



# VIPNET NEWS

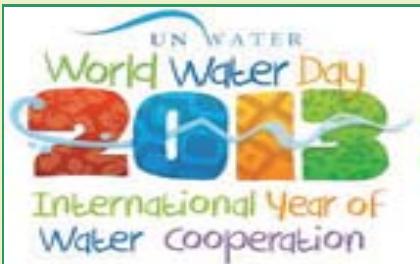
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## Assessment of VIPNET Clubs

### Dear Vipnetians

In our last issue we discussed with you the findings, observations and recommendations that emerged from the five regional meets and the brainstorming session. The basic purpose of all these exercises was to strengthen the working of science clubs and to provide them a sustained base of activities so that clubs can be established as a strong link between science and society. A study was undertaken on behalf of VP by Educational and Rural Development Society, Bharatpur, Rajasthan to conduct a systematic assessment of VIPNET programmes in terms of their functioning at national, state, district and school level. The study focussed mainly on learning about working of science clubs, usage of literature provided to clubs, and its outcome in terms of creation of S&T awareness among the students. The assessment was expected to provide inputs to consolidate the gain made so far, to identifying the gaps and prioritise the areas in need of further action, and to strengthen the programme to achieve the objectives of the VIPNET programme.



**Club Activities in Progress**

The study was carried out in the 40 schools selected from three districts in Rajasthan and four districts in Madhya Pradesh. A systematic random sampling method was used to select the districts and schools. The respondents included students (class IX to XII), peer leaders (class monitors) and teachers in-charge of the science clubs in the schools. A total of 573 students participated in the study (by filling self-administered schedule). The sample consisted of members (70%) and non-members (30%) of VIPNET Clubs. In addition, 63 monitors and 76 teachers were also interviewed. Eight focus group discussions (FGDs) were also held with the students in different districts.

**"Don't throw away the old bucket until you know whether the new one holds water"**  
*(Swedish Proverb)*

The summary of the findings and major recommendations of study are as follows:

### I. Activities of Science Clubs

1. Around 90% of the students were aware of existence of science clubs in their schools.

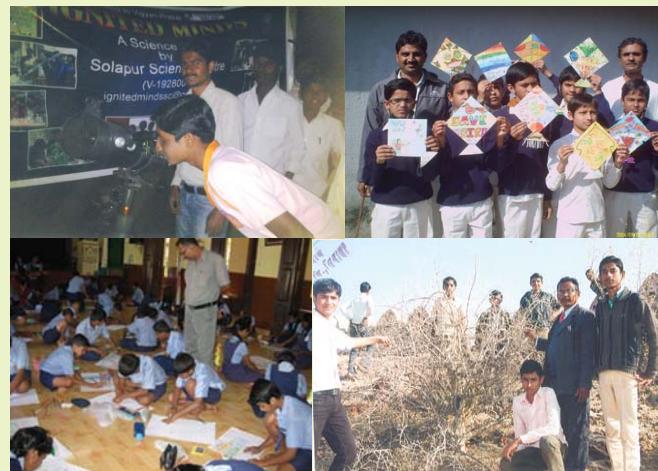
2. Most of the activities organised by science clubs were related to essay writing, poster competition, G.K. exam, and quiz contests. Activities like exhibition and exposure visits were less common. The level of students' participation in these activities was somewhat higher in MP (90%) (particularly, boys) than in Rajasthan (75%). However, in general, girls were more active than boys. Also, both members and non-members (of science clubs) equally participated in these programmes.

Further, there was little difference between government and private schools in relation to participation of students in science club activities. In Rajasthan, participation was more in government schools whereas in MP it was more in private schools.

3. About 80% students observed that the activities of science clubs were regularly organised. Among the two states, the activities were more regular in MP than in Rajasthan. The information about the programmes of science club was generally displayed on notice boards or announced during prayer/assembly.

4. Demonstration/experimental methods were mostly used (86%) to educate students about new developments in science and technology.

5. The winners of various competitions were



**Club Activities in Progress**

regularly awarded by the science clubs/schools to sustain the interest of students. Over 56 % students reported that they received awards in these competitions.

6. Around twothirds of students in two states observed that several interesting and useful books (they have even provided a list) are available in the science clubs/libraries. Further, the literature was mostly (68%) in both the languages (Hindi and English). About 23% students observed that the books and magazines were in Hindi and 8% said that these were in English. Apparently, language barrier was effectively bridged in making science knowledge accessible to students. Two-thirds of students said that books were allowed for home.

