



LIFE12 ENV/ES/000647

FARMER WORK SHEET

LIFE+ FUTUR AGRARI

FARMS FOR THE FUTURE:
INNOVATION FOR FERTILIZACION SUSTAINABLE
MANAGEMENT
FERTILIZATION FROM THE FARM TO SOIL



MONITORING SHEETS

Sheets are:

- DRINKING WATER AND CLEANING WATER.
- FEEDING
- LIVESTOCK
- MANURE
- ENERGY
- FACILITIES REVIEW
- TEMPERATURE & HUMIDITY



PROCESS: DRINKING WATER CONTROL

Objective:

To check drinking water consumption in farms by meters.

Process:

It is very important that water meters at the entrance of the farm, at the entrance of the drinkers circuit, and, in the case that farm has more than one building, at the entrance of each building.

Weekly, general and drinkers circuit consumptions must be registered.

On the other hand, if there are meters in cooling circuit, water consumption must be registered weekly.

Finally, cleaning water consumption should be registered when cleaning activity is carried out in the building.

Tools:

Water Monitoring Sheet:

Water meters. It is very important to have water meters in different distribution lines.



WATER MONITORING SHEET.

Farm Identification:

Drinking water consumption:

The reading of the water meter will be made once a week during the cycle of fattening
 Number of building: _____

WEEKS		
	m ³	Date
Week 1/.../.....
Week 2/.../.....
Week 3/.../.....
Week 4/.../.....
Week 5/.../.....
Week 6/.../.....
Week 7/.../.....
Week 8/.../.....
Week 9/.../.....
Week 10/.../.....
Week 11/.../.....
Week 12/.../.....
Week 13/.../.....
Week 14/.../.....
Week 15/.../.....
Week 16/.../.....



WEEKS		
	m ³	Date
Week 17/.../.....
Week 18/.../.....
Week 19/.../.....
Week 20/.../.....
Week 21/.../.....
Week 22/.../.....
Week 23/.../.....

(It implies to have water meters in drinking circuit)

Water cleaning consumption:

Beginning		Ending	
m ³	Date	m ³	Date
.....	.../.../...../.../.....
.....	.../.../...../.../.....
.....	.../.../...../.../.....

(It implies to have water meter in the cleaning circuit)



PROCESS: FEEDING

Objective:

Volume, presentation way and feeding composition are factors that affect the water volume consumed by livestock. Therefore, a feeding control can help find solutions for a more efficient use of water.

Process:

When feed arrives to farm, it must be write:

- I. Arrival date of feed.
- II. Productive phase of destination.
- III. Volume of feed.
- IV. Building of destination.
- V. Presentation of feed: grain, flour, extruded.

Moreover, it is important to write feed composition. This information should be recorded whenever there is a change in feed formulation.

- I. Protein
- II. Energy
- III. Fiber
- IV. Phytases
- V. Mineral salts.

Tools:

Monitoring sheet **Feeding**.

MONITORING SHEET FEEDING

Types of feed, time and volume consumed:

Number of building: _____

Types of feed: _____ (grain, flour, soup)

WEEKS	CODE FEED	Start date	Kg feed
Week 1		.../.../.....	.....kg
Week 2		.../.../.....	.....kg
Week 3		.../.../.....	.....kg
Week 4		.../.../.....	.....kg
Week 5		.../.../.....	.....kg
Week 6		.../.../.....	.....kg
Week 7		.../.../.....	.....kg
Week 8		.../.../.....	.....kg
Week 9		.../.../.....	.....kg
Week 10		.../.../.....	.....kg
Week 11		.../.../.....	.....kg



WEEKS	CODE FEED	Start date	Kg feed
Week 12		.../.../.....	.....kg
Week 13		.../.../.....	.....kg
Week 14		.../.../.....	.....kg
Week 15		.../.../.....	.....kg
Week 16		.../.../.....kg
Week 17		.../.../.....kg
Week 18		.../.../.....kg
Week 19		.../.../.....kg
Week 20		.../.../.....kg
Week 21		.../.../.....kg
Week 22		.../.../.....kg
Week 23		.../.../.....kg

