

Mixed member proportional (MMP) system

New Zealand uses the mixed member proportional (MMP) system.

Under MMP, voters cast two votes: a 'party vote' that determines the overall composition of the 120-seat Parliament and an 'electorate vote' to elect a local MP for their geographical constituency.

The FPTP method decides the local MP election. There are 72 electorate seats, and parties fill the other 48 list seats.

Each party submits a ranked party list to the Electoral Commission of New Zealand before the polls. Parties then elect candidates from this list as list MPs.

The electorate vote does not alter the overall party representation in Parliament. Voters can split their vote.

Giving both votes to one political party is a 'double tick'. Allocating votes to two different parties is a split vote.

The MMP system allows a voter to choose a candidate from a different party if they don't like the local candidate from their preferred party.

This choice doesn't dilute the impact of their vote on their preferred political party's final tally in Parliament

Advantages

The MMP system has its own share of criticism.

For instance, it may prompt tactical voting, where voters might support a party that they don't necessarily endorse just to keep another party out of power.

The first benefit is that the split voting system allows for more localized accountability for elected

FIGURE 9. MIXED MEMBER PROPORTIONAL BALLOT

YOU HAVE TWO VOTES

PARTY VOTE
This vote decides the share of seats each of the parties listed below will have in Parliament.

Vote for only one party

POOL PARTY	<input type="radio"/>
PIZZA PARTY	<input type="radio"/>
SLUMBER PARTY	<input type="radio"/>
DANCE PARTY	<input checked="" type="radio"/>

RIDING VOTE
This vote decides the candidate who will be elected.

Vote for only one candidate

NG, Marjissa POOL PARTY	<input type="radio"/>
WILSON, Andrew PIZZA PARTY	<input type="radio"/>
LEBOWSKI, Jeffrey SLUMBER PARTY	<input checked="" type="radio"/>
TERRIEN, Jeanne DANCE PARTY	<input type="radio"/>

Riding vote

Please mark one X beside one candidate for your local MP.

Naomi Moore
Ruby Party

Nikhil Salvi
Coral Party

Connor Higgs
Teal Party

Evelyn Johnson
Maroon Party

Charlie Collier
Independent

Party vote

Please mark one X beside one candidate for a regional MP.
A vote for a candidate counts as a vote for that candidate's party. This vote helps select regional MPs for top-up seats.

RUBY PARTY	CORAL PARTY	TEAL PARTY	MAROON PARTY	INDEPENDENT
Benjamin Chan Naomi Moore Jamilia Demas Leon Kay Avery McDonald Samuel Biniam	Chantal Lachance Kayleigh Reed Nikhil Salvi Sophie Martins Sheng Ch'en Scarlett McIntyre	Cannon Higgs Samantha Sims Luis Gutierrez Ben Gardiner Chelsea Owens Shizuki Kimura	Michael Preston Evelyn Johnson Gayatri Chautala Sara Saare Thomas Gibbs Serena Rangl	Francesca Daly Edward Harris Alex Heath

representatives. They can't just ride a party wave.

The second is policy focus. As parties don't need to concentrate on individual candidate winnability, they can emphasise on policies and ideologies to garner party votes.

The third is that MMP improves representation for women, indigenous communities, differently abled people, and other deprived groups.

Against colonialism



Valiant fight: Members of the Rodebrug Soerabaia Community and Reenactor Indonesia taking part in a re-enactment of the 1945 Battle of Surabaya between Indonesian nationalists against British and British Indian forces, in Surabaya on Sunday. *AFP*

The Battle of Surabaya was fought between regular infantry and militia of the Indonesian nationalist movement and British and British Indian troops as a part of the Indonesian National Revolution against the re-imposition of Dutch colonial rule.

The peak of the battle was in November 1945. The battle was the largest single battle of the revolution

and became a national symbol of Indonesian resistance.

The Hindu

Zika virus/ DENV Infection

The Zika virus is a mosquito borne flavivirus. Most infections in humans are asymptomatic or with mild symptoms, including fever, rash, and joint pain.

The Zika virus became notorious during the 2015-2018 outbreak that swept through the Americas.

The outbreak was characterized by an alarming increase in the number of microcephaly cases in newborns, prompting the World Health Organisation to declare it a public health emergency of international concern in early 2016.

Researchers isolated the virus in 1947 from monkeys from the Zika forest in Uganda. The first human cases were detected in 1952 in Uganda and Tanzania.

There have since been multiple outbreaks around the world, but largely confined to the tropics.

