



## Tips for an eco-friendly Diwali

Diwali is a time for celebration with family and friends, to light up your and others life with lights, gifts, and sweets. Yet, bursting firecrackers has become a prominent part of the festival. Firecrackers lead to emissions that harm the environment and health. Also, the noise causes distress to the elderly, those with heart disease, and pets too.

Can we celebrate Diwali without noise and with minimal pollution? *Grahak Sathi* gives you tips to celebrate it the eco-friendly way.

**Green crackers:** Try to avoid firecrackers altogether. If you do want to fire some, consider green crackers.

**Clay lamps:** Light traditional clay/earthenware lamps (*diya*) instead of electric lights/ candles. Oil *diyas* are not very polluting, whereas wax is not biodegradable. Buy *diyas* directly from local craftspeople/small vendors to help brighten up their Diwali.

**Eco-friendly decoration:** Use seasonal flowers and leaves for Diwali decoration. Think of using old dupattas, silk sarees etc. for decorations. Involve your kids and use old CDs, bangles and other craft material to make interesting décor items.

**Natural rangolis:** Use natural colours (rice powder, turmeric etc.) for *rangolis* instead of chemical colours that harm your skin and cause soil/water pollution. Incorporate flowers, petals, leaves, grains, and pulses in your *rangoli*. Also, pulses and grains used for *rangolis* can be later washed properly and used as birdfeed or given for cooking to assist the poor.

**Gifting:** Choose your Diwali gifts with care to the environment. Gift a plant. Shop using jute or cloth bags instead of plastic bags. Avoid

wrapping gifts. Or use fabric or recycled paper for doing so. Do not forget the less fortunate; buy some gifts for poor children/orphanages and other less privileged.

**Shopping:** You might want to buy new clothes and gifts for Diwali. Curtail your instinct, as additional shopping uses up natural resources and clutters your home. Also, instead of shopping online, do your festival buying at neighbourhood stores to support the local community. Instead of disposing off, give forward your pre-loved used items to those who can use them. You can also donate to '*aap le no otlo*', a CERC project for collection and distribution of used items among the needy.

**Biodegradable cutlery:** If you are hosting a small Diwali get-together, use biodegradable plates, cups and glasses. Banana leaf plates and bamboo plates are good options. Serve drinks in *kulhads* (mud pots). Avoid using plastic.

**Festival waste:** Festivals can lead to accumulation of large quantities of waste. Segregate the waste and discard it in a responsible manner.





## Go green this Diwali

### *Minimise noise and smoke with green crackers*

Increasing air pollution in winters has led the government to taking several corrective measures. One such move is considering Green Crackers, which have been developed by NEERI (National Environmental and Engineering Research Institute), an Indian Council of Scientific and Industrial Research (CSIR) lab.

### **What are green crackers?**

According to CSIR, firecrackers that cause 30-35% lower emission of particulate matter (PM) and 35-40% lower emission of gaseous sulphur dioxide and nitrogen oxide, thereby reducing air pollution, are 'green crackers'. Green crackers have been named as 'safe water releaser (SWAS)', 'safe minimal aluminium (SAFAL)' and 'safe thermite crackers (STAR)'.

### **Green firecrackers -**

- are made with a smaller shell
- don't contain harmful chemicals
- have low aluminium content
- eliminate ash usage
- use dust suppressants for reducing emissions
- substitute or reduce certain harmful raw materials (particularly, barium nitrate) which cause more emissions
- cannot be loud beyond a certain limit

To reduce pollution, green crackers release water vapour and/or air that suppresses dust and dilutes gaseous emissions. Green crackers will be sold in packets with a unique green logo and a QR code, which when scanned tells you which chemicals the crackers contain.



### **Remember**

- While green crackers are less harmful, all firecrackers contain arsenic, carbon and sulphur, which are hazardous to health.
- Pollution due to crackers can cause bronchitis and worsen conditions like asthma and heart disease.
- Green crackers are likely to be 30-40% more expensive than traditional crackers as the raw materials used are costlier.
- Green crackers are not very easily available in the market and it may require some effort to scout for them.
- The colours emitted on bursting crackers mainly come from the burning of metals like copper and phosphorus. While it would be best to have colourless crackers, it would take out the fun from bursting crackers.

Just because they are green crackers, you should not go overboard in bursting them. They are a better alternative than the traditional crackers, but still need to be used cautiously.



## Celebrate Diwali safely during COVID

Diwali is a time to celebrate life, to forgive, forget and come together. And to decorate houses, light lamps, firecrackers, exchange gifts, get together and eat with family/friends. However, the pandemic has subdued the excitement of the festival this year.

*Grahak Sathi* brings you tips and suggestions to celebrate Diwali safely during COVID and keep your mood festive.

- Avoid large gatherings, specially indoors. You can meet people outdoors, in a garden/park, in groups of 5-6 with physical distancing.
- Have small family gatherings/dinners. Or have a virtual dinner with friends/family. It is safer to meet loved ones on a video call for the occasion.
- Make sure that the sweets you buy, eat and share are unadulterated and safe from contamination.
- Share festival greetings with a Namaste. Do not hug or touch anyone.
- Don't use alcohol-based hand sanitizer before lighting diyas/candles, as it can cause fire hazards. Wash hands with soap and water before doing anything which involves lighting fire.
- Keep sanitizer bottles in a safe place and away from fire.
- Wear a mask to avoid inhaling smoke and polluted air due to firecrackers, as lung health is particularly important for COVID protection.
- Do not go shopping in crowded stores.
- Avoid travelling to minimize risk. If you must travel, follow all safety protocol.
- Deliver traditional festive meals to the less privileged and people who are isolating, or at high-risk, while ensuring zero contact.

Don't forget to take all precautions for COVID-19 prevention - wear masks, wash or sanitize hands regularly, and maintain social-distancing at all times, to keep yourself and your loved ones safe.



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