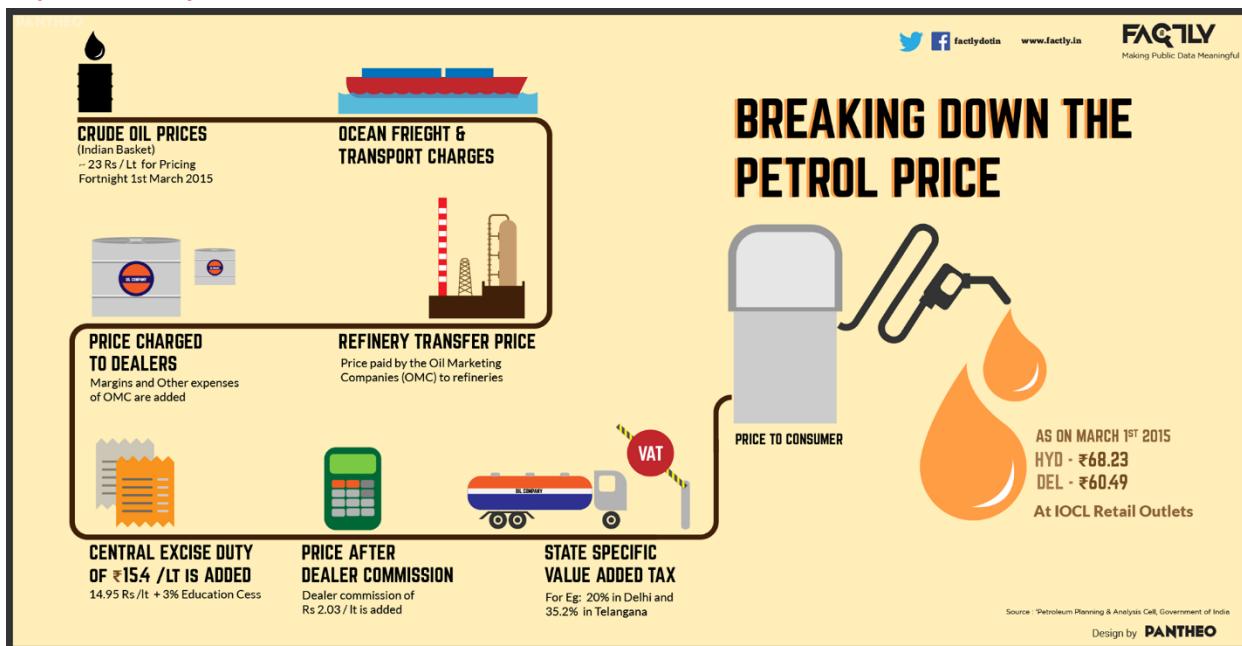


1. Oil Bonds and India's Oil Pricing Mechanism

Topic: Economy



In News: Petrol prices have crossed Rs 100 per litre in several Indian cities. Oil bonds are in the news related to this.

More on the Topic:

- Before the complete deregulation of petrol and diesel prices, oil marketing companies were faced with a huge financial burden as the selling price of petrol and diesel in India was lower than the international market price.
- The government subsidised the prices for transport fuels, LPG and kerosene through a mechanism to provide for oil marketing companies' under-recoveries.
- Oil bonds are special securities issued by the government to oil marketing companies in lieu of cash subsidy.
- These bonds are typically of a long-term tenure like 15-20 years and oil companies are paid interest.
- From 2004, oil prices started moving up, and the government restored **the cost-plus pricing system to protect consumers**.
- This 'under-recovery' is typically compensated through fuel subsidies allocated in the Union budget.** However, between 2005 and 2010, the UPA government issued oil bonds to the companies amounting to Rs 1.4 lakh crore to compensate them for these losses.

Why Government has resorted to Oil Bonds?

- Compensation to companies through issuance of such bonds is typically used when the government is trying to **delay the fiscal burden of such a pay out to future years**.



- Governments resort to such instruments when they are in danger of **breaching the fiscal deficit target due to unforeseen circumstances** that lead to a collapse in revenues or a surge in expenditure.
- These types of bonds are considered to be '**below the line**' **expenditure in the Union budget and do not have a bearing on that year's fiscal deficit**, but they do increase the government's overall debt.
- However, interest payments and repayment of these bonds become a part of the fiscal deficit calculations in future years.

The Fuel Pricing Mechanism:

- The price of petrol and diesel in India is not determined by the actual costs incurred by PSU refiners. A formula named the trade parity price (TPP) is used to price these products.
- It assumes that **80% of petrol and diesel is imported into India and 20% is exported**. So, petrol and diesel prices in India are determined based on prices of these fuels in the international market and not on the basis of crude oil prices.
- The international petrol and diesel prices generally move in line with crude oil prices. But it need not always be the case, given that demand and supply dynamics could be different.
- The TPP in dollars is converted to rupees. Then comes other costs and margins of the oil companies, dealer commission and taxes.
- From mid-June 2017, the pricing of petrol and diesel is done through a '**daily pricing mechanism**', based on a 15-day rolling average international rate. So, time lag has an effect too.
- Further, the weakening of the rupee against the dollar over the years has added to the fuel's cost.

