CHANIA 2023



#### LIFE-F4F

#### Food for Feed: An Innovative Process for Transforming Hotels' Food Waste into Animal Feed

#### LIFE15 ENV/GR/257

**Thrassyvoulos Manios** 

Professor



10<sup>th</sup> International Conference

On Sustainable Solid Waste Management

## The F4F Production Flow Chart

20% residues



Hand sorting





Product before the solar drying tank

Pulverizer

Shredder







The F4F product / animal



Food waste generation in hotels



Bins for food

wastes collection

Waste collection Refrigerator track The F4F Pilot Unit





### The F4F LIFE Project

The pilot unit (1,5tn/day)

Production of animal feed components from food waste



The solar drying unit



# Cooperative Units with the F4F





# Refrigerator track for collection of food waste from hotels











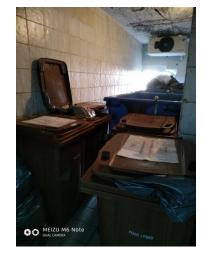
# During food waste collection from hotels















### In the pretreatment unit ... Weighting - Hand sorting – Shredding - Pulverizing



Shredder



# In the Solar drying unit...







### The F4F product ... as feed component...

✓ initial moisture 75 – 80%
✓ final moisture < 12%</li>
✓ Drying rate < 6 days</li>
✓ Crude protein 21-24%
✓ Crude fiber 16-21%
✓ Ether extracts (fats) 3-6%
✓ Evaluated as feed component
✓ Included in feedstuffs at 8-15%

#### Average drying rate: 6-8 days









### **KEEP FOOD LOSSES** IN THE FOOD CHAIN !!!!

https://life-f4f.esdak.gr/



🧑 life-f4f.gr

