SEN. SEC. SCHOOL

Address of School: HAMIRPUR

District: **HAMIRPUR**

State: HIMACHAL PRADESH

PIN: 177001

ABSTRACT

With the increasing age of advancement, we are moving away from environment Concerns.Grey water (waste water of kitchen and bathroom) is also one of those things we avoid In village areas this waste grey water flow over path, road or some people use it for irrigation. However this grey water contains harmful chemicals, high pH level, high TDS level which affect the soil fertility and water absorption capacity of soil to a large extent. It influence soil quality and turf grass performance .NO3 present in grey water ingested to Nitrites which cause Blue baby Syndrome disease

"How Idea appears"—Last year, in our kitchen garden I observed that leaves of different plants like chili, mint present there were becoming yellow and production was also lowered. I concluded Grey water the cause, the grey water which we had directed from kitchen and bathroom to the kitchen garden.

So I convinced my parents to change the outlet of the grey water to another direction from kitchen garden to after few days I found the plants glooming again. This induce the idea, that grey water is harmful for irrigation purpose. I discussed the problem with your chemistry teacher to find the solution of this problem. So we selected this topic.

Moreover, irrigation water quality formerly a minor concern is becoming an important issue now-a-days with the advent of industrialization rapid increase in water pollution level has drawn the alternation of people toward this glaring issue.

The growth of population is another factor that has caused increase in demand of "potable water ".Thus making the use of treated grey water for irrigation can lessen the burden on the supply of potable water.

So we tried to recycle grey water by different fruit peels and tested the treated water quality and study has revealed that the treated water was found to be in accordance with the Indian standard of irrigation water quality.

Then by recycling and reusing grey water there major problems can be solved

1) Disposing of grey water

2) Storage of irrigation water

3) Less pressure on portable water

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :**SCIENCE AND TECHNOLOGY FO A CLEAN, GREEN AND HEALTY NATION**
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: GUNJAN (Group Leader), ISHIKA RANI

Name of School: HAMIRPUR PUBLIC SCHOOL

Address of School: WARD NO 10, RAMNAGAR

District: **HAMIRPUR**

State: HIMACHAL PRADESH

PIN: 177001

ABSTRACT

Water is one of the supreme valuable natural resources known on earth. It is important to all living organisms, most ecological systems, human health, and food production. There are various parameters for checking the purity of water. The most basic parameter is checking its TDS level.

Another parameter is to check the presence of E.coli group of bacteria in water. E.coli is a type of faecal coliform bacteria various water-borne diseases like diarrhea spread easily when community members do not practice good hygiene. In this project first we conducted a survey in which we checked the quality of drinking water among the various households and the methods used by them to treat the water.

The highest TDS value was measured for the water from protected well. We conducted an experiment to check the presence of E.coli bacteria in water.The main conclusion of our project is that If the water is not treated in the household then the various diseases to which these households are prone, are diarrhea, and typhoid due to the presence of E coli and other pathogens like hepatitis A.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :**A CASE STUDY ON INNOVATIVE WORK CARRIED ON SAINTARY NAPKIN USED DURING MEN STRUAL FLOW**
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: JYOTI NEGI (Group Leader), SUBITA THAKUR

Name of School: GOVT MODEL SEN. SEC. SCHOOL

Address of School: BAJAURA

District: **KULLU**

State: HIMACHAL PRADESH

PIN: 175125

ABSTRACT

Menstrual flow is a natural cyclic process which repeats after every month. This process indicates about the attaining of puberty by the girl. A blood flow occurs for seven days. During blood flow, a proper hygiene is required. There are lot of sanitary napkins available in the market. We have heard that large number of women still is still using cloth during menstrual flow. Is it advisable ? why women are using cloth? Are they not in a position to buy sanitary napkins ? does use of cloth admissible by doctors ? What is the consequence of used sanitary napkin? Are they easily dispose off ? Are they decomposed easily ?

First of all, we decide to carry out survey of women of different category. The category made were school going, college going, women of rural area, and women of urban are& We took 25 samples and did survey related to the topic by making suitable questionnaire.

We were surprised when we observed that most of the women are still using cloth during menstrual flow. We found that most of them feel shy to buy sanitary napkin from the shop and even the girls of school going and rural women said that we are not in a position to buy it.

We interviewed many doctors and ask various questions regarding the topic. All the medical practioners said that it is not advisable to use cloth as it has many health issues. We also observe that sanitary napkins after is thrown anywhere and we found that sanitary napkins are not decomposed easily. So, it is a serious issue regarding health, hygiene and sanitation.

We decided to develop an innovative sanitary napkin which should be of zero budget, should be easily affordable by every women, and must decompose easily.

We have developed a sanitary napkin made up of goose grass and fibre of banana tree. We did experimental trial for its viability, feasibility. We found that it is totally made from natural material, so it can be easily decomposed and are made up of zero cost. Material used are easily available and in abundance in nature.

In future, we will carry out more experimental trials. We will work on its easy availability. We think that such type of organic napkins can be a boon to women society.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :**UREA JIVAN SEJANARTAK RAILPANCHYAT EKAVLOCAN**
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: SHABNAM (Group Leader), ABHILASHA

Name of School: RGM GSS RAIL

Address of School: HAMIRPUR

District: **HAMIRPUR**

State: HIMACHAL PRADESH

ABSTRACT

Rapidly increasing importance of urea fertilizer in world agriculture has stimulated research to find methods of reducing the problem associated with the use of this fertilizer. In soil, it promotes rapid growth but plants are weak so promotes stress, destroy soil organisms, increases disease activities and finally decreases nutritional value of plants to humans whereas increases nutritional value to pests. Studies reveals that only 33% of urea in the form N2 as Nitrate is absorbed by rice and wheat plants whereas 67% remain in soil which cause soil and water pollution. Nitrate is the form of nitrogen that plants absorb easily and it is essential for plants growth but excessive use of urea leads to several adverse implications on soil, crop quality and overall ecosystem. Excessive use of urea encourages climate change and ground water pollution. Increase in nitrate contents in ground water in intensively cropped areas has been reported which is due to leaching of nitrates. It is harmful when used for drinking purposes in several areas.In the present study, an attempt has been made to study the "Urea Jivan se Jahar Tak-Rail Panchayat Ek Avlocan" of Rail Panchayat Villages Rail, Balkuni, Kamlahu and Har.

The study was carried in two stages. In one stage, a questionnaire was prepared to study the extent of farmers' awareness viz- a- viz use of urea and organic manure; role of agencies and soil testing awareness. The excess amount urea in the form of nitrate was analyzed in water from ground water resources of selected villages.Soil samples of all the four villages were collected and in the samples, amount of nitrogen

,potassium,phoshhourus and ph were determined. An awareness campaign was organized regarding significance of organic manure instead of urea to reduce both soil and water pollution. Farmers were told not to use water from resources situated near their fields as nitrate was maximum i.e. 100 mg/lit in because the bawri being used by villagers for drinking water is near their fields.ln balkuhni village ph is 5.5 which indicatesuse of excess urea by farmers in thier fields.ph of soil in remaining villages is also found to be acidic. Amount of Nitrogen is found to be maximum in all Balkuhni the four villages which leads to nitrogen pollution which decreases fertility of soil by decreasing the carbon contents of soil and also leads to the production of nitrous oxide which is greenhouse gas and is contributed to climate change . The amount of potassium is found to be lowest in all the four villages which leads to deficiency of proteins in cereals and pulses and contributes to malnutrition that is why most of the children and women of rail panchayat were found to be anemic as shown by the hemoglobin records of panchayats. Then in stage 2, resurvey of farmers of study area was conducted and it was observed that after the campaign, the farmers became aware about the use and significance of organic manure instead of urea; soil testing and role of government agencies in providing necessary time to time information to farmers of study area.

It was observed during resurvey that use of urea was reduced from 80% to 30%, use of organic manure increased from 58% to 80%, nearly 75% people know about significance of organic manure and role of agencies is increased from 25% to 70%. In nutshell, organic manure increases productivity and fertility of soil. Use of "Principe Agriculture" should be encouraged to reduce wastage of fertilizers and money. Use of neem coated ureashould be preferred and Govt. have to reduce subsidy on fertilizers.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :STUDY OF PRECEPTION AND SANTATION PRACTICES DURING MENSTRUATION IN ADOLESCENTS GIRLS OF THE AGE GROUP 12-18
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: AKANKSHA (Group Leader), KANIKA

Name of School: GOVT. MODEL SR. SEC. SCHOOL

Address of School: WARD NO. 4 BHATTIYAT

District: **CHAMAB**

State: HIMACHAL PRADESH

PIN: 176302

ABSTRACT

Menstruation is one of the most important changes during adolescent years. Unfortunately in our society like in many part of India, it is still regarded as shameful and unclean. Hygiene related practices are not practiced by many and it results in other long term illness. Isolation of menstruating girls and restrictions imposed on them by the family, develops negative attitude towards this phenomenon.

We could different girls coming to our school in the age group of 12-18. We develop a questionnaire to gain insight into the perception of the school girls regarding menstruation, hygiene and nutation.

We come to know that ne girl is aware of scientific processes related to menstruating. Only 24.64% girls are using sanitary pads as menstrual material. 22.47% are using wet cloth and 53.08% are using combination of cloth and sanitary napkins. They use cloth but

used sanitary napkins in emergency. The waste cloth to unhygienic. It leads to Rashes, Itching, Fowl smell and UTI.

Girls don't spend their whole day n one or two pads/cloth. The menstruating blood when leaves the body, due to its warmth attracts number of microorganism which leads to nation types of infections. Girls argue that there is problem of disposal in school.

Awareness is the key to success in every filed. Every girl can be trained to prepare her own pads which are economic and ecofriendly.

