

Can drones transform our agriculture?

Turanur Islam

Drones, which are becoming popular in Bangladesh, have huge potential in local agriculture and can be used to reduce costs as well as increase efficiency, say experts.

They say the world population will reach nine billion by 2050 and better agriculture technologies are needed to feed this massive population. Considering that, drones can be very effective in boosting food production in many ways.

Former vice-chancellor of Bangladesh Agricultural University Dr MA Sattar Mandal told The Business Post using drones in the field of agriculture has many different advantages, such as spraying liquid fertilisers aerially.

He said drones can calibrate liquid fertilisers for different crops through Artificial Intelligence and remote sensing. "Different crops need liquid fertilisers in different growth stages, and drones can come in handy here."

According to the academic, drones can precisely carry out these tasks in real time with or without the help of an operator. "They can provide reports on crop health and soil condition as well as predict harvests in compliance with weather data."

Explaining further, Dr Sattar said drones are also used to plant seeds as well as spray the right amount of water, fertilisers, pesticides, and herbicides on crops.

"They can spray these by detecting infected or weak plants without affecting the healthy ones. This means farmers can do various tasks by using drones without the help of manual labour."

Moreover, drones can be used in climate-affected regions, especially to fight droughts, he said, adding, "Drones can measure the proper level of water in the field and irrigate crops without wasting water, unlike traditional methods."

The agricultural economist said, "In countries like Japan, where labour



Different crops need liquid fertilisers in different growth stages, and drones can come in handy here

- Courtesy Photo

shortage is a massive problem, drones can estimate final yields with precision using advanced algorithms and pinpoint where fruits and vegetables will grow during the flowering stage. Then automated devices can be used to harvest the yields without any wastage."

He observed that Bangladesh needs enormous modernisation in agriculture to get these benefits of drones. He also said drones can play an important role in addressing the current issues in the food sector.

"But it is very difficult to import agriculture drones in Bangladesh due to the strict official rules. Most drones used in agriculture exceed the permitted consumer drone weight," Dr Sattar noted.

Many large farms want to use drones but are still relying on traditional methods due to these limitations, he added.

Khandakar Mohammad Rashed Iftekher, additional deputy director at the Department of Agricultural Extension (DAE) and in-charge of the DAE control room, told The Business Post,

"We have proposed using drones in an upcoming project."

"We hope the project will get approval. Its implementation will begin within a year," he added.

Drone rules

The Bangladesh government has allowed drones for personal or institutional use since 2014, but there are strict rules.

The Civil Aviation Authority of Bangladesh (CAAB) has authorised the use

of drone cameras or drones through the Drone Registration and Flight Policy 2020. Drones are divided into four categories based on their use:

Category A: Used for recreational purposes only

Category B: Used by public or private organisations or individuals for non-commercial purposes, such as education and research

Category C: Commercial and professional use, such as still photography, film production, and transportation of goods

Category D: State or military use

The 2020 policy also specified zones where drones can be flown and the registration process for drone pilots. Drones weighing less than 7kg and flying at a height of less than 50 feet do not need official permission if they are flown outside three kilometres of airports and key point installations (KPIs).

Besides, drones weighing less than 7kg and flying at a height of less than 100 feet do not need official permission if they fly outside three kilometres and a half of airports and KPIs.

In all other cases, A, B, and C category drones need CAAB permission. The defence ministry approval is required to import drones weighing more than 7kg.

Bangladesh Armed Forces announced at the end of July this year to buy Turkish Bayraktar TB2 drones for military use, BBC reported. Bangladesh Institute of Peace and Security Studies says drones can be very useful in modernising the country's military.

Drone imports

The imports of D category drones increased recently due to the extensive demand for enterprise drones in the field of state security and surveillance.

Drone importers say the existing law is very vague and needs amendment to keep up with the progress in the modern world.

Next Gear, the largest importer of enterprise drones, started its business in 2020 after securing a dealership from China's Shenzhen DJI Sciences and Technologies. It has supplied drones to the military, Rapid Action Battalion, police, and other state agencies.

Mahmud Riyaz, director of Next Gear, told The Business Post it is a new technology in Bangladesh and the demand for both enterprise and consumer drones is skyrocketing.

"Our drones are mostly used to ensure public safety and improve aerial surveys. They are also used in urban planning, construction, and natural resource management."



A health worker takes a swab sample from a man to test for the Covid-19 coronavirus in the Huangpu district in Shanghai on Monday

- AFP Photo

WHO says not a time to relax on Covid, flu

AFP. Copenhagen

As winter approaches, the World Health Organization on Monday stressed the importance of staying vigilant as cases of Covid and influenza rise in Europe, encouraging more people to get vaccinated.

"This is not a time to relax," WHO Europe director Hans Kluge told a press conference.

The 53 countries that make up the WHO Europe region, which includes Russia and countries in Central Asia, were once again at the epicentre of the Covid-19 pandemic, accounting for nearly 60 percent of new Covid cases worldwide, Kluge said.

At the same time, cases of the seasonal influenza are peaking.

