

Southern Region Water Quality Conference



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Mortality Management



In-Vessel Composting

Challenges and Opportunities



What's the Big Deal?



Less Labor?



Less Management?



Less Cost?



Less Smell?



Just Something New?

Types of In-Vessel Units



Costs

Capacity

Cost



Variable

16 – 22 K



Variable

14 – 20 K



Variable

20K +

Approved Cost Share for In-Vessel Composters

Louisiana.....

Mississippi....

Alabama.....

Texas.....



USDA Cost Share

(Louisiana)

Conventional “Bin Type” for 6 House Broiler Operation

(42' X 500' house with 28,000 birds placed per house and fed to 7 lbs)

Size Re **Producer pays \$6200**

Estimated Cost ...\$24,600

Cost Share at %75 ... \$18,400



USDA Cost Share

(Louisiana)

In-Vessel Composter for 4 House Broiler Operation

(42' X 500' house with 28,000 birds placed per house 56 days old at 7 lb)

Size Requirements ...

Producer pays...\$8600

Estimated Cost ...\$27,000

Cost Share ... \$18,400



LSU AgCenter Compost Trial

Compost King

Hill Farm Research Station

*Followed stringent procedure with no deviation.



Five House Broiler Farm

*Followed “react to situation” procedure.

- Reached Favorable Temps
- Composted Large Bones
- Killed Pathogens



Producer during his first flock.



What does this tell us?

 In-Vessel units do require a certain amount of management.

BUT.....



 Required less time to dispose of mortality.

 Had no problem with predators.

 Required less labor.

 Created less odor.

 Hired labor managed the unit without a problem.

 No tractor needed after initial starting of unit.

Labor and Management

In-Vessel

Conventional

 Loading ease...



 Starting ease...



 Adding material...



 Monitoring ease...



 Turn...



 Adjust mix...



 Unload...



Advantages.....

1. Fewer predators...bio-security



2. Less smell...better neighbor relations.

3. More regulation compliance.

4. Better public perception.



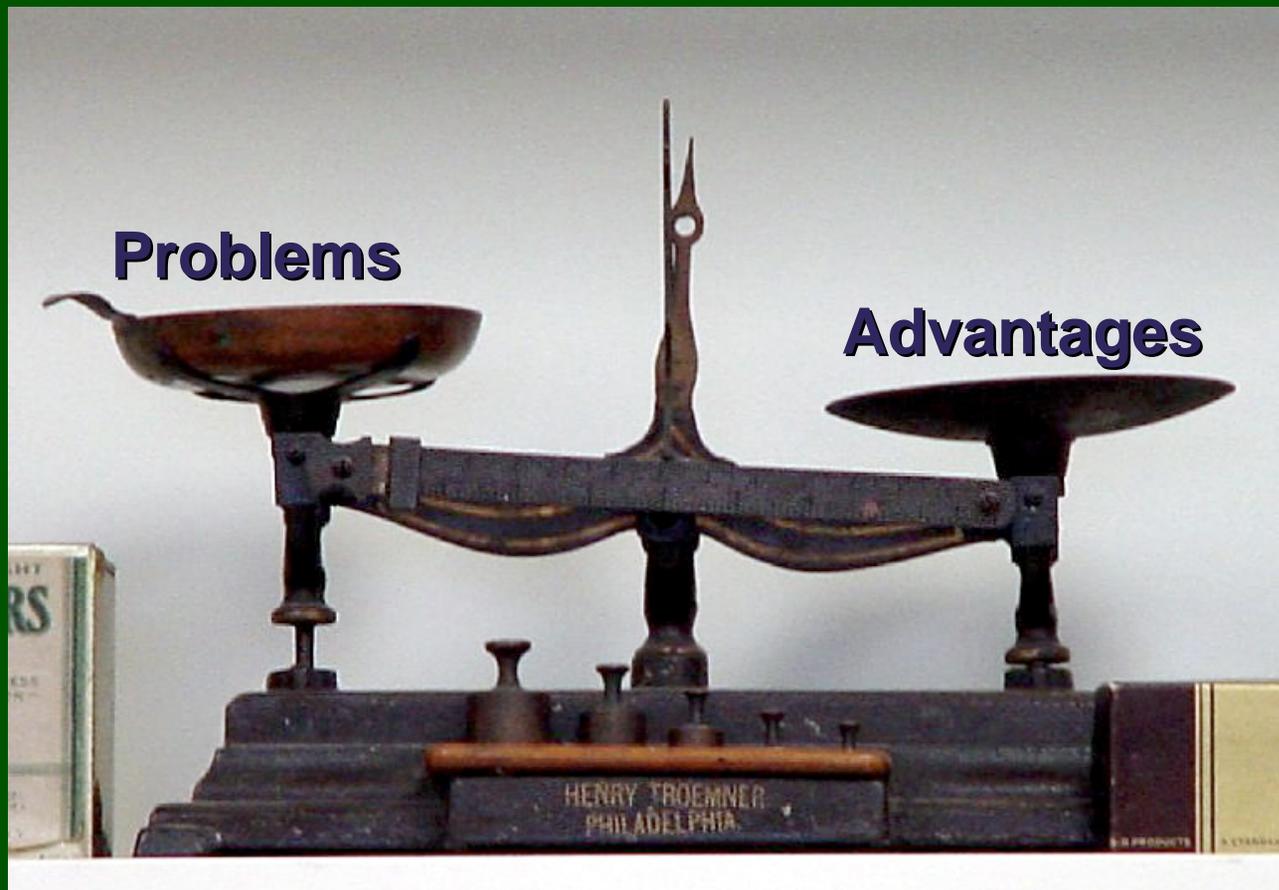
5. Composted material to be utilized.

