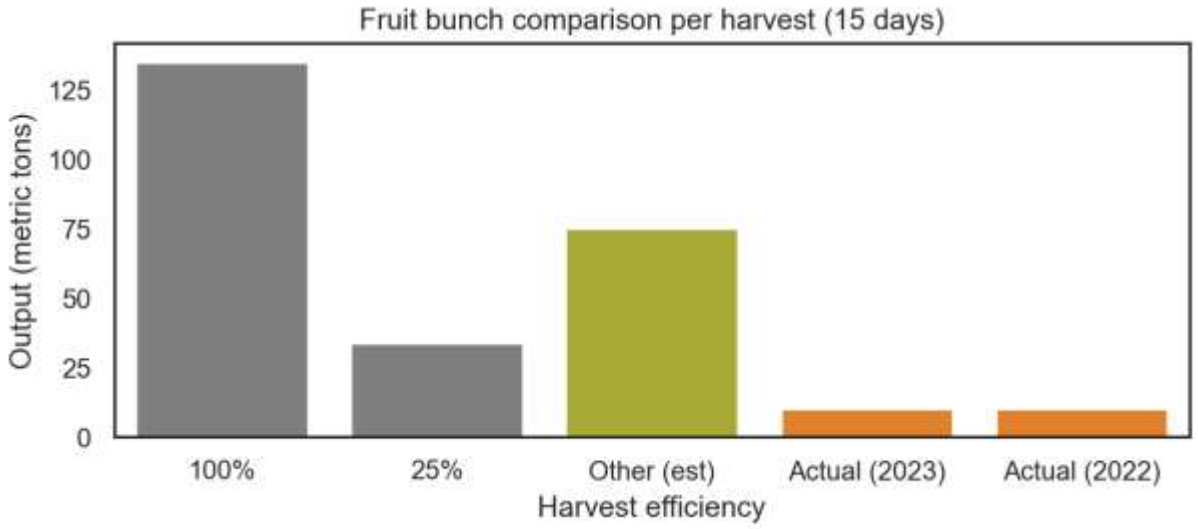
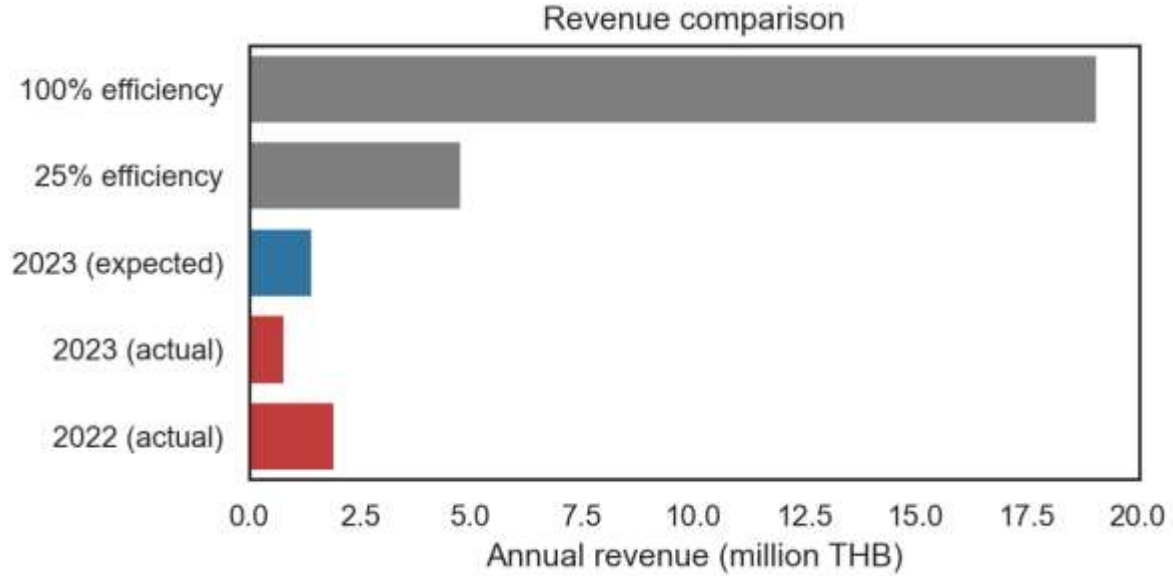
Potential yields greater than 4x can be obtained



- Total palm trees (as of May 2024) = **1,500 palms**
- Yields for 2023/2024 obtained **30% lower (10 tons/harvest)** than the **minimum potential yield (33.75 tons/harvest)** and only 7% (**10 tons/harvest)** of the **maximum potential yield (135 tons/harvest).**
  - Current rate is equivalent to harvesting 110 palm trees, despite a total of 1,500.
- Other plantations harvest **75 tons on average,** equivalent to approximately 830 palm trees.



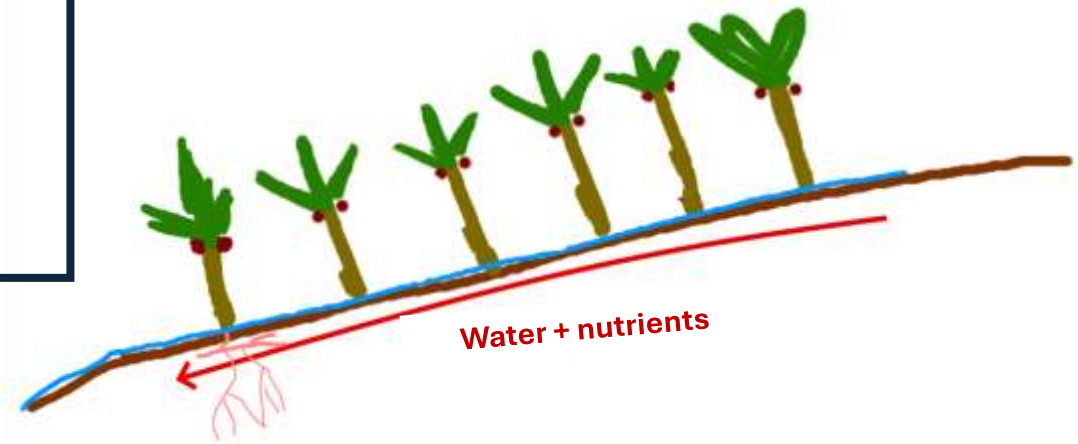
- The current yield rate (2022 – 2023) earns only **4% - 10%** of potential revenue.
- **2023:** Revenue from harvests is **61% less than** the **expected amount.**

