How does the government calculate the price for fresh fruit bunches?

The Indonesian government uses the following formula to calculate the oil palm fresh fruit bunch price:

\[ P_{FFB} = k \times \left( (P_{CPO} \times OER) + (P_{PKO} \times OER_K) \right) \]

Where:

- \( P_{FFB} \) = Price of fresh fruit bunches at the mill gate;
- \( k \) = Percentage of returns given to fresh fruit bunch producers (farmers, plantations);
- \( P_{CPO} \) = CPO price;
- \( OER \) = Oil extraction rate for CPO;
- \( P_{PKO} \) = PKO price;
- \( OER_K \) = Palm kernel oil extraction rate.

The price is different for bunches from plantations of different age, because bunches from older palms contain more oil (so the OER is higher) than bunches from younger palms.

Example of how the price of a fresh fruit bunch is calculated.

If we assume that:

- CPO price is 775 dollar per tonne;
- OER is 23%;
- PKO price is 850 US$;
- PKO extraction rate is 4 percent;
- \( k \) is 0.5 (i.e. 50% of the selling price of the oil goes to the farmers).

Then the fresh fruit bunch price is:

\[ 0.5 \times \left( (775 \times 0.23) + (850 \times 0.04) \right) = 106 \text{ US$/tonne, or ~1.3 million IDR/tonne} \]

If \( k \) would be 0.75, then the fresh fruit bunch price is 159 US$/tonne, or ~1.9 million IDR/tonne.