

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI  
DIRECTORATE OF EDUCATION, SCIENCE & TV BRANCH,  
OLD GARGI COLLEGE BUILDING, LAJPAT NAGAR-IV, NEW DELHI-110024  
Ph. No.: 26280408-12, Email: [sciencebranch@gmail.com](mailto:sciencebranch@gmail.com)

F.No.DE.40(6)/90/SCB/2024/ 1176-81

Date: 07/10/24

CIRCULAR

**Sub: Observation of Rashtriya Avishkar Saptah 2024-25-Reg.**

Please find enclosed herewith the letter F.No.12(i)(280)/Misc./C&P/SCERT/2024/6301-08 dated 11/09/2024 received from Joint Director, SCERT, Varun Marg, New Delhi regarding Observation of Rashtriya Avishkar Saptah 2024-25

NCERT has been conducting a programme called, "Rashtriya Avishkar Saptah" (RAS) every year with the objective to engage students in scientific exploration and inculcation of experimentation skills. In this endeavor, students perform activities and experiments based on guidelines provided by NCERT on the specified theme on contemporary relevant issues at school under the guidance of their teachers.


**Theme of Rashtriya Avishkar Saptah (RAS) - "Promotion of Tree-Plantation and water conservation".**

Department of Education in Science & Mathematic ( DESM ), NCERT, New Delhi, which is nodal department has developed guidelines for the tree plantation drive.

Thus, all the HoSs of Govt./ Govt. Aided/Private Unaided Recognized Schools of Directorate of Education, GNCT of Delhi are requested to disseminate the said information to the students for maximum participation.

This issues with the prior approval of the competent authority.

Encl. As Above

  
(Dr. C.S. Verma)

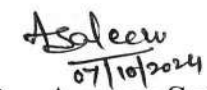
**Dy. Director of Education (Science)**

Date: 07/10/24

F.No.DE.40(6)/90/SCB/2024/1176-81

Copy for information and necessary actions to:-

1. PS to Secretary (Education), Directorate of Education, GNCT of Delhi.
2. PA to Director (Education), Directorate of Education, GNCT of Delhi.
3. PA to Secretary, Ministry of Power, Govt. of India.
4. All DDEs (District/Zone) for the compliance please.
5. All the HOSs of Govt./Govt Aided/Private Unaided Recognized Schools of Directorate of Education, GNCT of Delhi.
6. In-charge, Computer Cell with the request to upload the Circular on the Departmental website as well as public circular.

  
(Dr. Anwar Salim)  
State Coordinator (Science)

762/Adar.m/sch  
13/09/24

STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING  
(An Autonomous Organization of Education Department, GNCT of Delhi)  
VARUN MARG, DEFENCE COLONY, NEW DELHI - 110024

F.No. 12(i)(280)/Misc./C&P/SCERT/2024(630)-08

Date: 11/09/2024

To

- ✓ The Additional Director (Schools), Directorate of Education, Old Secretariat, New Delhi  
The Director (Education), Dr. S. P. M. Civic Centre, Minto Road, New Delhi  
The Director (Education), New Delhi Municipal Council, New Delhi  
The Chief Executive Officer, Delhi Cantonment Board, New Delhi

**Subject: Observation of Rashtriya Avishkar Saptah (RAS) 2024-2025**

Reference letter vide D.O. No. F. No. Prog No-3/PAB-RAS/2024-25/DESM dated 30<sup>th</sup> August 2024 (copy enclosed) received from Professor and Head Department of Educational Science and Mathematics, NCERT, New Delhi on the abovementioned subject, with self explanatory content.

You are requested to engage children in the tree plantation drive (first phase of Rashtriya Avishkar Saptah 2024-25) as per the enclosed guidelines. The guidelines for RAS 2024-25 are available on the NCERT website as well. The guidelines detail the procedure for executing and documenting the activity, including the submission of results. For your reference, a copy of the specific guidelines pertaining to the Tree Plantation drive and letter is also attached to this communication. Further, you are requested to circulate the guidelines for the observation of Rashtriya Avishkar Saptah 2024-25 in the schools under your jurisdiction.