With this new wave of Covid, deaths and admissions to intensive care are not increasing to the same degree as earlier waves, and the WHO stressed the link to vaccination campaigns.

"Vaccination remains one of our most effective tools against both flu and Covid-19," Kluge said, urging those eligible to get jabs for both the influenza and booster shot for Covid-19 as soon as possible.

On Monday, the WHO also marked World Polio day, a disease which affects mostly the very young and causes paralysis, and has been virtually wiped

out in the western world.

A mutated variant of the polio virus derived from oral polio vaccines has however recently been detected in the UK, Ukraine, Israel and the US.

Less virulent than the natural virus, this variant can nevertheless cause severe symptoms, such as limb paralysis in unvaccinated patients.

While rare, the variant has become more common in recent years due to low vaccination rates in some communities.

"I think it's important that we understand that anywhere in the globe if we left people behind, the polio virus is a very good barometer to tell us who are they," WHO Europe expert Siddhartha Datta told reporters.

Datta explained that regardless of the region, the populations affected were those "underserved," meaning that they for different reasons had not received enough vaccines to reach the 95 percent coverage target.

No cases of the natural polio virus have been reported in Europe for more than 20 years.

"This is not something we can take for granted," Kluge said.

In the region as a whole, coverage with the third dose of the polio vaccine fell by one percent between 2019 and 2020. By 2021, only 25 of the 53 countries had achieved 95 percent polio vaccine coverage.

Russia claims Ukraine in 'final stage' of creating 'dirty bomb'

AFP. Moscow

Moscow said Monday that Ukraine had nearly completed developing a "dirty bomb," after Russia's defence minister in calls with NATO counterparts claimed Kyiv's forces were planning to deploy the weapon.

"According to the information we have, two organisations in Ukraine have specific instructions to create a so-called 'dirty bomb'. This work is in its final stage," Lieutenant General Igor Kirillov said in a statement on Monday.

He said Kyiv was planning to accuse Russia of "using weapons of mass destruction in Ukraine and thus launch a powerful anti-Russian campaign in the world".

The weapon would be composed of radioactive elements "creating radioactive contamination over large areas, and potentially also leading to radiation diseases" after detonation.

Ukraine's foreign minister Dmytro Kuleba said UN nuclear agency (IAEA) chief Rafael Grossi accepted his request to "urgently send experts to peaceful facilities in Ukraine which Russia deceitfully claims to be developing a dirty bomb."



A Ukrainian serviceman stands on a tank near Borivske, Kharkiv region on Sunday

- AFP Photo

The United Kingdom, the United States and France issued a joint statement dismissing the claim earlier on Monday.

"Our countries made clear that we all reject Russia's transparently false allegations that Ukraine is preparing to use a dirty bomb on its own territory," according to the statement.

Russian Foreign Minister Sergei Lavrov said the reaction from the West was "in line with their reckless support for their protegee (Ukraine President Volodymyr) Zelensky, their indulgence for his Russophobic actions and destruction of civilian population," during a press conference Monday.

Five more die of dengue in 24 hrs

Staff Correspondent

Five more deaths from dengue confirmed in 24 hours till Monday morning raised this year's fatalities from the mosquito-borne disease in Bangladesh to 118.

During this period, 903 more patients were hospitalised with this mosquito-borne fever as cases keep rising, according to the Directorate General of Health Services (DGHS).

Of the latest deaths, three were reported from Dhaka, one from Mymensingh and another from the Khulna division.

With this the Dengue death toll from Dhaka rose to 70, it stood at four in Khulna and at three in Mymensingh.

The dengue death toll remained unchanged at 36 in the Chattogram division and at five in the Barishal division.

Of the new patients, 575 were admitted to different hospitals in Dhaka and 328 outside it, according to the Directorate General of Health Services (DGHS).

A total of 3,482 dengue patients, including 2,290 in the capital, are now receiving treatment at hospitals across the country.

The Directorate has recorded 31,966 dengue cases and 28,650 recoveries so far this year.

Myanmar military air strikes on ethnic rebel group kill dozens

AFP. Bangkok

Myanmar military air strikes on a concert held by a major ethnic rebel group killed around 50 people and wounded 70, the rebels said on Monday.

"Around 8:40pm (1440 GMT) Sunday, two Myanmar military jets attacked" a ceremony the Kachin Independence Army was holding, Colonel Naw Bu told AFP.

"Around 50 people were killed including KIA members and civilians," he said, adding that around 70 were wounded.

Local media reported that up to 60 soldiers and civilians had been killed. Images shared by local media pur-



This photo combination made from a viral video shows the aftermath of the airstrike in A Nang Pa region of Hpakan township in Myanmar - Collected Photo

ported to show the aftermath, with debris littering the ground.

The United Nation's office in Myanmar said it was "deeply concerned and saddened by reports of airstrikes that took place in Hpakan, Kachin State".

"Initial reports suggest that over 100 civilians may have been affected by the bombing," it said in a statement.

"Numerous fatalities have also been reported," it added.

A junta spokesman did not respond to a request for comment.

The KIA has clashed regularly with the military for decades, with heavy fighting erupting in the wake of last year's coup.