Possible Factors Affecting Yield and Revenue

Insufficient watering causes:

- **Poor root density**
- **Low palm yield** – In countries that are dry for much of the year, for instance Nigeria, lose only 30 – 40% of maximum yield (Carr, 2011).
- **High ambient temperature –** Palms thrive in temperatures **less than 33°C**

Slope of hill may lead to insufficient water and nutrient uptake.



Fertilisers

- What season? Applying fertilizer during monsoon season can wash nutrients away.
- How often?

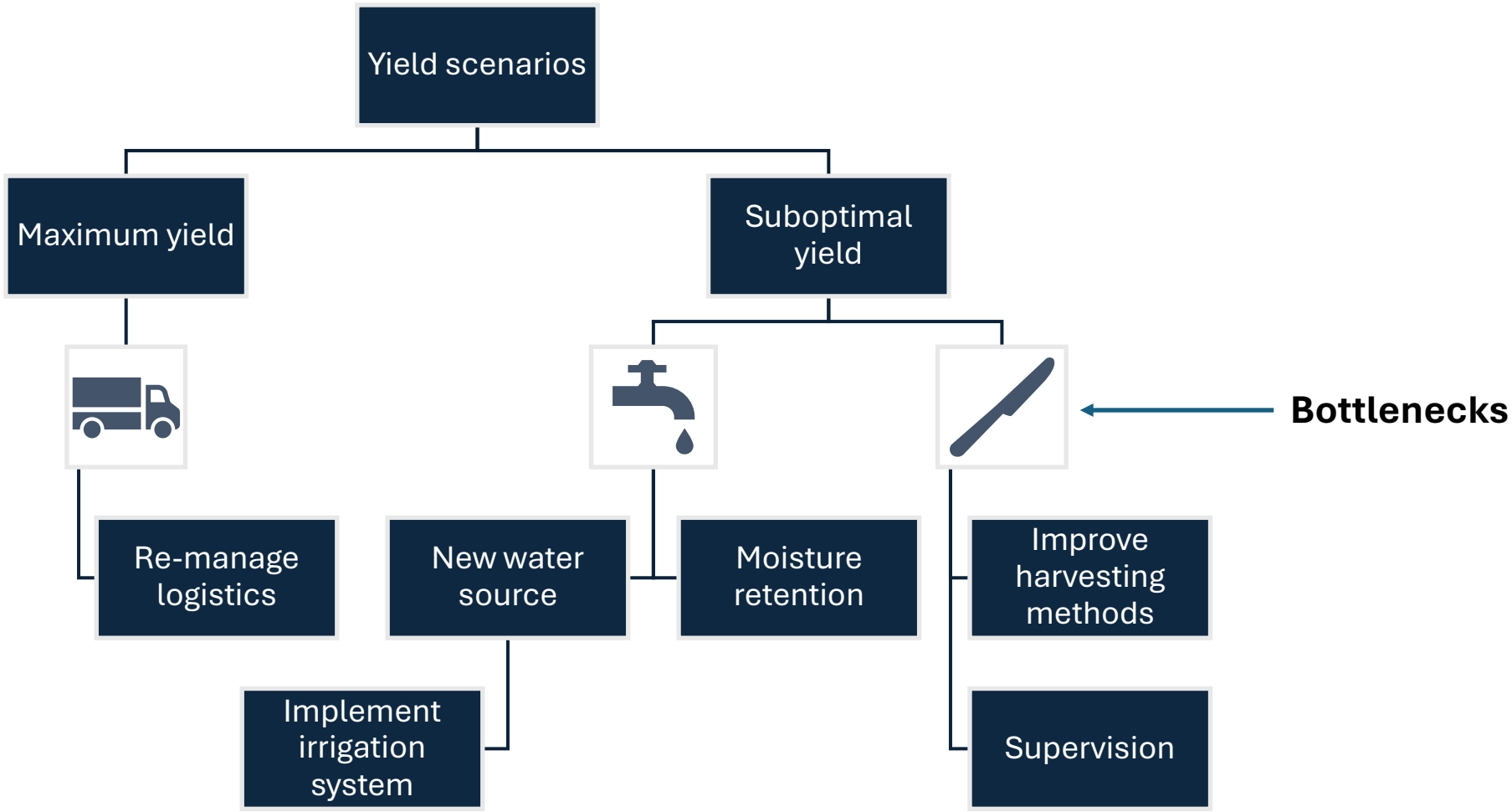
Harvesting

- Mature trees are much taller and more difficult to harvest
- Workers struggle to harvest on time?

Logistics

- According to workers, **a pickup truck can carry 3 tons/trip**, and a **six-wheeled lorry carries 7 tons/trip**.
- Possible logistics + harvest bottleneck if only 12 tons (~530 palm trees) are transported per harvest round.

Actionable Recommendations



Long-term Improvements