The Taxes:

- Taxes now account for about 60 per cent of the fuels' price. During the crude crash earlier in 2020, a cash-strapped Centre raised excise duty on petrol and diesel by Rs. 13-16 a litre.
- Many States too increased their sales tax/VAT. But when oil prices started rising, the taxes were not rolled back.
- So fuel prices increased, and customers bore the brunt.

Why Fuel Price Increase is Significant?

- Higher petrol and diesel prices don't just mean higher personal transport costs. They could also cause a price spike in a host of goods and services, given that these fuels play a big part in running the economy's wheels.
- Inflation is the most important consequence.

Source: Indian Express

2. One nation one Fertiliser Policy

Topic: Economy

In News: The Centre's move to usher in a 'One Nation One Fertiliser' regime is being criticized.

More on the Topic:

- Central government has said all fertiliser manufacturers will be required to sell their products under a single 'Bharat' brand.
- All the urea bags will have bar-code which will be read through bar code reading machine, which will be linked with POS machines.
- Fertilizer company will be eligible for subsidy only when the fertilizers bag is sold through bar code reading machines via PoS Machine under DBT.



Why this Move:

- The concept note proposing to require all urea manufacturers to sell their products under a single brand of Bharat Urea, seems to be motivated by the good intention of **pruning the subsidy bill that's now close to ₹1.5 lakh crore**.
- The selling price of urea is **statutorily capped at 10-20% of production costs**.
- Under the New Investment Policy 2012, urea units can be set up with the government providing subsidy support to manufacturers based on production costs plus a 12% assured return on equity.
- This is meant to enable producers to sell urea at artificially low prices.
- **An additional freight element** was added to this subsidy to help manufacturers transport their products to the end-user.
- The new policy argues that as urea is a commodity with negligible differentiation between players, **there's no real need for producers to transport their fertilizers cross-country**.
- This will save on freight subsidies of about Rs. 3,000 crore a year.
- One of the other objectives of "One Nation One Fertilizer" is **to stop the diversion of urea for industrial purpose**.

Concerns:

- The policy, if enforced, could prove a **serious impediment to India's bid for Atmanirbharta in fertilisers**, as it may **actively discourage private players from committing to new projects in the coming years**.

- With almost every aspect of fertiliser manufacturing controlled by the government, the sector already has very few private players.

Way Ahead:

- For the Centre to reap material savings in its subsidy bill, a far simpler solution exists. **Government can deliver the subsidy directly to farmers, decontrol urea, and leave the pricing to market forces.**
- With Direct Benefit Transfers now established as a workable way to deliver leakage-proof subsidies to targeted beneficiaries, the Centre must look to transition urea to a DBT regime that reimburses small farmers for their actual fertiliser use.

Source: Hindu Business Line

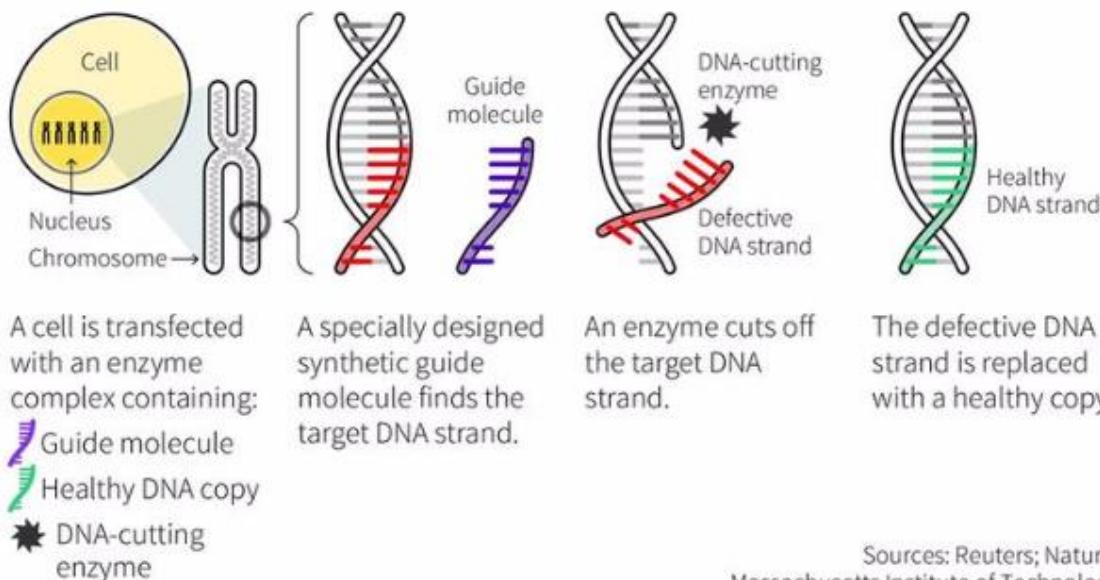
2. Genome Editing Technology

Topic: Science and Technology

DNA editing

A DNA editing technique, called CRISPR/Cas9, works like a biological version of a word-processing programme's "find and replace" function.

