

# Impacts of organic fertilizers

There are different types of organic fertilizers:

## Farm Yard Manure (FYM)



Farm Yard Manure

## Compost



Decomposition of organic material by micro-organisms

## Fresh Bio-Slurry



Decomposition through anaerobic digestion of organic materials

## Bio-slurry enriched Compost (BEC)



Bioslurry added during compost composition process

## Short and long-term impact

Short-term impacts provide quick crop nutrient results in one growing season, while long-term impacts relate to changes in soil pH, structure, and microbial life. Long-term effects are seen several years after fertilizer application.

Fertiliser type	Chemical Fertilizer	Farmyard Manure	Bio-slurry Fresh	Bio-slurry dried	Compost	BEC
Immediate - Chemical	●●●	●	●●	●	●	●●
Long term - Chemical	●●	●	●	●	●	●
Long term - Physical	●	●●	●	●	●●●	●●●
Long term - Biological	●●	●●	●●	●●	●●●	●●●

**LEGEND**

- Negative
- Slightly negative
- Slightly positive
- Positive
- Highly Positive

Short term impacts	
FYM	Slow nutrient release, decomposition of 45% of organic matter (OM)
Compost	Slow nutrient release, decomposition of 10-15% of OM
Fresh Bio-slurry and BEC	Fast nutrient release

Long-Term Impacts	
FYM Bio-slurry Compost BEC	<ul style="list-style-type: none"> <li>• Increased soil pH</li> <li>• Improved structure and organic matter</li> <li>• Enhanced water holding capacity</li> <li>• Root growth boosts microbial biomass</li> </ul>
Compost	Highly beneficial for soil structure and nutrient retention because of high formation of stable hummus