Problems

Cost

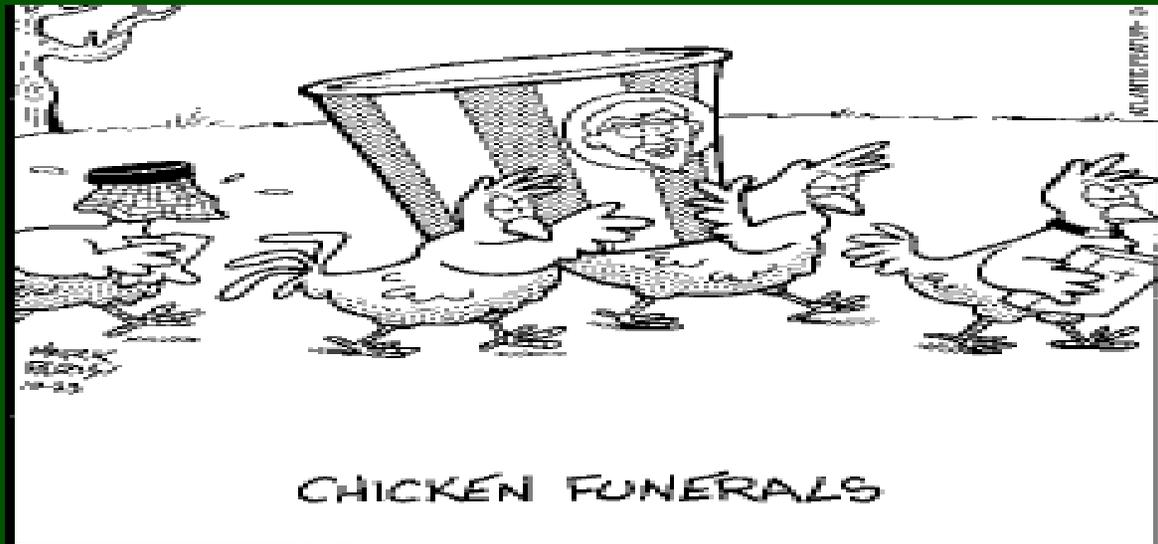
- 1. Lack of replicated research...**
- 2. Requires extra space for curing of product in in cases of short out times**
- 3. NRCS allowance for cost sharing....**
- 4. Uncertainty**

Which out weighs the other?



Findings from producers.....

Note: Of those producers who have struggled with proper mortality disposal, approximately 70 % have indicated that they would utilize an in-vessel system if it was affordable and they were provided with educational materials and programming regarding management .



Challenges

- * Lower the initial costs.....
- * Raise NRCS cost share amounts....
- * Conduct more replicated research on units.....
- * Create an “IfThen...” educational programming effort to educate producers how to react to situations....



**Let's Work Together
for water quality.....**

Thank you

LSU
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Research & Extension