7. About 86% students recognised the gain in knowledge through literature available at the science clubs. Around 80% students and monitors have

### Objectives of the Study

The specific objectives of this assessment study were as follows:

- ◆ To learn about the working of science clubs in schools including membership, activities undertaken, and usage of literature provided.
- ◆ To assess the outcomes of the science clubs' programme in terms of creation of awareness and temper for science and technology among school going students.
- ◆ To provide inputs to consolidate the gains made by the programme so far, and to identify gaps and prioritise areas in need of improvement to achieve the objectives of Science Club programme.

### Methods

Keeping the study objectives in view, a system approach has been followed to carry out this assessment. Under this approach, the performance of science clubs is assessed in the context of inputs, process, outputs, outcomes, and impact sequence.

Under this framework, this study was divided in to two broad components:

- ◆ The first step was to review the functioning of VIPNET clubs (in the context of objectives, strategy, programme, inputs, processes, outputs/ feedback, and follow up)
- ◆ Triangulation of findings through dialogue with stakeholders at national, state and district levels.

### Area of study and study design

- ◆ In consultation with Vigyan Prasar, the states of Madhya Pradesh (MP) and Rajasthan were identified for the assessment of science clubs.
- ◆ Keeping the study objectives in view, it was decided that along with students, data will also be collected from teachers looking after the activities of science clubs. Further, the students' sample would include both the members and non-members of science clubs. In addition, student peer leaders (normally a class monitors) would also be covered in the study.
- ◆ A systematic random sampling procedure was adopted to select the districts and schools from the two study states.
- ◆ Both quantitative and qualitative data were collected for the study. Quantitative data were collected from students who were either a member or not a member of science club and studying in class 9 to 12. A self-administered questionnaire was used to collect these data.
- ◆ The qualitative sample consisted of teachers and peer leaders (class monitors). An in-depth interview schedule was used to collect information from this category of respondents. In addition, focus group discussions (FGD) were also held with student members of science clubs.
- ◆ In every selected school, 10 members of science clubs were randomly selected for collecting desired information.
- ◆ Further, 5 other students (not a member of science club) from the same class were also randomly selected for study.
- ◆ In addition, from every school, 2 peer leaders (class monitors) were selected for in-depth interview.
- ◆ From every selected school, 2 teachers (one in-charge of science club and another school principal) were identified for in-depth interview.
- ◆ One FGD was planned for every study district.

Sample size of different categories of respondents.		
S. No.	Categories	No.
1.	Student members of science clubs	400
2.	Student not-members of science clubs	200
3.	In-depth interview with student's peers	80
4.	In – depth interview with teachers	80
5.	Focus group discussion with students	8

### Development of study tools

Both qualitative and quantitative data were collected for the study. The tools developed for each category of respondents had both close-ended and open-ended questions. The information was collected on various aspects related to background characteristics, objectives and strategy of science clubs, knowledge about Vigyan Prasar and science club functioning, practices and activities of science clubs, participation in the activities of science clubs, access and usage of literature, usefulness of the science clubs in creating awareness and building temper on science (particularly the value addition made by science clubs), grey areas, and suggestions to make science clubs more useful and effective. In the student's questionnaire, besides the standard questions on science club activities, a science quiz was also given. Following type of tools were developed for data collection:

- ◆ Self-administered schedule: A questionnaire was developed for member students and non-member students of science clubs. The same tool was administered as interview schedule for collecting the data from class monitors.
- ◆ Teacher's interview schedule: An in-depth interview schedule was developed for collecting data from Teacher/ In-charge of science club in the school. Teachers' opinion was particularly sought on the ways to improve the functioning of science clubs.
- ◆ Focussed group discussion checklist: A checklist was developed for conducting focus group discussion with students.
- ◆ All the tools were in Hindi and pre-tested before commencing the data collection work.

### Data collection

- ◆ The data were collected by two trained investigators specially recruited for this assignment.
- ◆ Both of them were given 4 days' training on the subject matter of study and process of data collection.
- ◆ The data collection work was closely supervised by the Head of the Organisation. He had travelled to almost every study district to look after the data collection and to get a feel of working of clubs.
- ◆ The data was edited before entry into the software.
- ◆ The data was entered in specialised software known as SPSS and data cleaning was done before analysis.

*(Against a sample size of 600 students, the information was collected from 573 students. The sample coverage was 95.5 %. For a sample of 80 peer leaders, 63 (78.7%) were interviewed.)*

opined that science clubs are giving information beyond syllabus.

8. Nearly 85% students observed that they not only shared the books borrowed from the clubs but also discussed the relevant science issues with family members and peers.

9. In more than half of the science clubs, programmes and activities were jointly organised by the teachers and students.