Dr. Nahar Singh  
Joint Director (Academic)

Encl. As above

Copy to:

1. P. S. to Secretary, Education
2. P. A. to Director, SCERT
3. P. A. to J. D. (Academic), SCERT
4. Guard File

AS  
17/9/24

DM/Science

18/9  
Sh. Anwar Ji



राष्ट्रीय शैक्षिक अनुसंधान  
और प्रशिक्षण परिषद्



NATIONAL COUNCIL OF EDUCATIONAL  
RESEARCH AND TRAINING

F.No. Prog No-3/PAB-RAS/2024-25/DESM  
Department of Education in Science and Mathematics, NCERT

Date: 30th August, 2024

Dr Sunita Farkya  
Professor & Head

Email: desm.nie.ncert@gmail.com  
desmncertras2024@gmail.com  
Phone no.: 011-26561742

Subject: Observation of *Rashtriya Avishkar Saptah (RAS)* 2024-2025

Dear Sir / Madam,

In connection with the observation of RAS 2024-25 (PAB approved programme of MoE), you might have received the letter of Director, NCERT addressed to the Secretary (Education) of your state. Under this programme, every year students perform activities and experiments based on guidelines provided by NCERT on a specific theme on a contemporary relevant issue in their schools under the guidance of their teachers. During the last few years of the observation of RAS, thousands of schools across the country have participated and reported the outcome through online Google form created by NCERT.

As it is evident from the letter and attachments therein, NCERT has planned to conduct activities under RAS 2024-25 in two phases with defined objectives. Activities of RAS this year is based on the theme "Promotion of Tree-Plantation and Water Conservation". In order to achieve these objectives, it is proposed that schools across the country must actively participate in the plantation of trees either in their school premises or surroundings in the first phase. This will not only contribute in increasing green cover on the earth but also to sensitize school children and others in this society about its importance. In this regard, the Department of Education in Science and Mathematics (DESM), the nodal department of NCERT for the purpose has developed guidelines for the tree plantation drive during the monsoon season across the country. Guideline for the tree plantation drive is enclosed. The same is also available on the NCERT website, for which the link is given below <https://www.ncert.nic.in/desm/RAS.php?ln=en>.

It is also informed that the guidelines for the second phase of the RAS 2024-25 activities on Water Conservation will soon be shared.

I, on behalf of NCERT solicit your personal intervention for the wide circulation of the guidelines across the schools of your State/ UT to engage children in the tree plantation drive followed by activities on Water Conservation.

Looking forward to your positive response.

(Prof. Sunita Farkya)

Director  
State Council of Educational Research and Training,  
Varun Marg, Defence Colony, New Delhi – 110024, Delhi  
Email Id : dir12scert@gmail.com

श्री अरविन्द मार्ग, नई दिल्ली-110016  
दूरभाष : 011-26562188  
वेबसाइट : <https://ncert.nic.in>

SRI AUROBINDO MARG, NEW DELHI-110016  
PHONE : 011-26562188  
Website : <https://ncert.nic.in>

एफ.सं. कार्यक्रम संख्या-3/पीएबी-आरएस/2024-25/डीईएसएम  
विज्ञान एवं गणित शिक्षा विभाग, एनसीईआरटी

प्रो. सुनीता फरब्या  
प्रोफेसर एवं विभागाध्यक्ष

दिनांक: 30 अगस्त, 2024

विषय: राष्ट्रीय आविष्कार सप्ताह (आरएस) 2024-2025 का अवलोकन  
प्रिय महोदय/महोदया,

आरएस 2024-25 (एमओई के पीएबी अनुमोदित कार्यक्रम) के अवलोकन के संबंध में, आपको अपने राज्य के सचिव (शिक्षा) को संबोधित एनसीईआरटी के निदेशक का पत्र प्राप्त हुआ होगा। इस कार्यक्रम के अंतर्गत, प्रत्येक वर्ष विद्यार्थी अपने शिक्षकों के मार्गदर्शन में अपने विद्यालयों में एक समकालीन प्रासंगिक विषय पर एक विशिष्ट विषय पर एनसीईआरटी द्वारा प्रदान किए गए दिशानिर्देशों के आधार पर गतिविधियाँ और प्रयोग करते हैं। आरएस के अवलोकन के पिछले कुछ वर्षों के दौरान, देश भर के हजारों विद्यालयों ने भाग लिया है और एनसीईआरटी द्वारा बनाए गए ऑनलाइन गूगल फॉर्म के माध्यम से परिणाम की रिपोर्ट की है।