HOW THE TECHNIQUE WORKS



In News: The Central government has for the first time issued an order exempting certain types of genome edited crops from the stringent regulations applicable on genetically modified or GM crops thus giving a big boost to their further research and development.

More on the Topic:



- In the recent past, many countries have either developed or approved for commercial cultivation of vegetables, fruits, oilseeds and cereals developed through genome editing such as Gamma-aminobutyric acid or GABA tomato, high oleic canola and soybean, non-browning mushroom etc.
- Genome editing or gene editing was discovered back in 2012, but Indian regulators took nearly a decade to comprehend its potential for developing crops resistant to biotic and abiotic stresses and with nutritional superiority.

About Gene Editing:

- Genome editing (also called gene editing) is a group of technologies that give scientists the ability to change an organism's Deoxy-Ribonucleic Acid (DNA).
- These technologies allow genetic material to be added, removed, or altered at particular locations in the genome.
- The Indian Agricultural Research Institute (IARI) has now moved to newer technologies such as Site Directed Nuclease (SDN) 1 and 2.
- New technique aims to bring precision and efficiency into the breeding process using gene editing tools such as CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats), whose developers won the Nobel Prize for Chemistry in 2020.
- SDN genome editing involves the use of different DNA-cutting enzymes (nucleases) that are directed to cut the DNA at a predetermined location by a range of different DNA binding systems.
- After the cut is made, the cell's own DNA repair mechanism recognizes the break and repairs the damage, using one of two pathways that are naturally present in cells.
- It involves the use of gene editing tools to directly tweak (improve\change) the plant's own genes instead.
- It would allow plants to be genetically modified without the need for conventional transgenic technology.
- In this case, you are just tweaking a gene that is already there in the plant, without bringing in any gene from outside.
- When a protein comes from an outside organism, then you need to test for safety. But in this case, this protein is right there in the plant, and is being changed a little bit, just as nature does through mutation.

Difference between Gene-edited Organisms & GMO:

- The basic difference between genome editing and genetic engineering is that while the former does not involve the introduction of foreign genetic material, the latter does.
- Genetically-modified Organisms involves modification of the genetic material of the host by introduction of a foreign genetic material.
- In the case of agriculture, soil bacteria is the best mining source for such genes which are then inserted into the host genome using genetic engineering.
- In the case of agriculture, both the techniques aim to generate variants which are better yielding and more resistant to biotic and abiotic stress.

- Before the advent of genetic engineering, such variety improvement was done through selective breeding which involved carefully crossing plants with specific traits to produce the desired trait in the offspring.
- Genetic engineering has not only made this work more accurate but has also allowed scientists to have greater control on trait development.

Source: Indian Express

4. AVSAR Scheme

Topic: Government Schemes

In News: Airport Authority of India (AAI) has taken an initiative to allocate space to Self Help Groups (SHGs) at its airports for selling/showcasing the self-made products of their region.

More on the Topic:

- Under this scheme, an area of 100-200 square feet has been earmarked at each AAI operated airport.
- The space is being allotted to the self-help groups, turn on turn basis, for a duration of 15 days.
- Few outlets have already been commissioned wherein SHGs operated by local women, are showcasing and marketing their homemade local products like Puffed Rice, Packaged Papad, Pickles, Bamboo based Ladies Bag/Bottle/Lamp Sets, local artefacts, traditional craft, natural dyes, embroidery and indigenous weaves with contemporary design to the air travellers.



About Self Help Groups:

- Self-help Groups are India's most powerful channels for empowering small and rural communities to move from subsistence to sustainability. Government is constantly creating an atmosphere to strengthen the SHGs.
- Self Help Groups (SHGs) are small groups of poor people. SHGs promote small savings among their members. The savings are kept with the bank. This is the common fund in the name of the SHG.
- The SHG gives small loans to its members from its common fund.

Source: Livemint

5. BUCHA

Topic: Places in News



In News: India has condemned the killing of civilians in Bucha, Ukraine, at the United Nations Security Council (UNSC).

More on the Topic:

- The mayor of the city has stated that over 300 of the city's inhabitants were found dead in the aftermath.
- The government of Ukraine has approached the International Criminal Court (ICC) and has asked them to investigate the happenings in Bucha and whether it can be declared a Russian war crime.
- Bucha is a city in Ukraine's Kyiv Oblast.**

Source: Hindu