## **II. Knowledge about sources of information on science**

1. It was found that the awareness about sources of information about science was good among students. About three-fourths students knew about the sources of information like, TV channels/programmes, journals and websites, in that order. More students from private schools knew about these sources than those from govt. schools. It could be linked to their higher access to resources.

However, knowledge about science and technology websites was higher among students of government schools than of the private schools. The knowledge about TV channels/programmes was higher in students of private schools. For magazines, it was neck and neck between students of private schools (59.0%) and government schools (54.1%), with the former having an advantage.

## **III. Knowledge about Vigyan Prasar**

1. Awareness about Vigyan Prasar was varied in two study states. In MP about 75% and in Rajasthan about 80% students were familiar with Vigyan Prasar. Around one third of students were aware of its website. Among those who knew the website, about 72% had visited it as well. In totality, 84.5% male and 59.4% female students said they had visited the website of Vigyan Prasar. About 34.7% of these students visited the website only once a week

2. The knowledge level on everyday science was found to be higher (but only moderately) among members of science clubs than non-members. However, in general it was a disappointment because very few students could give correct response to most of questions.

## **IV. General knowledge level of students on everyday science**

1. The knowledge level on everyday science was found to be higher (but only moderately) among members of science clubs than non-members. However, in general very few students could give correct response to most of the questions.



**Club Activities in Progress**

## **V. Suggestions for improvement of Science Clubs' activities**

1. The performance of science clubs is good but there is scope of improvement in several areas.
2. Training of teachers is very limited. Teachers feel lack of capacity in coordinating and carrying out the club activities. There is a great need of training of teachers.
3. More than half of the students suggested new add-on activities in science clubs.
4. According to the teachers the science clubs are grappling with various shortcomings like shortage of funds, lack of time and lack of knowledge in teachers, lack of infrastructure to conduct activities, lack of training of teachers for conducting club activities. There was a demand for filling of these gaps.

The key suggestions made by the teachers include funds support (37.3%), improved availability of literature (30.6%), making the club's activities more technology based (25.3%), participation in national and international competitions (18.7%), telecasting/broadcasting more science-based program on TV and Radio (14.7%).



**Regional Workshop for Central Zone in Progress**

Teachers have also suggested appointing a district-level officer who can supervise, guide and control the club activities. Science clubs are providing information beyond the school curricula; therefore teachers have suggested linking the club activities with the syllabus of the students. Suggestions like organising of science tours, discussions, inclusion of science movies in club activities, rallies, and availability of sufficient training material in science clubs were also made by several students and teachers.

## Other highlights

### I. Student's background, scholastic achievements, interest in science subjects and involvement in science clubs

- ◆ The study was carried out in 7 districts of which 3 were in Rajasthan and 4 were in Madhya Pradesh. Of 636 students and monitors, 65.8% were studying in govt. schools and rest in the private schools. In MP, the proportion of govt. school students was 77.7 % and in Rajasthan it was 35.4 %. The rural-urban distribution of students in the two states was relatively less varied. Overall, 43.9 % students were studying in rural schools. In Rajasthan, their proportion was 35.4 % and in MP 47.2%.
- ◆ The gender-wise distribution of students shows that out of 410 students in MP, 212 (51.7%) were boys and 198 were girls. In Rajasthan, out of total 163 students, 92 (56.4%) were boys and 71 were girls.
- ◆ Around three-fourths of the students in both the states were 15-19 years of age and around one-fourth were in 10-14 years of age. Class-wise distribution of students shows that in Rajasthan, majority of students were in classes 8 to 10. In MP, however, majority of boy students (50.9% boys and 59% girls) were in classes 11 and 12.
- ◆ Regarding participation in extra-curricular activities, majority of students preferred literary, art and culture activities. Science and general knowledge, sports and adventure occupied 3rd and 4th positions in this ranking.. Interestingly, boys and girls have had similar preferences
- ◆ A majority of students wanted to become an engineer or a doctor (together 66.3%). Though some students also aspired to become a scientist, soldier, teacher, or an officer, their proportion was relatively small. It appears that the students desire to make a foundation in science to achieve their aspiration to become a doctor or engineer.
- ◆ Science was noted as the most favorite subject of the students (92.8 %). In both the states, boys and girls in all the classes had same preferences. Overall 87.5% students have chosen science for higher studies; however, preference for science was stronger in MP than in Rajasthan.
- ◆ Regarding specific branch of science, boys have shown a greater interest in physics and biology and girls in biology only. . Class-wise distribution shows that among boys, biology is more preferred by students of classes 8-10 and physics by the students of classes 11 and 12. Among girls this order was

just reverse.