By accepting and implementing healthy hygiene sanitation practices during menstruation can help the society to prepare its girls for a healthy reproduces life especially in Rural areas.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :**SCIENCE TECHNOLGY AND INOVATION FOR CLEAN GREEN AND HEALTH NATION**
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: SWATI VERMA (Group Leader), PRAKRITI SOLANKI

Name of School: GOVT. GIRLS SR. SEC. SCHOOL

Address of School: CHAMBA

District: **CHAMBA**

State: HIMACHAL PRADESH

PIN: 176310

ABSTRACT

We know that health is defined as complete physical, mental and social well being and not merely absence of any disease or infirmity. As defined as by 'World Health Organization' health is a state of complete ability to adapt and manage physical, mental and social challenges throughout life and hygiene is a set of practices for the presentation of health. It refers to conditions and practices that help to maintain health and prevent the spread of diseases. "Personal hygiene refers to maintaining the body cleanliness and last but not the least thing in out topic sanitation involves the hygiene disposal and treatment of the by the authority of potentially unhealthy human waste such as serrate and drainage.

Name & Address of Guide Teacher: ……Phone: ……., PIN:…….

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :WASTE MANAGEMENT AND USE OF PLASTIC IN HUMAN WELFARE
Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: SADHANA THAKUR (Group Leader), PRANAV

Name of School: SNOWER VALLEY PUBLIC SCHOOL

Address of School: BAJAVRA, BHUNTAR

District: **KULLU**

State: HIMACHAL PRADESH

PIN: 175126

ABSTRACT

The improper management of waste is a leading problem in our surroundings. In waste management, we mainly deal with biodegradable and non- biodegradable wastes.

The management of biodegradable waste is easier. They can be handled easily. While, non-biodegradable wastes are difficult to manage, teir management and decomposition is very difficult. They are mainly recycled.

The plastic produced in homes and that in our surroundings is generally burnt. But, this brining of plastic is hazardous to human life and its disposal is soil makes the soil infertile and unsuitable of growing crops.

The plastic waste generally produced at homes is not managed well. The problem is very big. The management of plastic can be done by using it again and again through recycling or by making any other use of it. To cope with this problem, the marbles or tiles designed with plastic are great blessings.

They can reduce the unmanaged waste plastic. We should take care of smaller things; big things will automatically be well.

Name & Address of Guide Teacher:SEEMA CHAUHAN, VILLAGE BADAH, PO MOHAL TEH AND DISTT KULLU Phone:9459831142, PIN:175126.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :**A CASE STUDY ON THE USE OF LOCAL WEEDS FOR SOME PRODUCTIVE PURPOSE**
Sub Theme:- WASTE TO WEALTH

Team Members: PARTHIK PATHANIA (Group Leader), ABHIJEET KUMAR SINGH

Name of School: CAMBRIDGE INTERNATIONAL SCHOOL

Address of School: MOHAL

District: **KULLU**

State: HIMACHAL PRADESH

PIN: 175126

ABSTRACT

We have seen that the weed plants growing around us like – hemp, nettle, flex etc. are unuseful. We have seen these plants growing around us but we bever thought about their benefits or valuable properties. One day a grass cutter came and cut the unwanted plants or weeds plants and clean the surrounding area then I though that every plants in the nature has some valuable properties so then I thought to search about these plants and we got many valuable properties of these plants like – promotes hair growth, benefit for skin disorders, protects our health etc. the objective for our project to identify the types of weed plants which can add productive value to the human lift. To maje some useful products out of it. We decided to continue our project in this way. Identifiyings the weed plant in our surroundings. Researching about the valuable properties of weed plant. Invovating something productive and experimenting on it. Our aim was to covert waste

weed plant to a beneficial hair cream. The material required four our experiment was paste of hemp and nettle plants, essential oils.

Name & Address of Guide Teacher:MRS. RAINA VERMA, CAMBRIDGE INTERNATIONAL SCHOOL, MOHAL, KULLU Phone:8219574161, PIN:175126.

Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :EFFECT OF DRINKING CONTAMINATED WATER
Sub Theme:- WASTE TO WEALTH

Team Members: KANIKA (Group Leader), SHREYA THAKUR

Name of School: HIMALAYAN PUBLIC SEN. SEC. SCHOOL

Address of School: CHOWARI

District: **CHAMBA**

State: HIMACHAL PRADESH

PIN: 176302

ABSTRACT

Good health is not possible without food, nutrition, clean, green and healthy environment. The nationa can not be successful without its healthy public. We choose this topic because in our locality most of the health problems are causing by polluted water. Many peoples are aware to their health. But few peoples are not awarded to maintain their health one third of the people in our locality are suffering from Typhoird, Jaundice etc. with this report our aim to study about water problems and diseases causing by drinking contaminated water. Mainly to make our town healthy and mean starts from our town to a healthy and mean starts from our town to a healthy nation. And to aware people so that they will never drinks impure and unfiltered water and I council like to thanks my teachers, helpers and the people who gave me precious time for the survey and after survey from the peoples we observe that numbers of problems are caused due to water borne diseases and the peoples who don't drink filtered or boiled water. I suggested them to use it and I also aware that don't drink contaminated water. But the peoples who don't

afford R.O. in their houses that I suggested the to make a water purifier at home with homemade materials.

Name & Address of Guide Teacher:MR. AKSHAY KAPOOR, VPO GURCHAL, NURPUR, KANGRA Phone:8988019992, PIN:176202.

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :PROBLEM OF PLASTIC AND THERMOCOL GARBAGE IN KOT VILLAGE AND SOLUTION
Sub Theme:- WASTE TO WEALTH

Team Members: JYOTI (Group Leader), BHIM RAJ

Name of School:GOVT SENIOR SECONDARY SCHOOL

Address of School:KOT- TUNGAL

District: **MANDI**

State: HIMACHAL PRADESH

PIN: 175003

ABSTRACT

Thermocol and Plastic waste is causing serious threat to the man kind ,as it mix up with the food chain and causing many serious diseases like Cancer. Although in cities Thermocol and Plastic are Recycled , but in villages it is not picked up by the "KABAADI" so its disposal has become a big problem. Kot village is facing the same problem. This problem was solved through Scientific Project Report . Survey team of five member was selected , visited different sites of the village , Questionnaire was prepared of ten question, Team visited Kot village and collected data from hundred villagers. Collected data was analyzed . Most of the people do not have pits for disposal of plastic. All are throwing Plastic and Thermocol in open space . All people knows it is spoiling Soil and Water and causing serious diseases. All villagers wants some useful solution of it . Survey team discussed the problem with the teacher and he suggested to convert Thermocol in to jelly like Gum (Adhesive) by dissolving in "Acetone" or

“Petroleum”. Plastic garbage can be grinded in to small pieces . Plastic pieces is mixed in Thermocol jelly .Took paste mixture in to the “Compressing Machine” and compressed the mixture in between Sun mica sheets up to 24 hours . After 24 hrs. it has changed in to hard solid board. Plastic board is taken out from Compressing Machine and tested for its water proof nature , by dipping in water for 24 hrs. There was no change in the nature and texture of Board . By this quality testing it is proved that board is fully “Water Proof” . Child Scientists has got a very good solution of Plastic and Thermocol. All were very excited to do publicity of this board in the village . Survey team again visited Kot village and shown the Board to all villagers to whom they visited earlier. All villagers were very impressed to saw , Water Proof Board From Waste Plastic and Thermocol . Survey team also shown this Board to all members of Kot Panchayat and Mahila Mandal Kot and surrounding area. All people of Kot area got solution to the problem of “Plastic Garbage”

All were saying now that “ Swacch Bharat Abhiyan can be achieved” now in kot village now.

Name & Address of Guide Teacher: ANIL KUMAR LECT. IN BIOLOGY GOVR SEN.SEC. SCHOOL KOT – TUNGAL DISTT MANDI HP

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :TRADTIONAL KNOWLEDGE OF MEDICINAL PLANT OF OUR AREA

Sub Theme:-TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: NAVNEET THAKUR, (Group Leader), ADDARSH, KAVITA, SEEMA

Name of School: GOVT. MIDDLE SCHOOL

Address of School: DRUMAN

District: **MANDI**

State: HIMACHAL PRADESH

PIN: 175040

ABSTRACT

In this science project report , I and my team have worked under the focal theme "Science, Technology, and innivation for Clean, Green and Healthy Nation" sub theme "Traditional knowledge system" with title "Traditional Knowledge of medicinal plant of our area".In this survey report we collected the sample of leaves of medicinal plant and asked about their use from the experts.The medicinal plant which are used are amla , patherkhar , neelkanthi , bichhubuti , chhmreil , puthkanda , kafal , burans , tejpatra , sura , curry patta , arandi , katorini , khajre and tiur. We also made an questionnaire in which

ten questions are asked from every family and got the valuable traditional knowledge about medicinal plant. During our survey, we observed that our area is an underdeveloped due to hard geographical condition which are cris -crossed from many streams and connected with main station with kachcha road. Moreover wild animal ruin the seasonal crops, so people are now oriented towards the cultivation of medicinal plant. Also people use some medicinal plant as their earning source are kafal, burans , khajre,wallnut and kagj i nimbu . We also observed that people of our area are more suffered from sugar and kidney stone, so they frequently used neelkanthi and patherkhar. We came to conclusion that this epidemic is due to high intake of rice and open water resouces.So our team suggested them to use more medicinal plant, lower the use of rice and cover the water sources.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: URBAN

Title :ZERO BUDJET NATURAL FARMING ON OKRA CROP

Sub Theme:-TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: PARUL, (Group Leader), TANVI

Name of School: GOVT. GIRLS MODEL SEN SEC SCHOOL
Address of School: NADAUN
District: **HAMIRPUR**
State: HIMACHAL PRADESH
PIN: 177033

ABSTRACT

Healthy soil is the foundation upon which sustainable agriculture is built. Farming practices differ mainly based on soil inputs and crop protection measures. In conventional chemical farming practice, indiscriminate use of chemical fertilizers and pesticides destroy the beneficial soil micro flora change the soil nature and also contribute to the high crop production cost. Heavy metals from the polluted soil may enter the food chain in significant amounts and show adverse health effects. The essence of natural farming is to minimize the external inputs to the farm land, and nurture the soil fertility. It was shown that enrichment of soil occurs through propagation of beneficial soil microbes. It

encourages the natural symbiosis of soil micro flora and crop plants. Mulching can maximizes the moisture content in the soil, forms the cover for the earthworms and minimizes the weed propagation. This project reviews the concepts of natural farming in the context of its eco-friendly nature and sustainability.