It has more than 10,000 bases of single stranded RNA.

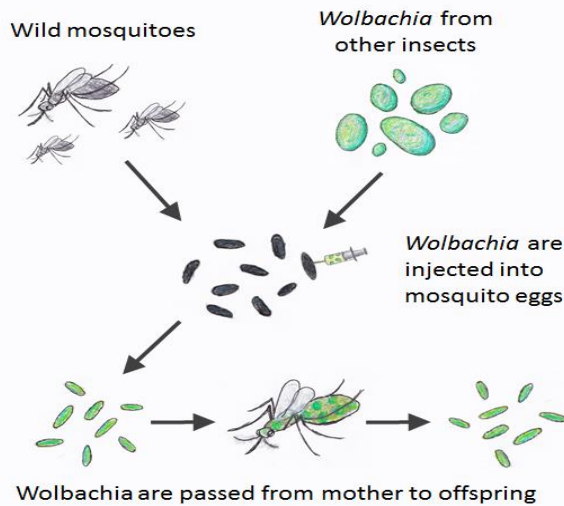
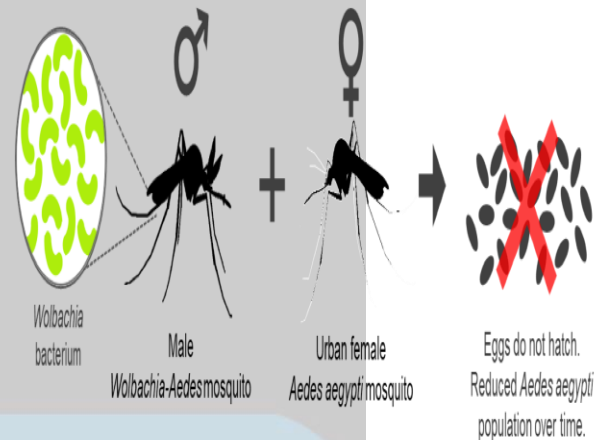
The genome is also peculiar: it encodes for a large polyprotein, which is further cleaved into capsid,

- membrane precursor (prM), envelope, and seven nonstructural proteins.
- The Zika virus has an RNA genome, and thus a very high potential to accumulate mutations.
 - Genomic studies have suggested that the Zika virus has two lineages: African and Asian
 - researchers had suggested that a mutation in one of the precursor membrane proteins, called prM, of the Zika virus was associated with microcephaly.
 - Researchers also suspected that this mutation originated during the outbreak in French Polynesia in 2013 before breaking out in South America, causing microcephaly.
 - researchers in Tsinghua University, suggested in a recent study in Cell that infections of two viruses in primates encourage specific microbes to grow on the skin by suppressing an antimicrobial peptide, RELM, on the skin.
 - These microbes produce acetophenones, which are volatile molecules that could provide a chemical cue to mosquitoes, attracting them towards the individual and supporting forward transmission of the viruses.
 - Zika virus and DENV interactions have also been an interesting area of research.
 - A significant body of evidence suggests that a Zika virus infection can significantly increase the risk for severe dengue.
 - Dengue is a viral infection caused by the dengue virus (DENV), transmitted to humans through the bite of infected mosquitoes.
 - About half of the world's population is now at risk of dengue with an estimated 100–400 million infections occurring each year.
 - Dengue is found in tropical and sub-tropical climates worldwide, mostly in urban and semi-urban areas.
 - The virus is transmitted to humans through the bites of infected female mosquitoes, primarily the *Aedes aegypti* mosquito.
 - Other species within the *Aedes* genus can also act as vectors, but their contribution is secondary to *Aedes aegypti*.
 - The Hindu

Wolbachia

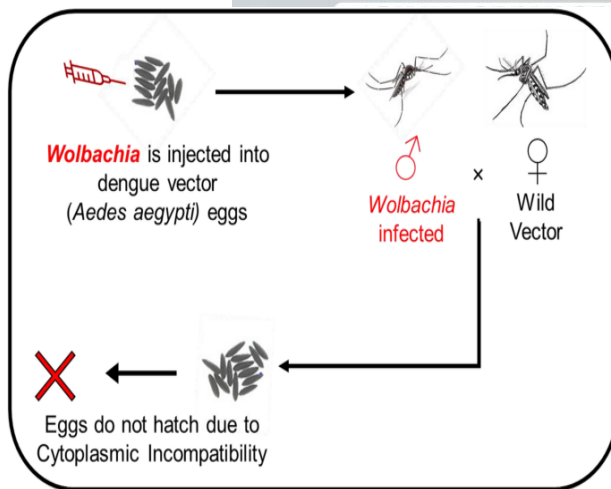
- Wolbachia is a genus of bacteria that has evolved complex relationships with the many insects that can host it.