### II. Role models and regularity in the activities of science clubs

- ◆ Majority of students see Dr. A.P.J. Abdul Kalam as their role model, followed by Sir Isaac Newton, Albert Einstein, Mendel, Galileo, JL Avadhali, Kerolis Lenious, Dr. C.V. Raman, etc.
- ◆ From the responses (87.5%) it is clear that the activities are being organised in the clubs quite regularly. However, among the two states, a higher level of regularity was noted in MP (87.8% students) than in Rajasthan (66.9% students).

### III. Science club's activities in which students/ monitors actively participated.

- ◆ A comparison between government and private schools regarding students' participation in science club activities shows that the science clubs in government schools were relatively more active than those in private schools. However, preferred or commonly held activities were similar in the two categories of schools. These were; essay writing, G.K. test, poster competition, and quiz contest. Participation in debate is higher among senior class students. More girls (56.3%) have won prize than boys (50.4%).



*Regional Workshop for Southern Zone in Progress*

### IV. Availability of books at science clubs

- ◆ The availability of books is a major support in generating students' interest in science club activities as well as contribution to knowledge building. More books are available in science clubs of Rajasthan (59.5%) than in MP (54.8%). The table 2.25 also shows a higher proportion of girls (62.8%) were aware of the availability of books than boys (50.2%).
- ◆ Further, nearly two-thirds of students have reported that they were allowed to borrow the books for home reading. Interestingly, there was little difference in the response of senior and junior students. Almost a similar pattern was observed in govt. and private schools

### V. Gained knowledge from literature available at science clubs and sharing of literature with others

- ◆ Majority of the students have acknowledged that the literature available in science clubs is good and contribute to knowledge building and provide motivation in learning by doing.
- ◆ The students mainly liked science related discoveries, information about Earth, etc. They find the activities of science clubs like plantation competition,



Various activities are being organised by VIPNET Clubs

- chemistry experiments, educational tours, poster making, model development, etc.
- ◆ It was found that more than 80% of students are sharing the books borrowed from library with school and non-school friends and family members. This practice was more prominent in Rajasthan (90%) than in MP (79.2%).
- VI. Discussion and dialogue on information given from books**
- ◆ Further to sharing of books and journals with peers, students are also encouraged to debate the information given/knowledge acquired from the books and journals. This process is expected to help students and their peers in internalising the learning. The responses received from the students show that as many as 84.1 % students have discussed the information given in books with other people (like relatives, peers and teachers). The trend was similar across boys and girls and all the classes.
- VII. Management of science clubs' activities**
- ◆ In majority of schools (55%), both teachers and students jointly organise the activities of science clubs..
- VIII.Appreciation of science club activities**
- ◆ Majority of students liked the activities organised by the science clubs. About 57% students said that they liked these very much and 42% just liked the

## Recommendations

1. **Increase participation:** Steps should be taken to improve participation of students in science club activities. For the students, who have taken science as subject in class XI and XII, it should be compulsorily to become member of the science club. Schools need to motivate students to become member of the Science clubs by promoting competition at inter-school level.
2. **Information about Vigyan Prasar:** Students should be briefed about the Mission, Vision and Objectives

activities.

### IX Student's membership of science club

- ◆ The membership of a club ranges from 11 to 100 in majority of clubs.

### X. Motivational activities of science clubs

- ◆ It broadly includes giving orientation on various scientific facts and general knowledge like solar system, solar and lunar eclipses, planets outside the solar system, new inventions, experiments, and many other such activities. Lectures of some well-known scientists were also organised to motivate students in science.

### XI. Training received by teachers for science club

- ◆ From the analysis it was found that training is the component which is extremely poor, as less than 19% teachers have reported having received any training in managing activities of science clubs. The proportion of these teachers was almost equal in the two states.

### XII. Knowledge about objectives of Vigyan Prasar

- ◆ It is apparent that the teachers were quite familiar with the objectives of Vigyan Prasar. Nearly 72% students were aware of Vigyan Prasar. The awareness level was 85.9% in Rajasthan and 66.3% in MP. Also, more girls were aware of Vigyan Prasar than boys
- ◆ However, relatively fewer teachers were aware of the website of Vigyan Prasar. Less than half (47.4%) of the teachers from Rajasthan and less than one-fourth (23.2%) teachers from MP are aware about the web link of Vigyan Prasar. Among those who knew about the website, nearly 60% said that they visit it often or once a week.
- ◆ About 44% teachers have watched the Vigyan Prasar programmes on television, but only 17% of them listened to its programme on radio. Proportion of teachers who have seen TV programmes and listened to radio also was 38.7%.
- ◆ 34.1% students knew about the VP website. State-wise, 39.3% students from Rajasthan and 31.4% from MP knew about the website address

of the Vigyan Prasar.