Recently our Governor Accharya Devbratt introduced ZNBF method in the state. The agricultural department is under training regarding this. We took this project as our challenge. We prepared all the solutions and applied to our experimental field on Okra plant. We got positive results in the form of pest less crop, no pesticide residues, fertile soil without any chemical fertilizer and good crop yield. We disscuss our results with KVK scientists and they also appreciated our work. We made farmers of our survey area aware about these results and they told us that they will also try the same in their field. By this method we can save our environment from the effect of pesticides and save life of both animals and humans from these harmful chemicals. By this we can make our India clean, green and healthy.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: URBAN

Title :SCIENCE TECHNOLOGY AND INNOVATION FOR A CLEAN GREEN AND HEALTHY NATION

Sub Theme:-HEALTH, HYGIENE AND SANITATION

Team Members: VAISHNAVI THAKUR, (Group Leader), ROHIT AMAN

Name of School: GHS MANJHELI

Address of School: KANGOO, NADAUN

District: **HAMIRPUR**

State: HIMACHAL PRADESH

PIN: 177040

ABSTRACT

Health is wealth. Health is the ability to adapt and manage physical, mental and social challenges throughout life. To maintain out health we have to take proper care of personal hygiene & sanitation. In 21st centaury we fully aware about the latest technologies. We have prop3er best sanitation system. Availability of latest water purifier best medical facilities but still we are facing many health problems. People are unaware about the diseases that are caused due to improper hand wash technique fashion of long nail. A recent study conducted by the Infectious disease society of America revealed that

nail that are longer than three millimeters beyond the tip of the finger carry harmful bacteria and yeast under them. Our hands come in contact with hundreds of objects every day and we use them for activities like cooking and eating. Long nails have the potential to cause a number of health problems since they are a perfect place for germs and dist to stay. Health experts agree that nails should be trimmed short and keep clean.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: URBAN

Title :**ANIMAN HUSBANDRY AND HYGIENE**

Sub Theme:-TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: KHUSHI, (Group Leader), ANAMIKA, AKSHAY, SEJAL, SANEER

Name of School: RAVINDRA NATH TAGORE PUBLIC SEN. SCHOOL

Address of School: JAWALAMUKHI

District: **KANGRA**

State: HIMACHAL PRADESH

PIN: 176031

ABSTRACT

Attitude to animals are linked to beliefs about their ability to experience pain and suffering , their cognition and their sentience. Education and awareness raising play a pivotal role in increasing society's consideration of non human animal welfare. Our survey aims to explore the attitude towards animal health ,prevailing animal husbandry and hygiene practices among the small scale livestock farmers of nearby area of are school. Small scale farmers were interviewed according to our questionaire. The data was characterized according to the basic information that we obtained from them. Most of the farmers are poor and they have a low in feed their animals with kitchen for market left

over. only of few farmer have a good breed of animals. They also provide them a variety of nutrients for good yield. The overall hygiene practice among the small scale farmers are not that much aware or satisfactory. Women in livestock farming have a better hygiene practices than male farmers. There is a very little veterinarian access in most of the farms. Arrangement of root level training and awareness program for the small scale farmers is essential. Proper investigation and understanding s the basic need to find out the actual scenario of farming sector. Different training and workshop must be operated to mitigate the knowledge toaction gap and raise farmer awareness for the small scale farmers. Ensuring veterinarian access at least an easy contact process to the root level farms would be the major step to the establishment of healthy animal farming policy.

Name & Address of Guide Teacher:SANTOSH KUMARI, VPR GREEN, BAROH, KANGRA Phone: 8627004530, PIN: 176029

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :**AGRO ECOSYSTEM ANALYSIS; SUSTAINABLE LAND USE SYSTEM FOR FOOD AND WOOD**

Sub Theme:-ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: STUTI BHATNAGAR, (Group Leader), DEVANSHU SHARMA

Name of School: GREEN FIELD SR. SEC. SCHOOL,

Address of School: NAGROTA BAGWAN

District: **KANGRA**

State: HIMACHAL PRADESH

PIN: 176047

ABSTRACT

The main-objective of the survey is to aware the people regarding the techniques used in agriculture and the knowledge regarding importance of new techniques and sustainable agriculture and also to motivate people to test their soil and to prosper with sustainable development . We have conducted two experiments to aware people regarding the basic need and to enhance productivity. The first experiment deals with the soil analysis test of the area of Hatwas which tells us the exact crops which can be grown to enhance maximum productivity. The second experiment deals with the latest iechnique of AESA in which we concluded that if we prefer this tecimique then this would help them to

increase their production and its cost effect tive. We surveyed the area Hatwas in which we firstly went to the agriculture university and gathered the information regarding AESA ,Vertical Fanning , Nano-Agriculture. These all techniques are helpful to farmers and after getting knowledge we went to local people to aware people regarding the new techniques and also know about their awareness regarding control of crop yield reduction. From this survey we observed that the people had no knowledge and awareness regarding soil test and modern techniques. So, from all this we can say that there can't be any progress in agriculture until and unless the people have awareness among them. We came to know that people were very less aware. From this survey we concluded that people are moving from ecological based approach to market based approach. There is a strong need to revive the traditional methods.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :DIVERSITY OF MEDICINAL LANTS IN OUR LOCALITY

Sub Theme:-SOCIETY, CULTURE AND LIVEIHOODS

Team Members: ANSHUL, (Group Leader), KAMAL, MEHAK, MANISHA

Name of School: GSSS GRANI,
Address of School: KUFRI
District: **SHIMLA**
State: HIMACHAL PRADESH
PIN: 171212

ABSTRACT

Himachal Pradesh is located in the lap of Himalayas has varied conditions due to variations in altitude and topography, which make this state a home for wide varieties of medicinal plants. The people of far flung rural areas still depends to a large extent upon plants and household remedies for caring different ailments. The Shimla hills have a rich repository of medicinal and other useful plants. The Folk Knowledge of Ethno medicines and its significance has been identified by the traditional communities through a process of experiences over Hundreds of years. The important Biodiversity of medicinal plants of our local hills was surveyed 25 June 2018 to 6th October 2018 at varies Forest places of our hills near Gadakufri (Tikker Hills) and neighborwood.in this study and Ethno

medicinal survey of plant diversity was carried out at Tikker hills near Gadakufri Tehsil Theog District Shimla in Himachal Pradesh. The study was mainly focused on the medicinal plants used for treatment of various ailments by the nearby inhabitants. The information was collected by questionnaires and consulting local old people. The study was entirely focused on revealing the medicinal potential possessed by the plants growing, Milled in this area and there sustainability for the betterment of mankind. Some of the important plants surveyed as Bacopa momineri, Eclipta alba,Figus palmeta,Origanum vulgare,Rosa brunonie,Rubia Cordifolia etc. Duringsurvey we had found that whole part of ten plants were used for medicine beside these there were 42% plants whose leaves were used as medicines .During our survey we found that people of our area are not so aware about uses of these medicinal plants. But some old people have much more knowledge about these traditional medicinal plants and there uses in ailments in their day to day life. The people of the area are not much aware about the side effects of medicines made by different synthetic ways and chemicals. In our survey we had suggested the people to give more importance to their traditional medicines in their minor ailments as they are much better than chemical medicines.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: URBAN

Title :CHANGES OF COMMUNITY LIFE STYLE AND LIVEIHOOD IN VILLAGE AND CITY

Sub Theme:-SOCIETY, CULTURE AND LIVEIHOODS

Team Members: DEVGYA KHACHI, (Group Leader), PAYAL SHARMA, GEETA SHARMA

Name of School: PREM PUBLIC SCHOOL

Address of School: THEOG

District: **SHIMLA**

State: HIMACHAL PRADESH

PIN: 171201

ABSTRACT

In the last few decades several man made unsustainable activities and 5interventions have accelerated the problem related to shelter, environment, food, health, society, culture and working pattern. These problem are area also associated linked and guided mainly withlifestyles and livelihoods, appropriate lifesytyles and livelihood c: help us to move towards a more healthy, livable and sustainab environment at the house hold, community and society level. Hem the sub theme of livelihood assumes significances. The idea of sub theme is to promote tl concept of conscious and cautious involvement of science

technolol and innovation to evolve sustainable lifestyle and livelihood. The si theme look at several concepts related to the effect of ti occupational, cultural and environmental change and their religio with lifestyles and livelihood's .This sub theme shall in addition to i focus on the negative impacts also look at the positive impact 4 lifestyle and livelihood and identify these as opportunities for sustainable future.

A life style typically reflects and individu: attitudes, way of life values, or world view .There for, a lifestyle it means of forging a sense of self and to create cultural symbols ti resonate with personal identity. Not all aspects of lifestyles a voluntary.

Surroundings social and technical systems c constrain the life style choices available to the individual and 1 symbol he/she is able to project to others and the self..