- It is named for the American pathologist Simeon Burt Wolbach, who identified it along with Marshall Hertig in 1924.
- In 1971, researchers discovered that when male *Culex* mosquitoes infected by *Wolbachia* bacteria fertilized healthy eggs from a female, the eggs died.



- The bacteria modified the male's sperm cells in a way that only the bacteria could reverse.
- So if the female mosquito was uninfected, her egg cells would be damaged.

- But if the female was infected by *Wolbachia*, the eggs would be viable if the male was uninfected or infected by the same strain of *Wolbachia*.



- This means infected female mosquitoes gain a reproductive advantage over time as the amount of *Wolbachia* in the population increases.
- *Wolbachia* can also reduce the rate at which chikungunya and yellow fever viruses multiply in infected mosquitoes.

The Hindu

• **Evros Region**

BIG SHOT



This aerial view shows a burnt forest in the Evros region, near the village of Dadia in Greece, on October 26, 2023. The European Union has said that the Dadia fire was the largest in Europe's recorded history, ravaging more than 900 sq. km of land in three days, including a large chunk of a biodiverse ecosystem, and destroyed swathes of pasture land. [APR](#)

Unsustainable urbanization & pollution

- **Evros is one of the regional units of Greece. It is part of the region of East Macedonia and Thrace.**
- **Its name is derived from the river Evros,**
- **Evros is the northernmost regional unit. It borders Turkey to the east, across the river Evros, and it borders Bulgaria to the north and the northwest**

- **The theme of World Cities Day (October 31) this year was “Financing Sustainable Urban Future for All.”**

- **Finances must be channeled in the right direction such that urban futures which are being cut short on account of flawed urbanization are checked, and, in turn, cities made liveable and safe**

- **A report released by The Energy Policy Institute at Chicago (EPIC) shows that out of the 50 most polluted cities in the world, 39 are in India.**

- **Pollution directly affects the health of people, and an average Indian loses 5.3 years of his life expectancy due to this; for the residents of Delhi, it is 11.9 years**

Evros – River of death

The Greek-Turkish border river (outside Greece: "Maritsa") in the eponymous Greek regional district Evros



- **The need now is to turn to sustainable and “ecological urbanization”.**

- **The trajectory of urban development, where the focus is more on real estate development, a widening of roads, allowing large fuel guzzling vehicles on them, in turn squeezing the space meant for pedestrians, and redevelopment are the major reasons for increased pollution in Indian cities.**

- Road dust, concrete batching, polluting industrial units and their extension in the cities, and vehicular emissions are key factors too. It is estimated that motorized transport alone is the cause for 60% of urban pollution.
- The green lungs of the cities, water bodies, urban forests, and green cover on urban commons, and urban agriculture have all reported shrinkage, even as “grey” infrastructure has seen rapid expansion.
- Hence, the priorities need to be set right. During winter in North India, there is a hullabaloo over the burning of paddy straw (called Parali) as being the cause for smog (smoke and particulate matter).
- This is partially true. The burning of paddy, primarily in Haryana and Punjab, only escalates the problem
- India’s automobile market has risen in value from \$100 billion and is expected to touch almost \$160 billion by 2027, registering a growth of 8.1%.
- There is a compelling need to have an alternative strategy of city building, where the focus is on more public transport, having secure pedestrian paths and bicycle lanes with the creation of a post of bicycle officers, and regulating construction activities through standard operating procedures.
- There needs to be good public transport, with investment in buses for towns and cities.
- Strong steps need to be taken to control private motorized vehicular movement in the cities.
- Likewise, an odd number even number plate formula can be another important intervention. Some cities have a no car day on certain days.



Steps needed

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- **Urban communities must protect, nurture and expand them.**
- **However, our urban development strategy has been the inverse of that.**
- **Massive land use changes and the handing over of open spaces to real estate developers do not look to be ending anytime soon**
- **So-called solutions such as smog towers or even watering roads are just cosmetic.**
- **People's empowerment through the city's governance architecture is a firm step forward.**
- **Pollution guides and standard operating procedures for various line departments and agencies must not only be made readily available to the people but should also become a part of the way of life in the city.**

The Hindu