3. **Promotion of VP programmes:** Vigyan Prasar programmes should be telecast in private channels as well in addition to DD and Lok Sabha TV. It will increase the viewership and will motivate the students to study science.

4. **Students** should be made aware about the website of Vigyan Prasar and other websites which give information about S&T. Also, they should be motivated to visit the websites.

5. **Trainings:** Regular training programmes of teachers

(In-charge of science club) should be organised. Only science teachers should be the in-charge of science clubs and their training needs should be assessed and addressed properly during training programmes. Refresher training programmes should be organised to upgrade the knowledge and skills of the teachers.

**6. Structural support to science clubs:** The current infrastructure status and needs of the science clubs should be assessed and adequate measure should be taken to provide infrastructure facilities like TV, Internet, computer, etc.

**7. Allocation of funds:** Separate funds should be given to schools to develop science clubs in school and to undertake activities on regular intervals.

**8. Activities of science clubs:** The science club activities should be organised regularly. The activities of the science club should be made more interesting and vocational. Students should be sensitised about the significance of science clubs activities in their career building.

**9. Strengthening of science clubs:** The quality of literature available in the library of science clubs should be improved. Students, at least member of the science clubs should be allowed to take literature home for reading/ studying purpose. Latest science magazine, journals, etc., should be regularly purchased for science clubs.

**10. Guideline:** There must be some guideline to coordinate the science club activities. It will help to resolve the issues of the in-charges of the science club and improve their decision making skill.

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Various activities are being organised by VIPNET Clubs

- ◆ 34.1% students knew about the VP website. State-wise, 39.3% students from Rajasthan and 31.4% from MP knew about the website address.

*Source : Report (A Assessment of National Programme of Promoting Awareness and Temper for Science and Technology among School going Students) by Educational and Rural Development Society, Bharatpur -2012.*

□ Presented by : B.K. Tyagi

### सूचना

आपके पत्र हमें समय-समय पर प्राप्त होते रहते हैं परन्तु कई बार आपके द्वारा अधूरे पते सहित पत्र व्यवहार से विज्ञान प्रसार को आपसे सम्पर्क में कठिनाई आती है। अक्सर विप्र. आपको पत्र-पुस्तक या पुरस्कार स्वरूप विभिन्न सामग्री भेजता है जो कि कभी-कभी सही पता ना होने के कारण वापस आ जाती है।

विज्ञान प्रसार से किसी भी तरह का पत्र-व्यवहार करते समय कृपया हर बार अपना पूरा पता हिन्दी या अंग्रेजी के कैपिटल अक्षरों में डाक पिन कोड (आवश्यक), फोन न. तथा ईमेल सहित लिखें।

### NOTICE

VIPNET Desk has been receiving various queries and a number of letters. Our team made all possible efforts to send replies to all.

In some cases it has been observed that the address of the sender is either incomplete or not legible. Kindly write your complete address clearly in all your future correspondent in capital letters alongwith Pin Code, phone & E-mail ID.

If you want to know more about Vigyan Prasar, its publications & software, besides the next moves of VIPNET Science Clubs, please write to us at the address given below:-



#### Vigyan Prasar

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# इसोन धूमकेतू के आगमन पूर्व की कुछ संभावित खगोलीय गतिविधियाँ



इसोन धूमकेतू की संभावित कम्प्यूटरीकृत चित्र। स्रोत <http://www.space.com/20787-comet-ison-hubble-photos.html>

जैसा कि अनुमान है कि वर्ष 2013 के नवम्बर से 2014 के जनवरी माह तक इसोन धूमकेतू अपनी धूम मचाने वाला है इसलिए विज्ञान प्रसार इसोन दृश्य पूर्व कुछ गतिविधियों की सिफारिश करता है ताकि क्लब सदस्यों को इसोन धूमकेतू को समझने और इस अभूतपूर्व खगोलीय घटना के आनन्द का अनुभव करवाया जा सके।

इसोन धूमकेतू के आगमन से पूर्व की जा सकने वाली कुछ संभावित गतिविधियाँ निम्न हैं जो विपनेट क्लब आयोजित कर सकते हैं :