Name & Address of Guide Teacher:GEETA SHARMA, VILLAGE PALLY PO TIYALI, THEOG, SHIMLA Phone: 9857431065, PIN: 171209

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: URBAN

Title :A CASE STUDY ON INNOVATIVE WORK TO ENHANCE EFFICIENCY OF TRADITIONAL SIDDU MAKER

Sub Theme:-TRADITIONAL KNOWLEDGE SYSTEM

Team Members: VIJAY, (Group Leader), POSHI

Name of School: GOVT. MODEL SEN SEC SCHOOL
Address of School: BAJAURA
District: **KULLU**
State: HIMACHAL PRADESH
PIN: 175125

ABSTRACT

Siddu is a local dish found in many places. We found that it is eaten as traditional food in the surrounding area of Bajaura. It is prepared in a container called as Siddu Maker. It is so popular that it is sold in market by many vendors. Siddu Maker is made up of many chambers, work on principle of cooking of food with the help of steam. So , we can call Siddu as a steam food. Siddu is made up of Maida, wheat flour, stuffed with desirable food articles. In local fairs and even in International fairs like Dusshera, it is the favourite dish of people.

We observed that Siddu maker has a lower chamber called as steam generating chamber, from where steam will flow upwards towards upper chambers through small holes. It is observed that vendor has to change the upper chambers with lower one again and again because the lower chamber has more heat but during the process, there is a lot of loss of steam as well as loss of temperature also. It leads to reduction in the efficiency of siddu maker. So , we decided to take up this issue and work up on it.

We decide to work in Bajaura Area and first of all, took survey of those vendors who were selling siddus in the vicinity. We calculate the time taken to cook a definite amount of Siddus and even calculate the consumption of heat loss.

After all observations and calculations, we made certain innovations in traditional siddu maker. In traditional siddu maker, steam is ascending from lower to upper chamber but in our innovations, we made a arrangements where steam is equally distributed in all the chambers and even arrangements are made to insulate the chambers so that heat loss can be minimized.

At last, we made comparative analysis between traditional and innovative siddu maker. The results found were exciting as with little innovations , the efficiency of siddu maker is enhanced.

In future, we have decided to make more comparative analysis and work upon the popularity of this type of innovative siddu maker.

Name & Address of Guide Teacher:MR. PANKAJ VERMA, TGT MEDICAL Phone: 9459778235, PIN: 175125

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :PROBLEM OF MUDDY WATER SUPPLY IN KOT VILLAGE DURING RAINY SEASON AND SOLUTION

Sub Theme:-HEALTH, HYGIENE AND SANITATION

Team Members: RIYA, (Group Leader), KARAN

Name of School: GSSS, KOT

Address of School: TUNGAL

District: **MANDI**

State: HIMACHAL PRADESH

PIN: 175003

ABSTRACT

80 % of Indian people lives inTwo iakh sixty eight thousand villages Despite 45 years of independence safe drinking water is still a distant dream, villages across the country are affected by poor water quality The most common contaminants present in the water are suspended matter, , mud silt, algae, and pathogens Kot village is facing the same problem in rainy season, due to over flooding of water supply source . born diseases diseases were common in such days. This problem was solved by the students of GSSS Kot-Tungai by doing survey of the village Questionnaire was prepared with the help of guide teacher,

collected the data from bimdred people of the village All villagers complaints for muddy water supply Results were summarized and drawn the 'Conclusion". For the solution i safe drinking water teacher suggested manufacturing "LOW COST BIG SAND FILTER" worth of hundred rupees only. Survey team manufactured sma,11 filter of two liter tirrica bottle , 'Unica bottle was cut at 34 from top funnel shape part) and kept aside Sand and gravel of different grade were taken, washed , about twenty time , till clear water comes from it . Gravels were kep;:: in the base of bottle along with a small purported plastic box One end narrow flexible pipe was inserted to the purported box and the other end was taken from 'bottle at the top by putting small whole near the cut end. T4ow took upper part of the bottle I Funnel Shaped) kept small hole on the cap ,so that water may come from it . kept this cut end inverted on the sand bottle , so that some water may he pored in funnel. Keep pouring muddy water Ai.il water comes out form the outlet pipe. Collected the water sample and saw the clarity of water. It was Crystal Clear. Water sample was tested for Other pollutants also. Through tests it seems fit for drinking. This is san fitter was taken to the villagers where survey team visited earlier. Villagers were very impressed on the filter and of cheep cost and easy manufacturing, All villagers promised to install it in the next season,, Bit) sand filter was shown at Kot for its publicity This really a very good device.

Name & Address of Guide Teacher: ANIL KUMAR, GSSS, KOT, MANDI

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :HEALTH AND HYGIENCE

Sub Theme:-HEALTH, HYGIENE AND SANITATION

Team Members: ARYAN THAKUR, (Group Leader), DIYA GUPTA

Name of School: LA MONTERRORI SCHOOL
Address of School: KELHELI
District: **KULLU**
State: HIMACHAL PRADESH
PIN: 175125

ABSTRACT

The aim of this survey was to develop an test measures of health and hygiene knowledge, attitudes and behavior. A total of 4-5 villages were investigated for- the study which span across various areas of the villages. A questionnaire was administered to 100 people 25 each of Kelheli, Shamshi, Bhutti and Nagwain. The criteria for selecting these areas were based on the problems in their society out of the 4 - villages surveyed the major problems which arose where those of separate dustbins, poor drainage and sewage system and lack of dispensaries. The ratio of dustbins in the localities were 47:53 i.e. urban:rural . This

survey reveals-that there is lack of facilities in the rural areas and the people were unaware of the facts and knowledge.

Therefore to maximize the facilities it is necessary to integrated programmes with full policy implementation backup. It was concluded that these scales were useful measures of heath and hygiene knowledge, attitudes and behavior. It provided base line information for planning health promotion programmes and could be used to evaluate the use of small scale remedies for treatment of various problems.

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26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: URBAN

Title :HANDLING OF BIODEDRADABLE WASTE

Sub Theme:-WASTE OF WEALTH

Team Members: TANISHA SHARMA, (Group Leader), MAULI

Name of School: KIDS CAMP PUBLIC SR. SEC. SCHOOL,
Address of School: BHATIYAT
District: **CHAMBA**
State: HIMACHAL PRADESH
PIN: 176302

ABSTRACT

The understanding of the concept of waste of wealth which is the conversion of waster and Science Tech. and innovation plays very important role for making our nation clean green and healthy. For this we can adopt many strategies in field of waste to wealth waste is a man – mage substance in a given tome and place which in actual state is not useful. Recycling is best option to meet with the problem caused by more waste generation, Recycling rubbish material is also away to conserve natural resources main objective of doing this survey is to make people aware about waste management. After selectin the site for our survey we discussed methodology for our survey report and made

questionnaire and collected info, during analysis the collected data from our secondary and primary resources our team found that waste management or recycling of waste material is only way to reduce the risk of getting affected by more waste generation. Amount of waste generation is almost 100 % over the past 100 years. Waste generation in urban areas of India is 0.7 kg per person per day. Management of waste will play a major role in maintaining city clean, keeping people healthy, creating job for poor and so on many natural resources like trees, gas etc are running out. So to save natural resources for our future generation recycling and waste management is very important. Accordingly, to the research about 62 million tones of waste is generated out of which only 28% is recycled and 72% is left on the roads and landfill areas of years to years which is very bad. So, in order to reduce to waste generation waste management should be done properly so that our future generation will also get clean green and healthy nation in stead of getting a deteriorated environment.

Name & Address of Guide Teacher: SUMIT SINGH THAKUR, VILL PARI, BHATIYAT, CHAMBA, 176313 PHONE NO. 9459062503

26th HP Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :**A CASE STUDY ON THE USE OF LOCAL WEEDS FOR SOME PRODUCTIVE PURPOSE**
Sub Theme:- WASTE TO WEALTH

Team Members: PARTHIK PATHANIA (Group Leader), ABHIJEET KUMAR SINGH

Name of School: CAMBRIDGE INTERNATIONAL SCHOOL

Address of School: MOHAL

District: **KULLU**

State: HIMACHAL PRADESH

PIN: 175126

ABSTRACT

We have seen that the weed plants growing around us like – hemp, nettle, flex etc. are unusual. We have seen these plants growing around us but we beaver thought about their benefits or valuable properties. One day a grass cutter came and cut the unwanted plants or weeds plants and clean the surrounding area then I though that every plants in the nature has some valuable properties so then I thought to search about these plants and we got many valuable properties of these plants like – promotes hair growth, benefit for skin disorders, protects our health etc. the objective for our project to identify the types of weed plants which can add productive value to the human lift.

To make some useful products out of it. We decided to continue our project in this way. Identifying's the weed plant in our surroundings. Researching about the valuable

properties of weed plant. Innovating something productive and experimenting on it. Our aim was to covert waste weed plant to a beneficial hair cream. The material required four our experiment was paste of hemp and nettle plants, essential oils.

Name & Address of Guide Teacher:MRS. RAINA VERMA, CAMBRIDGE INTERNATIONAL SCHOOL, MOHAL, KULLU Phone:8219574161, PIN:175126.

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :PRESERVATION OF GRAINS AND FOOD ITEMS THROUGH NATURAL PROTECTANTS

Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: DIKSHA BHARDWAJ, (Group Leader), YUVRAJ SINGLA

Name of School: SHIVALIK VALLEY SCHOOL
Address of School: KIRPALPUR, NALAGARH
District: **SOLAN**
State: HIMACHAL PRADESH
PIN: -

ABSTRACT

A society is defined not only by what it creat, but by what it refused to destroy. India is a country which is enriched with natural resources. We have a valuable treasure of nature in our surroundings, inspite of using and conserving it wisely we are moving towards the modernization blindly. Traditional knowledge system is as old as man started interacting with nature. It is gathered by a community through years of experience. So,to understand our traditional knowledge our team of five member Gitika, Jasmine, Yuvraj, Aastha, Yuvraj, Diksha under the able guidance of our guide teacher Mrs. Sapna Pathania and

proper supervision of our worthy Principal Mrs. Kavita Bansal choose the project" Preservation of grains and other food items through natural protectants under the focal theme of this year science technology and innovation for a "clean green and healthy nation" and sub theme "traditional knowledge system" The main aim of choosing this project is that 70% people of Nalagarh belongs to rural area.and their main occupation is agriculture to store their grains during posts harvesting practices they use chemical pesticides and insecticides to avoid pests without any exact knowledge of how much quantity of grains required how much pesticides.