जैसा कि पत्र और उसके संलग्नकों से स्पष्ट है, एनसीईआरटी ने आरएस 2024-25 के दो चरणों में परिभाषित उद्देश्यों के साथ गतिविधियाँ आयोजित करने की योजना बनाई है। इस वर्ष आरएस की गतिविधियाँ "वृक्षारोपण और जल संरक्षण का बढ़ावा" विषय पर आधारित हैं। इन उद्देश्यों को प्राप्त करने के लिए, यह प्रस्तावित है कि देश भर के विद्यालयों को प्रथम चरण में अपने विद्यालय परिसर या आसपास के क्षेत्रों में वृक्षारोपण में सक्रिय रूप से भाग लेना चाहिए। यह न केवल पृथ्वी पर हरित आवरण को बढ़ाने में योगदान देगा, बल्कि बच्चों और समाज के अन्य लोगों को इसके महत्व के बारे में जागरूक भी करेगा। इस संबंध में, इस उद्देश्य के लिए एनसीईआरटी के नोडल विभाग, विज्ञान और गणित शिक्षा विभाग (डीईएसएम) ने देश भर में मानसून के मौसम के दौरान वृक्षारोपण अभियान के लिए दिशानिर्देश विकसित किए हैं। वृक्षारोपण अभियान के लिए दिशानिर्देश संलग्न हैं। यह एनसीईआरटी की वेबसाइट पर भी उपलब्ध है, जिसके लिए लिंक नीचे दिया गया है <https://www.ncert.nic.in/desm/RAS.php?ln=en>।

यह भी सूचित किया जाता है कि जल संरक्षण पर आरएस 2024-25 गतिविधियों के द्वितीय चरण के लिए दिशानिर्देश जल्द ही साझा किए जाएंगे।

मैं, एनसीईआरटी की ओर से, आपके राज्य/केंद्र शासित प्रदेश के विद्यालयों में दिशानिर्देशों के व्यापक प्रसार के लिए आपके व्यक्तिगत हस्तक्षेप का अनुरोध करती हूँ ताकि बच्चों को वृक्षारोपण अभियान में सम्मिलित किया जा सके और उसके पश्चात जल संरक्षण पर गतिविधियों में भाग लिया जा सके।

आपके सकारात्मक प्रतिक्रिया की प्रतीक्षा है।

(प्रो. सुनीता फरब्या)

निदेशक

राज्य शैक्षिक अनुसंधान एवं प्रशिक्षण परिषद,  
वरुण मार्ग, डिफेंस कॉलोनी, नई दिल्ली - 110024, दिल्ली

# RASHTRIYA AVISHKAR SAPTAH (RAS) 2024-2025

## TREE PLANTATION DRIVE

### GUIDELINES

#### Introduction

Tree plantation is a vital activity for sustaining the environment. Trees play a crucial role in maintaining ecological balance, improving air quality, and providing habitat for wildlife. They act as natural air filters, absorbing carbon dioxide, and releasing oxygen, which is essential for all living beings. Additionally, trees help prevent soil erosion, conserve water, and mitigate climate change effects. Tree plantation is immensely important from the point of view of the overall development of children as a responsible citizen with sensitivity to the environment. Engaging in tree planting activities would create environmental awareness, in terms of its vital role in maintaining ecological balance, absorbing carbon dioxide and producing oxygen besides supporting biodiversity. It will also provide hands-on learning experiences, allowing children to gain practical knowledge about biology and ecology in a memorable way. Caring for newly planted trees instills a sense of responsibility and encourages a greater appreciation for nurturing living things. Additionally, outdoor activities like tree planting promote physical health and enhance mental well-being by reducing stress and providing a sense of accomplishment. These activities also build teamwork and collaboration skills, fostering a sense of community feeling among students. The trees planted by children serve as a living legacy, reinforcing the idea that their actions can make a long-lasting and positive impact on society. Thus, incorporating tree plantation into school activities enriches students' educational experiences and helps them grow into environmentally conscious and responsible individuals.

