

# Success Story of MAT Technology in Shrimp Farming

## Farmer Profile :

Mr. Subbaraju Gadirajun, a corporate farmer, has been engaged in large-scale shrimp farming for the past 25 years in Keswararam Village, West Godavari, Andhra Pradesh. He owns and operates a 120-acre shrimp farm, which is divided into four blocks, maintaining high levels of hygiene and biosecurity. Mr. Subbaraju is an innovative farmer who actively conducts research and development on his farm to enhance productivity and sustainability.

## Adoption of MAT Technology :

FAITT, an NGO dedicated to supporting farmers through technology transfer, developed a novel Micro Algae Technology (MAT) using Spirulina-based products. The Spirulina is processed into a dry powder, which is then mixed with commercial shrimp feed to improve growth, coloration, and immunity.

Initially, many farmers were hesitant to adopt this new technology, as only 2.5% of farmers typically fall into the early innovator category. However, as a progressive farmer, Mr. Subbaraju quickly embraced this innovation. He conducted a trial in one crop cycle over 10 acres of land, incorporating Spirulina powder into shrimp feed.

## Observations and Results :

After experiencing positive results, Mr. Subbaraju recommended that the technology be developed into small feed pellets to enhance ease of application. FAITT subsequently developed the MAT pelletized feed, which was then introduced into Mr. Subbaraju's entire 120-acre farm. He incorporated MAT feed as 10% of the first meal of the day and observed the following benefits after two months:

1. **Increased Growth Rate:** The shrimp exhibited a weight increase of 1.5 grams extra per shrimp compared to traditional feeding methods.
2. **Enhanced Immunity:** The shrimp showed improved disease resistance, and no disease outbreaks were recorded in the farm.
3. **Improved Feed Intake:** The MAT technology enhanced feed attraction, leading to better feeding efficiency.
4. **Better Pigmentation:** During check tray observations, shrimp gut color changed to green, and pigmentation improved, resulting in visually healthier shrimp.

## Conclusion :

Mr. Subbaraju's successful implementation of FAITT's MAT technology demonstrates its effectiveness in enhancing shrimp growth, immunity, and overall farm productivity. His results serve as a model for other farmers looking to



adopt innovative and sustainable shrimp farming practices. The MAT feed technology can be effectively used after 35 days of crop initiation to achieve superior results.

This success story highlights the potential of Spirulina-based feed technology in revolutionizing the shrimp farming industry, ensuring higher yields, disease resistance, and economic sustainability for farmers in Andhra Pradesh and beyond.