They forget about the ecofriendly and user-friendly natural protectant. So, through this project we tried to make them aware about the benefits of natural protectants overall we want to minimize the risk for community rather than maximizing the profits. To fulfill the objectives our team decided to proceed through experimental as well as survey based study methods.

Our survey work is decided into three sections.

1. A visit to created Govt department.
2. A visit to shop selling pesticides.
3. Survey of farmers of two rural areas of nalagarh.

In first part of our survey we visited to agriculture department and forest deptt. In forest deptt we met with ACF Mr. Manish Tiwari through a questionnaire and took first hand knowledge about the plant species which can be used as natural protectants In agriculture department we met with Mrs. Y.K Gautam he told us that the use of chemical pesticides and insecticides are increasing day by day.we asked the officer weather the people are aware about the adverse effect of chemical pesticides. He told us that there is lack of awareness among the people of nalagarh area. The department suggested rural people to avoid the excessive use of chemical pesticides and to adopt biopesticides.

In second part of our survey we visited to the pesticides shops here we met with shopkeepers they told us to the health problems faced by them during the selling of pesticides.they also told that most of the villagers buy pesticides like Malathion ,Bromophos etc.

In third section of our survey we prepare a questionnaire our team collected 50 samples in the form of verbal inputs 25 from chuhuwal and 25 from Rajpura. After conducting survey in both the localities we got the following results:- In both the localities more then 60% of people are using chemical pesticides in pre as well as to post harvesting practices. when we asked them that do you know the harmful effects of chemical pesticides on health and environment then more than 50% people say yes In Chuhuwal 36% and in Rajpura 40 % of people are much aware about biopesticides. By deep study and applying analysis method we concluded that not much people are aware about natural protectants.

They do not want to adopt biopesticides because they are time consuming, needs more effects and not much effective as chemical pesticides. overall we can say that in this modern era industrialization and urbanization the people left behind their traditional wealth. Every person make his/her life so busy that they need a quick relief from every problem either it can be harmful for us or our nature So to make these people aware we suggested some solution to the problem.

we prepared some natural protactants like Neem powder,Neem tablets,Euclayptus powder, Eucalyptus tablets.clove powder and distributed among the people of surveyed area and told them to use these product in their household for storing grains, pulses,cereals etc. The result was satisfactory all the people were ready to use biopesticides and give up chemical pesticides. We also prepare a herbal booklet and a scientific instrument showing natural protectants and their uses.we also conducted and experiment. We made a comparative study of grains stored by natural protactants and chemical pesticides. In the case of chemical pesticides the grains degraded and produces bad smell but the grains stored in the care of natural protactant is fresh, healthy and safe.

Here we are presenting some traditional food items which are preserved by natural protectants like neem, tulsi etc.

After clearing the Distt level we prepare a follow up for state level we met with A.C.F Mr. Manish Tiwari again and requested him to provide us some plants which can be used as natural protectants.Our team distributed thse plants among the people of surveyed area and told them “To take care plants so that plants takes your care” We can say that we born in the nation where traditional know ledge came from depth of Vedas,upnishads and holy scriptureswhich distinguish india from the other nation of the world.

It is the need of hour that every individual should adopt and conserve their traditional wealth. Because in the tree of life traditional knowledge is roots. At last I conclude my project report with the words. All that man needs for health and healing is provided by nature the challenge for modern science is to find it.

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Name & Address of Guide Teacher: SHIVALIK VALLEY SCHOOL, NALAGARH

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :PYROLYSIS OF BIOMASS FOR MAKING SMOKELESS FUEL BLOCKS

Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: SIMRAN SINGH, (Group Leader), MUSKAN CHAUDHARY

Name of School: TRINITY PUBLIC SCHOOL
Address of School: NEAR MELA GROUND BANJAR
District: **KULLU**
State: HIMACHAL PRADESH
PIN: 175123

ABSTRACT

Seeing people's dependence upon fuel wood to meet their basic need of energy which is consequently threatening our ecosystem and its services, we surveyed hundred houses of Banjar's 10 villages through PRA to understand the consumption of fuel wood . In our survey we found Banjar's 95% people are using fuel wood. The objectives of our study are to stop deforestation to save the environment for our future generation. Keeping our aim in mind to provide cheap and best alternative for fuel wood We decided to put in to use the broken branches and leaves lying on the forest floor . For our survey study, we

developed questionnaires, selected survey sites, collected data, compiled it. analysed and interpreted regarding the requirement of fuel wood by the people , we did experiment using a steel drum with tapered lid and connected the lid with U-shaped pipe, we dipped the other end of the pipe into the NaOH solution. Then we put 3 kg dry collected leaves of Deodar, Walnut and Pine trees and dry branches and then we heated the material for 45 minutes using heater. . Collected charcoal was then mixed with binder and a small quantity of water to make its pieces, we placed these pieces in the sunlight for 2 days to get them dry .The NaOH solution was also used as a fertilizer . Carrying those pyrolysed smokeless charcoal blocks we again visited the villages and made them to use these charcoal blocks instead of collected wood which they get by cutting down the trees. 10 families used this prepared paralyzed smokeless fuel which they found was more efficient and environment friendly. Our future plan is to engage Local Govt. to aware and pursue people to make and use smokeless pyrolysed blocks to save forest ecosystem.

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Name & Address of Guide Teacher: MS KIRAN DANG, TRINITY PUBLIC SCHOOL BANJAR , VPO BANJAR , DISTT - KULLU (HIMACHAL PRADESH) 1751232

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :SACCHAROMYCESS CEREVISIAE BRIDLES THE METHANE PRODUCTION

Sub Theme:- ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: SRIJAN PALIYAL, (Group Leader), MOKSHIKA, TANISHA, RAMNEET KAUR, KASHISH

Name of School: GURU NANAK MISSION PUBLIC SCHOOL

Address of School: PAONTA SAHIB

District: **SIRMOUR**

State: HIMACHAL PRADESH

PIN: 173025

ABSTRACT

ongenial environment is utmost important for the sustainability of life on earth. Global warming is the major threat to the environment and ultimately to the life. Green house gasses (CO2, CH4, N20, CFC) result into global warming. As compared to CO2, methane is 34 times potent to absorb the heat anci.to raise the atmospheric temperature. Wetlands (natural) and agriculture (anthropogenic) are the two major factors contributing methane to the atmosphere. In agriculture, rice cultivation and ruminant animals (cattle) through carbohydrate entero-fermentation are responsible for CH4 emission.

Supplementing concentrated feed and its fortification with 0.5% yeast (Saccharomyces cerevisiae) will reduce the methane production by 2-12 %. Capacity building of the cattle keepers is required to use the technology and hence curbing the havoc of global warming. In this direction we, theleth standard students of GNMPS, Paonta Sahib, District Sirmour under the able guidance of our Science Teacher, Mrs Neha Mahajan developed a 15 point questionnaire to survey a sample of 100 farmers of surrounding area to assess their knowledge and understanding of the issue. After careful analysis of the data obtained, we found that 97% of the farmers surveyed do not know about the Methane gas. Further, 31% of the cattle keepers use the home made animal feed and the rest purchase it from the market. It is evident from our results that the technology which is very economic and readily available must be transferred to the quarter concerned through trainings etc. to make the environment safe and congenial to live.

Name & Address of Guide Teacher: MRS. NEHA MAHAJAN, BADRIPUR, PAONTA SAHIB, SIRMOUR (HIMACHAL PRADESH) 173025, 9882812329

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :BLEED WITHOUT PEAR BLEED WITHOUT TAX

Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: ARSHDEEP KAUR, (Group Leader), TANISHA PUNIR, RAMNEEK, MANPREET KAUR, GEETIKA SHARMA

Name of School: GURU NANAK MISSION PUBLIC SCHOOL

Address of School: PAONTA SAHIB

District: **SIRMOUR**

State: HIMACHAL PRADESH

PIN: 173025

ABSTRACT

INTRODUCTION:-Menstruation is a normal physiological process indicating beginning of reproductive life but sometimes it is considered as unclean phenomenon in the Indian Society. Insufficient in correct information regarding menstruation is after a cause of unnecessary restitutions in the daily normal activities of the menstruating girls creating various physiological issues. Besides the lock of knowledge and awareness also need to some poor personal hygienic practices during menstruation leading to many reproductive tract injections.

AIMS:-To empower a girl and women to manage her menstruation safely, hygienically to prevent diseases like fungal injection, irritation, etc. To break the silence, raise awareness and change negative social norms about menstruation. To ensure safe disposal of sanitary napkins to prevent skin injection, drain blockage, etc. To ensure supply of sanitary napkins in schools as well as to the needy women in regularity

METHOD:-

A cross sectional study was done which was containing 100 respondents from Village Behrewala Gondpur and small area of Taruwala in Paonta Sahib city.

CONCLUSION:-

Supporting adolescence girls on managing menstrual Hygiene and creating safe and hygiene environment in schools which would facilitate good, academic environment for school girls may perhaps be the only way to put an end to the never ending cycle of issues like dropout, low attendance, low age of marriage and low status of women.

REFRENCE:-

Menstrual Hygiene and Management an issue for adolescent school girls. Menstrual Hygiene practices, Acess and Risk factors. Guide Teacher Library News paper- Punjab Kesri.