1. पूर्व वर्षों में दिखने वाले विभिन्न धूमकेतुओं की सूचि/चित्र बनाना व उनके बारे में जानकारी एकत्र करना ।
2. धूमकेतू का मॉडल पुरानी रद्दी, प्लास्टर ऑफ ऐरिस व रूई आदि से बनाना ।
3. धूमकेतुओं में पाये जाने वाले तत्वों व पदार्थों की सूचि बनाना ।
4. पुराने धूमकेतुओं से सम्बंधित विभिन्न सम्भावित जानकारी एकत्र करना ।
5. धूमकेतू के आगन पूर्व उसका काल्पनिक चित्र, स्केच व पेटिंग बनाना ।
6. आकाश दर्शन करना व विभिन्न तारामंडलों व ग्रहों-नक्षत्रों को पहचाना ।
7. विश्व में विभिन्न देशों द्वारा धूमकेतुओं पर जारी किये गये डाक-टिकट एकत्र करना ।
8. समुदाय के विभिन्न आयुर्वा के व्यक्तियों से गत् वर्षों में दिखे पुच्छल तारों के बारे में उनके अनुभव को कलमबद्ध करना व लेख लिखना ।
9. अपने क्लब में पांच-पांच विद्यार्थियों के समूह बनाकर धूमकेतू प्रश्नावली बनाना और प्रश्नोत्तरी (Quiz) आयोजित करना ।



हेली धूमकेतू का (1910) में एवं द्वितीय (1984) में लिया गया चित्र  
स्रोत [http://en.wikipedia.org/wiki/Halley%27s\\_Comet](http://en.wikipedia.org/wiki/Halley%27s_Comet)

10. इसोन धूमकेतू पर पावरपाइट प्रस्तुतीकरण बनाना तथा व्याख्यान देना ।
11. धूमकेतुओं से सम्बंधित अंधविश्वासों की सूचि बनाना और उनके वैज्ञानिक पक्ष सामने रख लोगों की जिज्ञासाओं को शान्त करना ।
12. पृथ्वी पर जीवन के लिए कच्चा माल किसी धूमकेतू द्वारा ही आयातित हुआ, अर्थात् धूमकेतू किसी ग्रह पर जीवन के लक्षण पहुंचाने के लिए जिम्मेदार हो सकते हैं। इस परिकल्पना पर अपने विचारों को लिखना । साथ ही वाद-विवाद, निबन्ध लेखन, कहानी आदि प्रतियोगिता आयोजित करना ।
13. धूमकेतू से सम्बंधित विज्ञानगत्य अर्थात् 'साइंस फिक्शन' लिखना ।
14. एक बड़े खेल के मैदान में सफेद पाउडर या चूने (लाइम) से सौरमंडल की कक्षाएं (ओरबिट) बनाना और इसोन धूमकेतू की कक्षा बनाना ।
15. धूमकेतू विषय पर कार्टन, चुटकुले आदि बनाना ।

□ दर्शन लाल बवेजा एवं बी.कु त्यागी

# विज्ञान प्रसार द्वारा जैवविधित से संबंधित गीत आधारित ऑडियों सीडी. का विकास



'अंतरराष्ट्रीय जल सहयोग वर्ष-2013'

**सूचना****विपनेट क्लबों के लिए राष्ट्रीय कैम्प****स्थान: साइंस सिटी (अहमदाबाद)****राष्ट्रीय कैम्प में मुख्य आकर्षण होंगे :-**

- ◆ नर्मदा बांध की यात्रा तथा रात्रि कैम्प।
- ◆ पानी से संबंधित खेल प्रतियोगिताएं, फ़िल्म आदि का प्रदर्शन।
- ◆ गुजरात के 'जल संरक्षण' से संबंधित परम्परागत स्थान/क्षेत्रों की यात्रा, जैसे सीढ़ीदार कुएं, बावड़ी, तालाब, आदि।
- ◆ क्लबों द्वारा क्रियान्वित गतिविधियों की पोस्टर/चार्ट प्रदर्शनी।
- ◆ पानी से संबंधित विशेषज्ञों से वार्तालाप।

(इस कैम्प में रिपोर्ट के आधार पर चुने हुए क्लबों को ही आमंत्रित किया जायेगा)

विदित हैं कि इस वर्ष 2013 को 'अंतरराष्ट्रीय जल सहयोग वर्ष' के के रूप में मनाया जा रहा है। गत् वर्ष की भाँति इस बार भी विपनेट क्लबों हेतु 'नेशनल कैम्प' 14-17 नवम्बर 2013 के दौरान 'साइंस सिटी' अहमदाबाद में आयोजित किया जायेगा। क्लब रिपोर्ट व तकनीकी रिपोर्ट भेजने की अन्तिम तिथि 30 सितम्बर, 2013 है। उक्त गतिविधि की सूचना आपको पहले ही पत्र व विपनेट न्यूज (देखें गत् माह के अंक) के माध्यम से दी जा चुकी है। अधिक जानकारी के लिए वैबसाइट [www.vigyanprasar.gov.in](http://www.vigyanprasar.gov.in) देखें।



'International Year of Water Cooperation-2013'

**NOTICE****National Camp for VIPNET Clubs****VENUE : Science City (Ahmedabad)****Main attractions of the Camp :-**

- ◆ Visit to Narmada Dam and Night Camp.
- ◆ Interaction with experts.
- ◆ Poster exhibition by clubs members.
- ◆ Visit to traditional water harvesting sites in Gujarat like step-wells, Baoris, Ponds.
- ◆ Activities/Competition and film shows relating to water.