In alignment with the Hon'ble Prime Minister's initiative to emphasize tree plantation in the name of the mother, "*Ek Ped Maa Ke Naam*" this year's theme for *Rashtriya Avishkar Saptah* (RAS) encompasses activities focused on **"Promotion of tree plantation and water conservation."** The following guidelines pertain to the tree plantation activity in the first phase to be undertaken by school students. Guidelines for promotion of water conservation shall be available on the NCERT website soon.

Planting local trees holds significant importance for both the environment and the community. Local tree species are well-adapted to the region's climate, soil, and ecosystem, which ensures their healthy growth and sustainability. These trees provide essential habitats and food sources for native wildlife, promoting biodiversity and supporting the balance of local ecosystems. By planting local trees, we also preserve the genetic heritage of the area, maintaining the unique characteristics and resilience of indigenous plant species. Local trees are typically more resistant to local pests and diseases,

reducing the use of chemical fertilizers and promoting a healthier environment. They contribute to the stability of the soil, preventing erosion and enhancing soil fertility through natural leaf litter and organic matter. Additionally, local trees often require less maintenance, making them more efficient and cost-effective for urban and rural landscaping projects. Furthermore, planting local trees fosters a sense of community and connection to the land. It encourages students to learn about and appreciate their natural surroundings, instilling a sense of pride and stewardship. This community involvement can lead to increased environmental awareness and collective efforts to protect and preserve local ecosystems.

### **Steps for tree plantation**

Planting a tree involves several steps to ensure its healthy growth and long-term survival. Here are the key steps for a successful tree plantation:

1. **Select the Right Sapling:** Choose a tree species that is well-suited to the local climate, soil, and environmental conditions. Native or local tree species are often the best choice. Talk to teachers, elders and grandparents to know which tree grows best in your area. You may also contact the local forest department office or a nursery in your nearby locality. Schools are expected to facilitate such consultation. You can select plants like Teak, Tamarind, *Peepal*, *Banyan*, etc., and avoid planting shrubs such as Rose, Hibiscus, Jasmine, Banana plant, Henna, etc. Students should explore the local name and the botanical name of the sapling and the same may be reported in the Google form. However, names of the trees given above are suggestive. Schools may choose trees as per local habitat of the area.
2. **Number of saplings to be planted:** Plant at least 10 to 15 saplings in the school campus or nearby areas in the locality where there is proper light, water facilities and also where children can take care of them.
3. **Choose the Planting Site:** Identify a suitable location with good soil quality for planting the sapling in your school/ neighbourhood with the help of your teacher. Ensure the site has enough space for the sapling to grow to its mature size without obstruction from buildings, power lines, or other trees. Check the soil quality and drainage to make sure it is suitable for the chosen tree species. If the current site exhibits poor soil conditions, such as being classified as Barren land i.e., *Banjar* or *Osar Bhumii*, remedial action is required. Specifically, a larger planting pit should be dug and filled with fertile soil procured from an external, more suitable location. This approach will provide a more appropriate environment for tree growth and health.
4. **Prepare the Soil:** Clear the planting area of weeds, grass, and debris. Loosen the soil to a depth of at least 12 inches to help the plant's roots

establish. If necessary, mix in compost or organic matter to improve soil fertility. Take pictures of this step.