Name & Address of Guide Teacher: MRS. NEHA MAHAJAN, BADRIPUR, PAONTA SAHIB, SIRMOUR (HIMACHAL PRADESH) 173025, 9882812329

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :SCIENCE, TECHNOLOGY AND INNOVATION FOR A CLEAN, GREEN AND HEALTY NATION

Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: POOJA KAUR (Group Leader), RISHI PAL, DIKSHA, MUSKAN, KAJAL, NIAKA

Name of School: GOVT. MODEL GIRLS. SEN. SEC. SCHOOL

Address of School: PAONTA SAHIB

District: **SIRMOUR**

State: HIMACHAL PRADESH

PIN: 173025

ABSTRACT

Dengue fever is the most rapidly spreading mosquito borne viral disease.A mosquito borne disease is considered to be a significant threat for the rnankind.The best way to prevent dengue epidemic is to provide knowledge about dengue and its preventive measures to people.Despite the efforts to prevent dengue virus is still on rise.

The possible preventive measure that can he adopted to avoid dengue infection is taking precautions to avoid mosquito bites, using mosquito repellents, protective clothes, and

insecticides .Himachal Pradesh is considered safe place for the tourists but still it is facing epidemic of dengue as about 611 patients have been registered.

Bilaspur top among highly infested area as 314 patients traced with dengue infection , 277 in Parwanoo area of Solan District...No life has been claimed due to timely action by district and health authorities in the state.

A sample of 10 question was structured by a group of 5 girls to collect the meaningful information in ward no.9 of Paonta Sahib which is highly slumped during monsoon, drains get blocked, garbage scattered along the river bed due to monkey menace which become good breeding area of mosquitoes.

So our main objective is to focus on cleanliness, eradicating mosquito breeding sites so as to control and prevent dengue. My second objective is to aware people to protect their children by adopting some dengue preventive methods through awareness programme, panphlets and sharing important knowledge with the people and using herbs for the treatment which are more safer than allopathy as it has no specicific treatment yet.

During the survey, we visited patients suffering from dengue fever in Civil Hospital Paonta Sahib. We gathered important information from Dr. Amitabh Jain (M.D.), Dr. Kuldeep Sharma in Ayurvedic Hospital Paonta Sahib, Patanjali Yog PeethPaonta Sahib. They told us about the medicines given to them.

According to data collected after pre survey, we found that people were not aware of mosquito of dengue, its symptoms, its effects on our body, mosquito breeding places. After the awareness programme conducted by us in the households and in the school and in the community of ward no.9.we got better results than before.

People were not aware that it has no specific treatment and vaccine. So we have to focus on elimination of breeding sites completely and we should visit doctor immediately after catching infection of dengue. So we suggested solutions like wearing full sleeved protective clothes, using coils, and mats maintaining good hygiene and adopting some medicines and herbs as prescribed by Ayurved Doctor like Giloy sat, Tulsi, Neem, papaya leaves, Aloevera, citrus juices. As our old indigenous practice still have its

solution. It increses platelets count caused by dengue virus which is otherwise not possible in allopathic medicines.

This is not the end of my survey rather we would continue it in future also because my efforts to make Paonta, District Sirmour Dengue free by adopting measures and we would continue our awareness programme at large scale with the help of authorities till the desired results are achieved.

Firstly we would like to thank to our school principal Mr. Ravinder Kumar who gave me the opportunity to present my survey, science and technology department (Himcoste) our guide teacher.

Name & Address of Guide Teacher: MRS. OMLATA MMAM, GOVT. MODEL GIRLS SEN. SEC. SCHOOL PAONTA SAHIB 173025

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: URBAN

Title :LEACHATE; IT'S EFFECT ON ECOSYSTEM AND ECO SYSTEM SERVICES

Sub Theme:- ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: ABHAY RAINA (Group Leader), AKSHIT SHARMA, ANIRUDH DEOL, ANAYA THAKUR, AYUSH

Name of School: NOORPUR PUBLIC SCHOOL

Address of School: WARD NO 2, NURPUR

District: **KANGRA**

State: HIMACHAL PRADESH

PIN: 176202

ABSTRACT

Background- Landfill leachate is the liquid that drains or leaches from a landfill. It usually contains both dissolved and suspended particles. Leaching occurs when water percolates from any permeable material. After forming in a landfill it can move into groundwater, soil and streams poisoning ecosystem and harming wildlife as it contains many harmful and toxic waste.

Methods- We investigated the nearest Landfill site, collected groundwater samples from it's near and conducted an experiment to record the difference in growth of plants for

which we took 2 same plants, watered one with the groundwater sample and the other with tap water. We also investigated the views of people and their role in that ecosystem.

Results- The questionnaire was provided to 124 people for this investigation. It came out that 0 people know about landfill leachate. People using groundwater without any purification used to suffer more from water borne diseases.

Even the plant watered with the groundwater showed improper growth compared to the plant watered with tap water.

Conclusion- The survey showed that the groundwater near the landfill has become polluted and toxic as it affected the growth of the plant and causes water borne diseases.

Name & Address of Guide Teacher: MRS. GEETA SHARMA, WARD NO 6, MANDI ATTAR SINGH, NURPUR, KANGRA 176202, 9418914923

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :**WASTE MANAGEMENT ECOSYSTEM**

Sub Theme:- ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: VIJAYSAUMINI JAISWAL (Group Leader), DURGEISH DAMINI JAISWAL

Name of School: LA MONTESSOR SCHOOL

Address of School: KELHELI

District: **KULLU**

State: HIMACHAL PRADESH

PIN: 175125

ABSTRACT

Kullu the land of gods. A place where people are rejuvenated and replenished. But open dumping, scattered waste and the river pollution is all making the situation adverse. Our objective to carry out this survey was to create awareness regarding the segregation of waste, to come up with an economical solution on maintaining cleanliness and managing the household waste so that each and every household can become a self sufficient and self reliant unit.

Initially we listed down the internal and external factors that we found that our need is the impetus to change our lifestyle. For that we first analyzed the situation through a survey and concluded that in rural areas people want a small scale solution and implementation owing to their financial circumstances.

The water supply is irregular and thus people have water storage more than their per day requirements. Due to lack of awareness and initiative people in the rural areas directly dump their waste in the nearest rivulet. After the data was analyzed we came up with different solutions and checked out their feasibility in the particular circumstances.

Ghandhiji Said, "All humans are scavengers of their own waste." Keeping that in mind we came up with a solution for each and every household to make a self sustainable system which would create all the sewage into potable water and a drum composter which would convert all the household waste into a cheap and ready to use manure.

Name & Address of Guide Teacher: MRS. VEENU SHARMA; RAGHUNATHPUR, KULLU 175101, 9736670093

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :RELATIONA OF ETHNOBOTANICAL STUDY OF CUSCUTA PLANT WITH ITS PHYTOCHEMICAL PROPERTIES

Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: SNEHA (Group Leader), PALAVI

Name of School: G.S.S.S. KATHINDHI

Address of School: SADAR

District: **MANDI**

State: HIMACHAL PRADESH

PIN: 175005

ABSTRACT

A study has been made to evaluate the relation of ethnobotanica/ study of Cuscuta plant with its phytochemical properties. at Panchayat katindhi Mandi. A survey has been made in different villages as katindhi, Badidhar,Sangali,Kharidhar,Sadhla and Nashyahan of Panchayat katindhi in Distt Mandi with questionaires.. The data of survuy has been analysis and found that people of Panchayat katindhi have ethnobotanica/ knowledge of various plants such as tulsi ,tinospora, alovera, basuti, amla, brahmi, herd, bahed, bichhubuti,adarak,and amarbel. The data of survey shown that people of panchayat Katindhi use Amarbel plant among other plants in least percentage i.e. 3f %. for traditional ethnobotanica/ knowledge. For present investigation Cuscuta (amarbel) plant is used for analysis phytochemical properties. Stem of cuscuta plant is received from panchayat katindhi and dry for 15 days in sunlightand then crushed in to fine powder with the help of pestle mortar. Now 50 gm fine powder of amarbel is mixed with 150 ml

of ethanol and kept for 72 hrs. and then filrer with filter paper. Similarly 50 gm fine powder of amarbel is mixed with 150 ml of distal water and kept for 72 hrs.and then filrer with filter paper. Now both filtrate are separately heated in water bath till remain one fourth in quantity and cool to room temperture .Now filtrate is ready for phytochemical analysis. Five phytochemicaltest were conducted i.e. test for tannins, test for saponins , test for fia vinoids, test for terpenoids, test for steroids .Ethenol extract and aqueous extract of amarbel for test of tannin was found negative.. The tannins are poly phenolic compound that may be recognised as cancer causing. But amarbeL is negative for tannin and may no possible sign of cancer Aqueous extract of amarbel for test of Saponin was recognised positive .Saponin- are glycosidic compounds that are soluble in water . The saponins has evaluated antidiabitic properties in earlier reseach. The traditional knowledge of people shown as survey that amarbel use for diebitic treatment. Ethenol extract and aqueous extract of amarbel for test of flavonoids was found positive. The flavonoids are natural phenolic compounds that show antioxidandants and heptoprotective characterstics. The traditional knowledge of people shown as survey that amarbel use for jaundice ,headache treatment. Ethenol extract and aqueous extract of amarbel for test of terpenoids was found positive. The terpenoids are hydrocarban with characterstic smell and has antibacterial properties.. The traditional knowledge of people shown as survey that amarbel use for curing stomach pain, urine burnig sensation ,headache . Ethenol extract and aqueous extract of amarbel for test of steroids was found positive. The steroids are organic compound that reduce the biotic stress and investigated antiflammatory properties.. The traditional knowledge of people shown as survey that amarbel use for reducing inflammation in got . The phytochemical compounds may work individually or /and in group to reduce the body stress. The traditional knowledge of the people for amarbel is much closely related to the findings of phytochemical properties that were tested in our scientific project.