(For this camp only selected club's will be invited on the basis of the clubs reports.)

As you know, year 2013 being observed as 'International Year of Water Cooperation'. This year National Camp for VIPNET Clubs will be organised at science city, Ahmedabad during Nov. 14 -17, 2013.

The last date for submitting the club's reports & technical report is September 30, 2013.

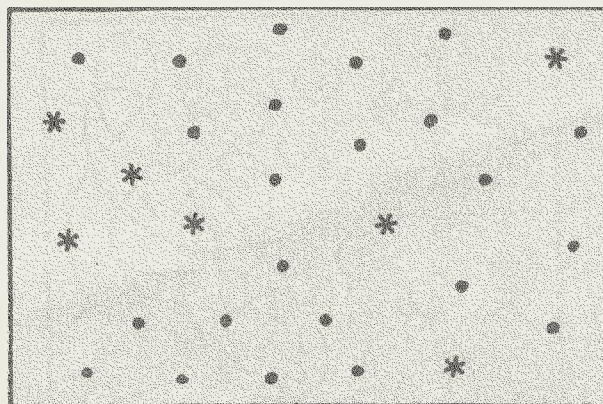
About the activities and other detailed, kindly refer to previous issues of VIPNET News or visit VP website [www.vigyanprasar.gov.in](http://www.vigyanprasar.gov.in).

**पहेली संख्या**

**Quiz No. -79**

**Brain Teaser /**

- चित्र में एक आयाताकार पार्क है इस पार्क में 30 पेड़ हैं जिसमें 7 चीड के और 23 आम के हैं। आपको तीन सीधी रेखाओं द्वारा पार्क को इस प्रकार सात भागों में बांटना है कि आम और चीड के वृक्ष अलग-अलग हो जाएं। (ध्यान रहे कि किसी भी भाग में आम और चीड के वृक्ष साथ न रहे)।
- In a rectangular park there are 23 mango and 7 Pine trees. What you have to do is to divide the park with the help of three straight lines into 7 block in such a way that mango and Pine tree should be separated in seven blocks and only one type of tree is found in a block.



- उत्तर प्राप्त करने की अंतिम तिथि: 30, जूलाई 2013
- द्वां द्वारा चयनित विजेताओं को पुरस्कार स्वरूप विज्ञान प्रसार के प्रकाशन भेजे जाएंगे।
- अपने जवाब इस पते पर भेजें :

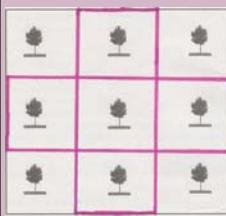
विपनेट चित्र पहेली - 79, विज्ञान प्रसार, ए-50,  
सेक्टर 62, नोएडा-201 309 (उत्तर प्रदेश)

- Last date of receiving correct entries: 30 July, 2013
- Send Quiz Ans. to desk :

VIPNET Photo Quiz 79, VIGYAN PRASAR, A-50,  
Sec. 62, Noida-201 309 (U.P.)

**Correct Answer of Brain Teaser 78**

**विजेता/Winner**



- 1- Ritu Bagga/Sonia Bagga  
(Hoshiarpur)
- 2- Avinash Bhardhwaj  
(Bhajpur)
- 3- Joginder Pal Gupta  
(Hoshiarpur)

**Puzzle 35 Based On Water related disaster**

A	B	D	E	B	T	S	E	D	B	D	E	D	G	T
R	C	R	O	P	F	A	I	L	U	R	E	R	S	T
S	D	E	R	C	L	O	U	D	B	R	U	S	T	R
A	G	S	D	E	O	S	T	D	E	G	H	S	I	O
V	S	D	G	T	O	E	D	H	F	E	D	S	D	P
A	S	E	D	G	D	R	O	U	G	H	T	D	A	I
L	D	E	D	F	J	G	R	T	Y	S	D	U	L	C
A	S	D	F	H	J	K	T	H	J	D	L		W	A
N	D	T	S	U	N	A	M	I	F	I	R	T	A	L
C	F	D	D	T	H	J	D	F	A	R	T	H	V	S
H	D	F	G	N	J	R	T	F	A	M	I	N	E	T
E	D	F	R	G	P	H	J	K	T	Y	G	F	D	O
D	F	G	H	O	J	R	T	Y	H	J	K	F	G	R
C	F	T	R	E	D	F	G	D	A	S	D	F	G	M
S	D	C	Y	C	L	O	N	E	D	F	G	H	J	K