5. **Dig the Pit:** Dig a pit which is two to three times wider than the plant's root ball and just as deep. This will help the roots to spread and establish themselves. Make sure that an adult person supervises the activity and take pictures of this step to upload on the Google form.
6. **Remove the Tree sapling from Its Container:** Gently remove the tree sapling if it has a container or plastic wrapping. If the roots are tightly bound, carefully loosen them to help them in outward growth.
7. **Place the Sapling in the Pit:** Carefully position the tree sapling in the center of the pit. Ensure the top of the root ball is in level with or slightly above the soil to prevent waterlogging. Take pictures of this step.
8. **Backfill the Pit:** Fill the pit with the soil gently. Water the soil to help settle it around the roots. Take pictures after completing this step.
9. **Water the plants:** Water the plants appropriately after planting. This helps settle the soil and provides essential moisture to the roots.
10. **Mulch Around the Plant:** Apply a layer of mulch (dried leaves, straw, etc.) around the base of the plant, extending out to the drip line. Mulch helps retain moisture, regulate soil temperature, and suppress weeds. Keep the mulch a few inches away from the-plant to prevent rot.
11. **Protect the plant from grazing:** If you have planted the tree in areas within the reach of grazing animals make sure the plant is protected using some eco-friendly twigs, bamboo sticks, etc. around the plant. Take pictures of the plant after completing the step.
12. **Stake the plant (if necessary):** If the plant is in a windy area or has a weak stem, stake it for support. Use soft ties to secure the plant to the stakes, allowing some movement to encourage strong trunk growth.
13. **Water Regularly:** Ensure the plant receives regular watering, especially during the first few years until it establishes its root system.
14. **Monitor and Maintain:** Keep an eye on the health and growth of the plant. Prune any dead or damaged branches, and watch for signs of pests or diseases. Continue to water and mulch as needed. Take pictures of your tree every week to record the progress.

Following steps will help ensure your plant grows into a healthy and thriving part of the landscape. Make sure to take pictures of the tree at every step.

### **Precautions to be followed while planting**

1. **Wear Appropriate Clothing:** Ensure to use long sleeves, and sturdy shoes to protect against thorns and insects.
2. **Be Mindful of Allergies:** Be aware of any allergie(s) you may have for plants or insects. Take necessary precautions, such as using insect repellent or wearing protective clothing.
3. **Respect Wildlife:** Be aware of and respect any wildlife you may encounter during the planting process.
4. **Seek Supervision:** If you are unsure about any aspect of tree planting, seek guidance from your teacher or someone experienced to ensure safety and proper technique.
5. **Avoid Overwatering:** Ensure proper drainage to prevent waterlogging, which can suffocate roots.
6. **Handle Roots Carefully:** Be gentle when handling roots to avoid damaging them, as healthy roots are crucial for the tree's survival.
7. **Avoid Planting Too Deep:** Do the plantation at an appropriate depth so that the root collar is slightly above ground level, as planting too deep may lead to the decaying of roots.
8. **Protect Against Wildlife:** Use tree guards or fencing to protect young plants from grazing animals, such as cows, goats, rabbits, etc.
9. **Use of Manure/Fertilizers:** As far as possible, children should be encouraged to use manure or compost instead of chemical fertilizers as it is natural and chemical fertilizers can harm the tree and the surrounding environment.
10. **Monitor Growth:** Regularly inspect the tree for signs of stress, disease, or pest infestation, and take appropriate action promptly.
11. **Practice Good Hygiene:** Wash your hands thoroughly after handling soil or plants to remove any potential contaminants.



## PROCEDURE FOR FILLING GOOGLE FORM

Filling up Google Form is very easy. You need to have a Gmail account for filling this Google form

1. Once you have a working Google ID (Gmail), you can open any browser and copy/ type the following URL into browser:

<https://forms.gle/d3cgziGfnPsidnoCA>

2. Click on fill out form on the front page.
3. It will take you to the Section 1 where you need to enter personal details.



### Data submission form - RAS 2024 | डाटा प्रस्तुति फॉर्म

The name and photo associated with your Google account will be recorded when you upload files and submit this form. Your email is not a part of your response.

[deanncert.ras2024@gmail.com](mailto:deanncert.ras2024@gmail.com)

Instructions | निर्देश

Click on the following link and go through the PDF carefully before proceeding further। अभी बढ़ने से पहले, नीचे दिए लिंक पर क्लिक करें और PDF का ध्यानपूर्वक पढ़ें।

Help | सहायता

Check out announcement section on [ncert.nic.in](http://ncert.nic.in) for all the updates regarding RAS 2024.