Name & Address of Guide Teacher: RAJESHWER GULAERIA, TGT MEDICAL, GSSS KATIDHI, MANDI 175005, 9418426036

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :BIODIESEL

Sub Theme:- ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: ISHITA (Group Leader), PREETI

Name of School: SHIVA INTERNATIONAL SCHOOL

Address of School: GHUMARWIN

District: **BILASPUR**

State: HIMACHAL PRADESH

PIN: 174021

ABSTRACT

This study evaluates that how the increasing demand of fossil fuel like petrol and diesel is leading to environmental pollution.

In this study we have mainly focused on the diesel, made from fractional distillation of crude oil that its excessive use leads to Global Warming, acid rain and other kind of Environment pollution.

This study is on the alternate to diesel that is biodiesel which is made up of organic matter.

We have also focused here on jatropha plant from which we can extract biodiesel

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Name & Address of Guide Teacher: MEENU SHARMA, BILOUR, LUHARWIN, BILASPUR 174021, 9817055566.

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :**A CASE STUDY ON INNOVATION METHOD TO COMBAT WITH SOLID WASTE IN BAJAURA AREA**

Sub Theme:- WASTE TO WEALTH

Team Members: SIMRAN (Group Leader), RESHMA

Name of School: GOVT. MODEL SEN SEC. SCHOOL

Address of School: BAJAURA

District: **KULLU**

State: HIMACHAL PRADESH

PIN: 175125

ABSTRACT

It seems that this Earth is going to be covered with the waste material everywhere. We think that most suitable reason responsible for this is the lifestyle of modern man. We have generated so many things which produce waste at the end. Solid waste can be seen in the form of wrappers, poythenes, covers used to wrap things etc. But the most concern thing is that this solid waste is not managed properly at all. That'y we found this waste lying everywhere. It is found around the roads, rivers, nullahs, fields etc. it Is not only making the scene ugly but are also deteorating the environmental components. Can there

any innovative way which will help to manage the generating solid waste ? To know about it, we have decided to carry this project.

First of all, we surveyed the different houses in Bajaura Area to know the quo status about waste generated. Then, we decided to calculate the solid waste generated in these houses. For this purpose, we took a sample polythene which is to be filled upto the brim. Then, we treated it as one sample and it is segregated into different categories and weighed properly. At the end , we found that biodegradable waste is generated is 4 times than non-biodegradable waste. Now we work upon an innovative way to curb this problem.

1. Biodegradable waste can be converted into manure. For this purpose, we suggested that every Panchayat should have sufficient biocompost pits which should be designed scientifically and should be properly maintained time to time. The prepared compost can be sold to village people so by this way it can be a source of income for Panchayats and even they can collect waste from nearby urban places.

2. The large amount of waste can be used to produce electricity just as the thermal power plant works but the burning waste will produce harmful gases which should be treated well before the smoke is released in the atmosphere.

3. A innovative Electric dustbin which will be used to produce new plastic + cement Bricks.

4. Use of plastic waste to make bricks and roads.

Name & Address of Guide Teacher: PANKAJ, TGT MEDICAL, G.S.S.S. BAJAURA, KULLU

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :E-WASTE TO WEALTH

Sub Theme:- WASTE TO WEALTH

Team Members: UPASNA SHARMA (Group Leader), KRITIKA, SMRITI, SWASTIK, KRITI

Name of School: GREEN FIELD SR. SEC. SCHOOL

Address of School: NAGROTA BAGWAN

District: **KANGRA**

State: HIMACHAL PRADESH

PIN: 176047

ABSTRACT

We the students of Green Field Sr.Sec.School , Nagrota Bagwan,District Kangra,H.P surveyed one of our locality Chahri regarding the topic E-Waste To Wealth.In India,growing population and increasing urbanization have contributed various solid wastes out of which E-Waste is the major waste,which consist of E-devices which are no longer put in use.But we think, E-waste currently viewed as a menace,can soon be resource for development.

This research work conducted mainly focus on how E-waste is managed in our locality,what are the factors that affected and mainly ensurement of the best initiative to be taken for its proper disposal leading to sustainalble growth economically.

The main objective of our survey report was to aware people about the negative impacts of E-Waste disposal on nature and mainly to find a best alternative for disposal of E-Waste in profitable way.

We also validated our report with experimentation in which our main aim of 1st experiment was to make an account of soil health degradation by E-Waste disposal in it by taking into consideration the ph value of soil samples and rate of growth of plants. In our 2nd experiment, we made an account of non recyclable E-gadgets and studied their economical value if utilized properly.These experiments made us more clear about the sustainability that proper E-Waste can bring in nature Our survey area was Chahri and after doing our survey,we concluded that there are not much facilities available for the disposal of E-Waste. Even people themselves are not aware about impact of E-waste disposal on nature, if not done properly. E-Waste is dumped near landfills or thrown in the open environment and no government facilities areavailable.

Thus, E-Waste disposal is a major problem which can only be tackled if initiative by both government as well as by the people of nation, is taken then only we will get CLEAN & GREEN NATION.

Name & Address of Guide Teacher: DEVARCHANA SHARMA, KANGRA

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :ECOLOGICAL STUDY AND MAPPING OF DHAULA KVALA SACRED GROVE AND SACRED TREES IN JANDRU AREA

Sub Theme:- ECOSYSTEM AND ECOSYSTEM SERVICES

Team Members: PRIYA (Group Leader), JYOTI

Name of School: GSSS

Address of School: JANDRU

District: **HAMIRPUR**

State: HIMACHAL PRADESH

PIN: 177028

ABSTRACT

Himachal is known as ' land of Gods ' . It has more than 500 sacred groves . Sacred groves are ecologically important areas devoted to local deity . They were established by our ancestors to save medicinal plants and endemic flora &fauna . But in last few years area and no. of sacred groves are reducing due to human activities and negligence .Our project involves the ecological study and mapping of Dhaula Kaula sacred grove and sacred trees of our area .

We selected and surveyed three villages by random sampling method and asked people about sacred groves and sacred trees . We surveyed the Dhaula Kaula sacred grove and by quadrat method studied the flora and fauna of the area . We tested the soil of the grove

for texture ,pH ,water retention and water absorption rate and documented the challenges affecting grove .We also studied the sacred trees of the area and mapped them .

We found the sacred grove very rich in biodiversity with 16 plant and 25 animal species in selected quadrats (higher than in control) .Soil of the grove was found to be more fertile . We found that road construction on the periphery of grove has caused land slide in the grove , making it vulnerable for more landslides . We also found toxic weeds like Lantana , Ageratum and Parthenium on the periphery . We found 18 Peepal trees , 2 Banyan and 9 Bael trees in our area and mapped them .Banyan tree had most fauna species 12.5 whereas Peepal had 8 and bael 4.3 species per tree .

We conducted a general awareness drive about Saving Dhaula Kaula sacred grove and sacred trees with the help of Panchayat and Mahila mandal Thana Tikkar .Our resurvey showed a positive change in attitude of people towards conserving sacred grove and trees .

Name & Address of Guide Teacher: YAJNISH KUMAR, GSSS, JANDRU, HAMIRPUR, 177028, 9816166767

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :ORGANIC MANURE FROM WASTE FLOWERS

Sub Theme:- WASTE TO WEALTH

Team Members: ANUJ SHARMA (Group Leader), ATISH SHARMA

Name of School: GSSS

Address of School: KHARGAT

District: **CHAMBA**

State: HIMACHAL PRADESH

PIN: 176207

ABSTRACT

"Waste-to-wealth" has been used as the concept to address the environmental problem by changing the traditional view of waste as an end product to be disposed off. Raising awareness on environmental issue and turn it into potential value has been a big challenge, as most system relies on operational behavior. Increase in the global greenhouse gases emission drastically increases the hot weather. Due to mismanagement of waste and natural resources, we have already experienced several warning from global warming and climate change.

Thousands of solid waste tonnage are generated daily in Higher Educationa! Institutions (HEI's). The significance of integrated solid waste management systems in recent years increased due to the growing number of populations within HEI's and problems of waste management issues affecting the daily lives of people and the impact on the environment.

Several promising approaches have been developed in the past few years, one of them is the 3R's system in Integrated Solid Waste Management Hierarchy. 5R's (Refuse, Reduce, Reuse,Recycle and Recover) system were proposed with priority on source minimization, intermediate treatment then final disposal and enlighten the waste generators to practice 5R's as a substantial measure to refuse ,reduce, reuse,recycle and recover the generated solid waste there all day.

The main objective of our survey is to create awareness among villagers regarding to obtain useful things from waste materials .One of the best example is to prepare "organic manure from waste flowers ".For this we planned our work and started our survey in a group of 2 students of our school under the guidance of our guide teacher Sh. Sunil Dhiman PGT (Chemistry).We divided our work and start working on our choosen topic .We perform the survey in 2 stages and collected the information from villagers on a "Survey Questionnaird'. After the survey was over we analysed the data and calculate the result. At last we found that most of the peoples are now aware that how to draw "Best out of Waste".and how to apply the principle of 5R's in their daily lifes for creating a clean,green and healthy environment.