**Clue**

1. An extreme amount of precipitation, sometimes with hail and thunder within a few minute .
2. Rapid and sudden sliding and flowage of masses of usually unsorted mixtures of snow or ice
3. Significant rise of water level in a stream, lake, reservoir or coastal region.
4. Abrupt rise of tidal water caused by atmospheric activities moving rapidly inland from the mouth of an estuary or from the coast.
5. Period of deficiency of moisture in the soil such that there is inadequate water required for plants, animals and human beings.
6. A drastic, wide-reaching food shortage.
7. Abnormal reductions in crop yield that is insufficient to meet the nutritional or economic needs of the community.
8. Large-scale closed circulation system in the atmosphere with low barometric pressure and strong winds that rotate clockwise.
9. A rapidly-rotating storm system characterized by a low-pressure center, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain.
10. Series of large waves generated by sudden displacement of seawater caused by earthquake, volcanic eruption or submarine landslide.

□ **R.K. Yadav**  
[drrahiiprs@gmail.com](mailto:drrahiiprs@gmail.com)

- Last date of receiving correct entries: 30 July, 2013.
- Winners will get activity kit/ books as a prize.

**Please send your entries to:-**

**Water Puzzle-34 , VIPNET News,  
Vigyan Prasar, A-50, Sector 62, Noida-201 309 (U.P.)**

The puzzle has been Designed as part of  
International Year of Water Cooperation-2013

**Answer Water Puzzle- 33**

**विजेता/Winner**

- 1- Savita Kumari  
(Barnala-Punjab)
- 2- Ritu Bagga/Sonia Bagga  
(Hoshiarpur)
- 3- Abhipsa Pattojoshi  
(Bhubneswar)

# Club speak

## वृक्ष है जीवनदाता

ग्राम्यांचल विज्ञान कल्ब, ग्राम पॉली, हरदोई, उत्तरप्रदेश द्वारा पिछली तिमाही के दौरान अनेक विज्ञान कार्यक्रमों का आयोजन किया गया। विज्ञान क्लब द्वारा पर्यावरण के संरक्षित अनेक कार्यक्रमों के दौरान पेड़-पौधों की खुशहाली के लिए जैविक कीट नाशकों का महत्व, पर्यावरण में ऑक्सीजन गैस की उपलब्धता पर चर्चा के साथ ही हेतु पौधों की आवश्यकता हेतु 'हरा वृक्ष है जीवनदाता, प्राणवायु और वर्षा लाता' पर जागरूकता अभियान चलाया। इसके अलावा राष्ट्रीय विज्ञान दिवस, 28 फरवरी के अवसर पर खाद्य पदार्थों में मिलावट से बचने के उपाय पर कार्यशाला का आयोजन कर जनमानस में इस विषय पर जागरूकता लाने का प्रयास किया गया।



## जैवविविधता संरक्षण

जीजस रॉय रोज (विज्ञान संदेश), क्लब, दुमारिया, बिहार द्वारा जैवविविधता संरक्षण पर एक कार्यशाला का आयोजन किया गया। इस कार्यशाला में क्लब के सदस्यों को जैवविविधता के महत्व के बारे में समझाने के साथ ही उसे संरक्षित करने की आवश्यकता पर बल दिया गया।



## Science Tour

Eureka Science Club, Vijaipur, Guna. M.P. organized

science tour during 29 March, 2012. Beside science tour club members also participated in CBSE Regional Science Exhibition-2012. Club members made a projects on Malnutrition & Girl Child and Low Cost harvesting technique. Club members also organized a science exhibition 'Spectrum-2012' based on theme 'Science for future' on 1<sup>st</sup> December, 2012 in Delhi Public School, Vijaipur.



## Workshop of Renewable Energy

Darwin Science Club, organized many activities including poster making, debate, workshop etc. base on 'Renewable Energy' during March 2012 to March 2013. Club organized painting competition for age group 5 to 10 on the topic nature. Club also organized rangoli competition on wild life conservation.



**World water reserves are drying up fast and booming populations, pollution and global warming will combine to cut the average person's water supply by a third in the next 20 years. ,  
( A report of the United Nations)**



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