For any assistance/help, kindly email us at

[deanncert.ras2024@gmail.com](mailto:deanncert.ras2024@gmail.com)। RAS 2024 के बारे में अधिक जानकारी के लिए [ncert.nic.in](http://ncert.nic.in) पर ध्यान से अपडेट देखें। किसी भी तरह की सहायता के लिए हमें

[deanncert.ras2024@gmail.com](mailto:deanncert.ras2024@gmail.com) पर ई-मेल करें।

The name, email, and photo associated with your Google account will be recorded when you upload files and submit this form.

\* Indicates required questions

Poster of Tree Plantation Drive for Rashtriya Avishkar Saptah 2024-2025



E-mail \*

Name of the Student \*

Class of the Student \*

4. After clicking on Next button, you will be taken to Section 2 of the Form, where you have to fill your State, District and School details like School Name, Address etc.

**School details | विद्यालय विवरण**

State/Union Territory | राज्य/केंद्रशासित प्रदेश \*

Choose

City / शहर \*

Your answer

Name of District | जिले का नाम \*

Choose

Block / Town / Sector where School is located | ब्लॉक / टाउन का नाम जहाँ पर विद्यालय स्थित है \*

Your answer

Name of School | विद्यालय का नाम \*

Your answer

U-DISE code School | विद्यालय का यू-डाइस कोड \*

Your answer

Is your school a PM Shri school? / क्या आपका स्कूल पीएम श्री स्कूल है? \*

Yes

No

I don't know

Pin code | पिन कोड \*

Your answer

Locality of School (Urban/Semi-urban/Rural) | विद्यालय के अवस्थिति (शहरी/अर्ध-शहरी/ग्रामीण) \*

Rural | ग्रामीण

Semi-urban | अर्ध-शहरी

Urban | शहरी

Name of School Principal/Head of School | विद्यालय के प्रधानाध्यापक/संचालक का नाम \*

Your answer

Name of Teacher(s) involved in guiding the activities | क्रियाकलापों के समय मार्गदर्शन करने वाले अध्यापक/ अध्यापकों का नाम \*

Your answer

Designation of Teacher(s) involved in guiding the activities | क्रियाकलापों के समय मार्गदर्शन करने वाले अध्यापक/ अध्यापकों का पद \*

Your answer

5. After clicking on Next button, you will proceed to Section 3 of the Form. In this section, you have to fill the data for Activity.

Activity / गतिविधि

Name of the 1st sapling selected for plantation / वृक्षारोपण हेतु चयनित प्रथम पौधे का नाम

Your answer

Name of the 2nd sapling selected for plantation(If planted) / वृक्षारोपण के लिए चयनित दूसरे पौधे का नाम (यदि लगाया गया हो)

Your answer

Name of the 3rd sapling selected for plantation(If planted) / वृक्षारोपण के लिए चयनित तीसरे पौधे का नाम (यदि लगाया गया हो)

Your answer

Was the soil prepared for tree plantation? / क्या वृक्षारोपण के लिए मिट्टी तैयार की गई थी?

- Yes  
 No

What was the source of collecting the tree sapling for plantation? / वृक्षारोपण के लिए पौधे एकत्रित करने का स्रोत क्या था?

- Local Nursery  
 Neighbourhood  
 Nearby forest  
 Others

Area selected for plantation / वृक्षारोपण हेतु चयनित क्षेत्र

- School Premises  
 Neighborhood  
 Public Place  
 Other

The tree plantation is dedicated to whom in your family? / आपके परिवार में वृक्षारोपण किसको समर्पित है?

- Grand Father / Father  
 Grand Mother / Mother  
 Other

Photograph of tree planted along with the student / छात्र के साथ लगाए गए पौधे की तस्वीर

3. Add file

6. After this, you have to click on Submit button to finally submit your Form.

**Note:** You can check your responses again by clicking on the Back button before making Final submission. No changes can be made after Final submission of the Form.



Data submission form - RAS 2024 | डेटा  
प्रस्तुति फॉर्म

Your response has been recorded

7. After submission, a message will be received "Your response has been recorded".

8. After this, you may close the window/ tab of your web browser.

**For any assistance/ support, kindly email us at:**

[desmncert2024@gmail.com](mailto:desmncert2024@gmail.com)

84