Name & Address of Guide Teacher: SUNIL KUMAR, PGT, CHEMISTRY, GSSS KHARGAT, CHAMBA, 176207, 9418228083

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: SENIOR
Rural/Urban: RURAL

Title :STUDY OF WASTE MATERIAL MANAGEMENT IN OUR LOCALITY

Sub Theme:- WASTE TO WEALTH

Team Members: SUMIT (Group Leader), ANITA, MONIKA, RITESH, HEMA

Name of School: GSSS

Address of School: KUFRI

District: **SHIMLA**

State: HIMACHAL PRADESH

PIN: 171212

ABSTRACT

Waste is an important component of our land resource. Waste is a natural byproduct of the phenomenon of life and growth of societies. It is viewed as unwanted or unusable material that has been disposed or discarded after primary use. Efficient handling of waste is an important factor in the developmental progress of any nation and the health of people. It is now recognized that we cannot afford to lose it as mere "waste" instead it is important to view waste as a valuable resource that can be converted into a variety of useful products. This process of conversion of waste to a product that can be out to primary use can be viewed as a process of generating wealth. It can bring back useless discarded waste products into economic use and lead to —

1. Reduction of pressure induce by waste on the environment.

2. Creation of opportunity for income.

3. Improve quality of life.

In our surveyed area we found that people of our locality has little knowledge about waste materials which can be converted into wealth. We found that they are using waste of kitchen, animals, forests and fields in different ways in their daily life. Mostly they are using the waste of animals, forests ,kitchen for making manure. Other waste materials such as clothes ,plastic, paper is also use by them to make different useful things but they do not have knowledge to use these waste products as wealth in large scale .During questionnaire we had found that people of area do not have much knowledge about the use of these waste material in proper manner. Some people are throwing waste materials such as clothes, plastic waste, glass waste as well as shoes in open. They don't have knowledge as well as facilities of management of these waste materials.

Name & Address of Guide Teacher: KANTA SHARMA, TGT, GSSS, KUFRI, SHIMLA 171212, 07807227767

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :STUDY OF TRADITIONAL HOUSE IN TERMS OF CLIMATE COST TEMP TYPE OF ROOF AND ENERGY EFFICIENCY

Sub Theme:- TRADITIONAL KNOWLEDGE SYSTEMS

Team Members: NITIN SHARMA (Group Leader), SRISTI, PANKAJ, NITISH, NAVEEN

Name of School: GSSS

Address of School: NHARANA, THEOG

District: **SHIMLA**

State: HIMACHAL PRADESH

PIN: 171212

ABSTRACT

Society culture and livelihood are linked mainly through environmental context where people |ive.in society and culture shelter also play and important role. In our shelter traditional housing designs have evolved through time as an adjustment process to local weather and climate conditions of the area to enhance the level of safety and security and assure the level of comfort. In this process utilization of local available building materials which are specific to that area also get highlighted. Usually uses of building materials for floor ,walls, roof etc. are selected on the basis of their specific requirement. The orientation and ventilation of houses are Also determined by the conditions of weather and climate particularly temperature ,wind, precipitation, sunshine hours ,humidity etc.

During our survey we found that people of our ocality are shifting their houses from traditional to modern. They are renovating and altering their traditional into modern RCC or pucca houses. For this they have different reasons some Says that traditional houses are not good looking and well finished without any architectural designs. Some says that the material for traditional houses like Timber is not easily available due to strictness of government on forest and more labor charges in purchasing Timber. The cost factor is main for its construction. So they are preferring modern houses as compare to traditional. Whereas the old people give more preference to the traditional houses. According to them the traditional houses are more ecofriendly, easy in raw material, less in cost and moreover climatically suitable. By conducting our survey for a long period of time we found that although people are preferring modern houses due to their merits but traditional houses are more ecofriendly, climaticaly suitable for the human beings in our locality in all weather and easy availability of raw materials.

Name & Address of Guide Teacher: SMT. KANTA SHARMA, TGT, GSSS KUFRI, THEOG, SHIMLA 171212, 07807227767

National Children's Science Congress' 2018

STATE- HIMACHAL PRADESH

Language: ENGLISH
Category: Junior/Senior: JUNIOR
Rural/Urban: RURAL

Title :**PRINCIPLE OF HYGIENE AND ENVIRONMENT SANITATION**

Sub Theme:- HEALTH, HYGIENE AND SANITATION

Team Members: SEEMA DEVI (Group Leader), ANCHAL KUMARI

Name of School: SHIVALIK PUBLIC SCHOOL

Address of School: BHARMOUR

District: **CHAMBA**

State: HIMACHAL PRADESH

PIN: 176315

ABSTRACT

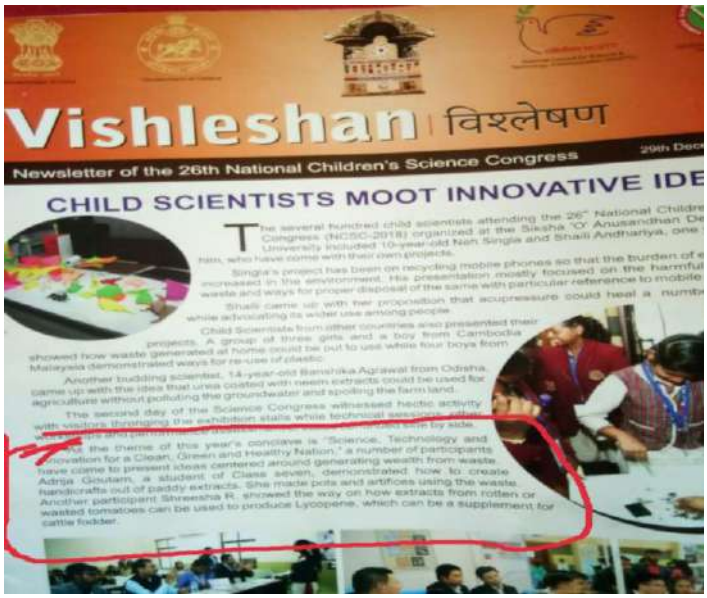
House of 04 village, Dhudenka, Thalla, Malkota, Rajour are included in the study the most common activities implemented in the villages are development of hygiene rehabilitation of latrine, education packaging.

The disposal treatment, sewage treatment and the main source of drinking water. The most common type of facility used in the village is improved fir taurine and the most common type of village source is natural source.

Name & Address of Guide Teacher: PRIYANKA DEVI, VILLAHE RAKOUR, BHARMOUR, CHAMBA 176315, 7807907363

Glimpses of 26th National Children Science Congress 2018

In News



Vishleshan | विश्लेषण

Newsletter of the 26th National Children's Science Congress

CHILD SCIENTISTS MOOT INNOVATIVE IDE

DEMAND FOR DISTRICT STATUS FOR PADAMPUR SUBDIVISION GROWS | 4

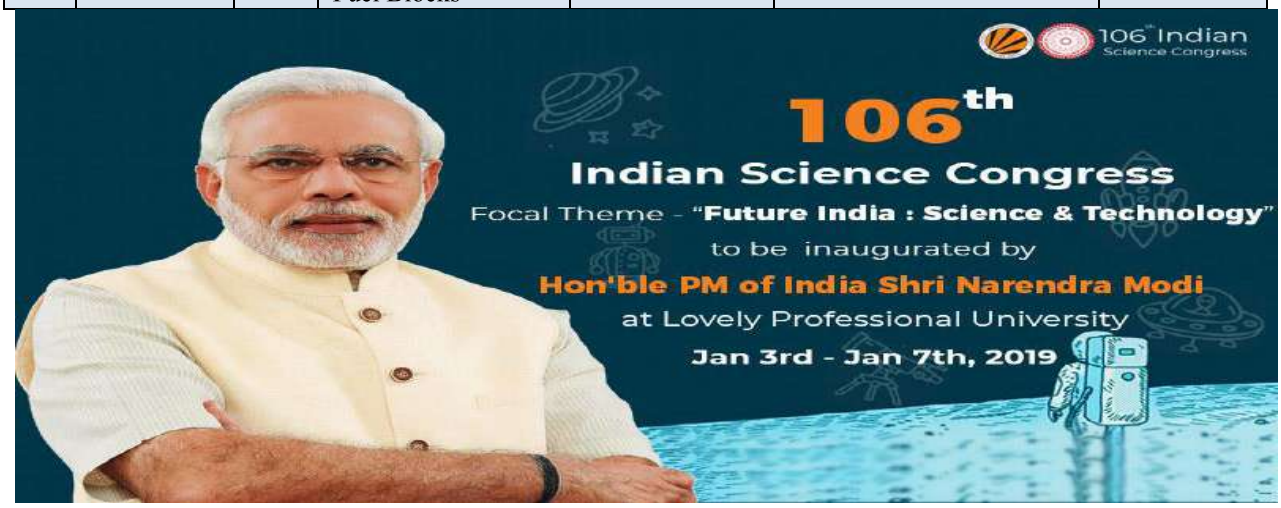
26th Children's Science Congress off to a start

ଜାତୀୟ ଶିଶୁ ବିଜ୍ଞାନ କଂଗ୍ରେସରେ ଯୋଗଦେଇଥିବା ହିମାଚଳ ପ୍ରଦେଶର ଛାତ୍ରଛାତ୍ରୀଙ୍କ ସହ ସୋଆର ବରିଷ୍ଠ ଅଧିକାରୀମାନେ

Glimpses of 106th Indian Science Congress-2019

2 Child Scientist selected at State level CSC-2018 participated in 106th Indian Science Congress 2019 at Lovely Professional University, Jalandhar w.e.f. 3rd to 7th January 2019 as per details below:

S. No.	Name of Child Scientist	Age	Title of Project	Name of Guide Teacher	School	District
1.	Yuvraj	13	Preservation Of Grains And Food Items Through Natural Protectants	Shivani Kaushal	Shivalik Valley School Kirpalpur, Nalagarh Solan Pin Code 174101	Solan
2.	Muskan Choudhary	15	Pyrolysis Of Biomass For Making Smokeless Fuel Blocks	Kiran Dang	Trinity Public School Banjar, Kullu Pin code 175123	Kullu




INDIAN SCIENCE CONGI
3rd-7th January, 2019
Theme: "Future India : Science & Tec

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