



SUSTAINABILITY BRIEF

AGROCHEMICAL REDUCTIONS

Agrochemicals (pesticides and fertilizers) are applied in a sparing and responsible manner to protect crops from pests and to enhance crop yields while minimizing risks to people and the health of the environment.

We do not apply any chemicals in conservation areas, and we ensure that our workers are sufficiently trained and equipped for the safe handling of any chemicals. When handling chemicals, our workers use appropriate personal protective equipment (PPE) provided by the company. Workers involved in the application of agrochemicals also undergo regular medical check-ups.

Integrated Pest Management

Our Integrated Pest Management system combines compatible methods to minimize the potential loss of yield due to pest damage while progressively reducing reliance on chemical pesticides. In FY 2022/23, our use of chemical pesticides was 0.086 kg per hectare cultivated and 1.67 liters per hectare cultivated, representing a 16% reduction in volume compared to FY 2018/19. Reductions are achieved through the optimal use of pesticides, techniques to suppress weeds, and use of biological control agents.

— Optimal use of pesticides

- We avoid blanket spraying and recommend only platform and circle spraying to reduce the quantity of chemicals applied.
- We adopt site specific application, selecting the right pesticides optimal for the age of palms, ground cover conditions, and the area of application.
- We promote optimal use of pesticides, by application with surfactants and adjuvants.

— Weed Suppression

Planting leguminous cover crops to suppress weeds. Applying Empty Fruit Bunches (EFB) as mulch and improved placement of cut oil palm fronds to minimize weeds.

— Biological control of insect pests

- Planting beneficial plants such as *Cassia cobanensis* to attract parasitoid species for the biological control of leaf-eating pests.
- Breeding and release of natural predators such as parasitoids.
- Utilizing pheromone traps to control damage by Rhinoceros beetles.
- Replacing chemical insecticides with biological alternatives such *Bacillus thuringiensis*.

— Biological control of rodents

Increasing barn owl populations by the installation of barn owl boxes. This helps to keep rat populations under control, reducing the need for chemical rodenticides. The Group now has 805 barn owl boxes installed across its plantations and we continue to increase.

The Group prohibits the use of paraquat and has been successful in phasing out the use of Warfarin and Carbofuran.



Fertilizer Efficiency Program

Our Fertilizer Efficiency Program successfully reduces the use of chemical fertilizer per hectare of oil palm cultivated by substituting chemical fertilizer with organic waste. The application of organic materials (including palm fronds, EFB and POME) provides nutrients, reduces moisture loss from soil and improves soil quality.

In FY2022/23, our use of chemical fertilizer was 0.63 MT per hectare cultivated, representing a 10% reduction in volume compared to FY 2018/19. These reductions have been achieved by increasing the application of empty fruit palm bunches (EFB), either via direct application or in the form of compost.