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Feed composition:

	Protein: <i>Unit:.....</i>	Energy <i>Unit:.....</i>	Fiber <i>Unit:.....</i>	Phytases <i>Unit:.....</i>	Mineral salts <i>Unit:.....</i>
Code feed:					
Code feed:					
Code feed:					
Code feed:					
Code feed:					
Code feed:					

Record units. (% , gr by kg; mg by kg; kjoules by kg) according to the labelo or cooperative thecnic



PROCESS: LIVESTOCK

Objective:

Production stage, genetics, production days, number of fattened animals is factors that help to calculate the unit cost of water consumption on the farm.

Process:

At first, it must to make a description of the types of animal on the farms.

- VI. Livestock genetic on each productive phase.
- VII. Capacity and number of animals on each productive phase.

Moreover, to know the unit consumption of water in different phases of farm, production rates for each production phase shall be entered as:

- I. For the fattening production:
 - i. Number of animals at the beginning.
 - ii. Number of animals at the end.
 - iii. Starting date
 - iv. Departure date
 - v. Middleweight input
 - vi. Middleweight output.

Tools:

Monitoring sheet **LIVESTOCK**.



MONITORING SHEET LIVESTOCK

Fattening production

Entrance date	Number of animals	Weight (kg)
.../.../...kg
.../.../...kg
.../.../...kg
.../.../...kg

Departure date	Number of animals	Weight (kg)
.../.../...kg
.../.../...kg
.../.../...kg
.../.../...kg



PROCESS: Manure

Objective:

To know results of correct water management and decrease the volume of manure, the output volume must be controlled.

Process:

At first, storage capacity and waterproof material must be known

Moreover, slurry volume from farm must be recorded:

- I. Date.
- II. Pond where manure has been collected.
- III. Collected volume
- IV. Slurry electrical conductivity.

Tools:

Monitoring sheet **Manure.**

As the farm's owner is required to complete the book management, where information is more detailed you can replay sheet for book.



Date	Manure pond	Cond (CE) mS/cm	Volume (m ³)
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³
.../.../...	m ³



PROCESS: ENERGY

Objective:

To know energetics consumptions for different activities on the farm, is a first step in energy saving policies.

Process:

With respect to consumption from buildings:

- I. Entrance date of animals.
- II. Electric meter reading, gas, electricity and others.
- III. Departure date of animals.
- IV. Electric meter Reading, gas, electricity and others

With respect to cleaning water consumption (if it can be checked):

- V. Electric meter Reading, gas, electricity and others at the beginning
- VI. Electric meter Reading, gas, electricity and others at the end.

With respect to manure management consumption, in case all management is performed within the frame.

- VII. Diesel consumption in transport and manure application.

In case you have a treatment into farm.

- VIII. Electric meter reading, gas, electricity and others during farm treatment.

Tools:

Monitoring sheet **Energy**.



PROCSS: FACILITIES REVIEW

Objective:

Facilities review and repair them involved in water distribution.

Process:

Monitoring protocol with a predetermined order must be made.

A visual check daily to all drinkers in the farms and to distribution facilities must be performed

Date and incidents must be registered.

In case of leakage, an action protocol must be written.

Tools:

Monitoring sheet **Facilities review**



Water leak repairs:

Date	Comments
.../.../.....	
.../.../.....	
.../.../.....	
.../.../.....	
.../.../.....	
.../.../.....	

Other incidents



PROCESS: TEMPERATURE AND HUMIDITY

Objective:

Controlling environmental conditions including temperature and humidity, report us, in the one hand, the conditions found in pigs (more heat, more water consumption) and secondly, if the outside temperature is controlled, the efficiency of cooling systems and building insulated.

Process

Maximum and minimum inside and outside temperature and humidity percentage must be registered daily.

Tools:

Monitoring sheet **Temperature**



Date	Maximum T	Minimum T
.././...°C°C
.././...°C°C
.././...°C°C
.././...°C°C
.././...°C°C
.././...°C°C
.././...°C°C
.././...°C°C
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Date	Maximum T	Minimum T
.././...°C°C