



# E-learning materials delivered under R4D

**Lean Management** 













Univerza v Ljubljani

























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# Welcome



Welcome to this e-learning module on The 8 Wastes. This module will provide a high-level introduction to the 8 Wastes of Lean. These wastes exist in your farm business impacting your productivity, cost and business performance. Understanding what these Wastes are and how to eliminate them is essential to every farm.

#### Key learning objectives:

- Learn about the components of work
- Discover how much Waste can be in our processes
- Discover why this Waste is bad for our farms
- Learn what the 8 Wastes are
- > Be able to relate these 8 Wastes to the farm
- ➤ Learn the 5 steps to help eliminate these wastes



Lean is often defined as:

"The relentless pursuit of <u>IDENTIFYING & ELIMINATING</u>

<u>WASTE</u> in all of it's forms in order to improve business

performance and customer satisfaction."

The concept of Waste in a lean business can be challenging to understand as it is Waste seen in the eyes of the customer. It is also something we as farmers need to learn to see.

### Our work



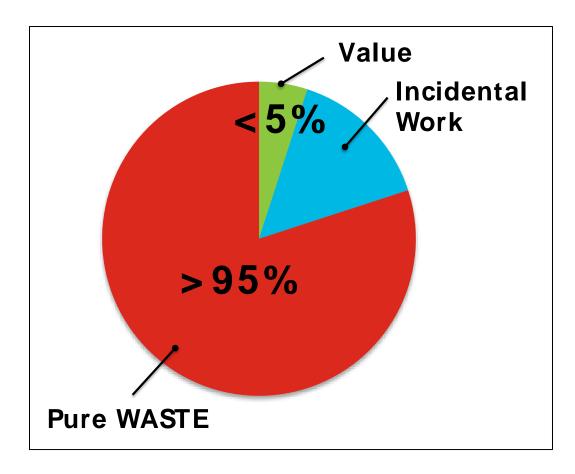
Everything we do on farm – all our jobs and tasks can be broken into 3 elements:

**Value Added** – components of what we do that is seen as value adding in the eyes of the customer

**Incidental** – these are components of our work that are not necessarily value adding but we must do them due to compliance or regulation.

**WASTE** – these are all the components of our work that do not add any value to our product/ customer and even our farms. They simply Cost our farms money.

Very often, a large portion of our end-to-end tasks/ processes are considered Waste in the eyes of the customer.



YES that's right – often **95%** of what we do is **WASTE!** 

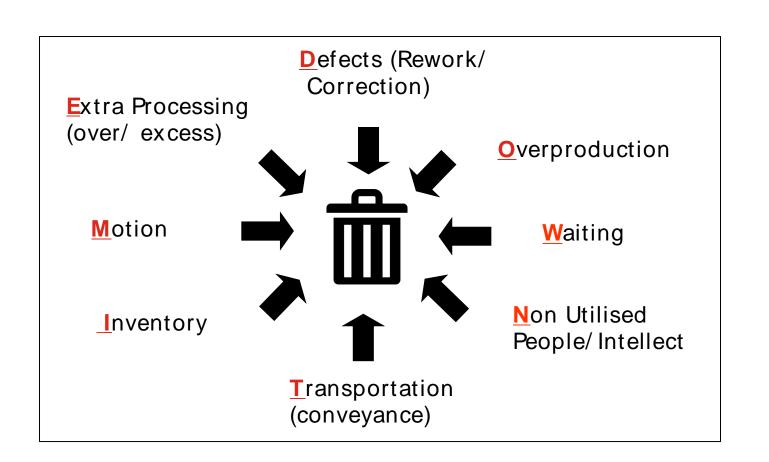
### The 8 Wastes



What is this Waste on farm that takes up all our time? The Waste consists of 8 components or types of activities that are known as the 8 Wastes.

The 8 Wastes can be remembered by the acronym **DOWNTIME** – if you are spending any time doing any of these 8 Wastes then it is considered downtime for your farm business.

All these 8 Wastes can be found regularly on all types of farms every day. To become lean and productive, we need to learn how to see these wastes and begin to reduce or eliminate them.



### Defects



**Defects or Rework** is where a product, service or information is incorrect because a process or procedure is not completed correctly the first time and therefore needs to be scrapped, redone, or fixed. Time is spent detecting, checking or fixing errors/defects.

#### Examples of Defects on Farm:

- ➤ High somatic cell count
- ➤ Mastitis/ other health issues
- ➤ Milk Grades
- > Feed allocation that is incorrect
- > Incorrectly washed plant
- > Poor pasture utilisation
- > High empty rate









# Overproduction



**Overproduction** is where an excess of products, or services or information are being created, without there being any real requirement for them.

Examples of Overproduction on Farm:

- > Too much milk in market
- > Too much grass
- > Too many calves
- > Too much feed/ crops grown









**Waiting** is where people or materials are not being utilised because they are waiting for another person or process to complete before work can resume.

#### Examples of Waiting on Farm:

- Waiting for cows
- Waiting for people to start meeting/job
- Waiting for information/ decisions
- Waiting for instructions
- ➤ Waiting on suppliers/ contractors
- ➤ Waiting on components or parts
- ➤ Waiting for equipment/implements









# Non utilised people/ talent



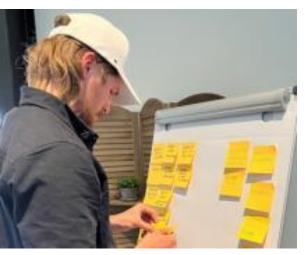
**Non utilised people/talent** is where a farm does not get the best out of its people. People can be an extremely valuable asset to every farm. The key is to bring out the best in people and use their skills and contribution effectively.

Examples of Non Utilised People on Farm:

- Poor communication
- Poor training
- ➤ Not listening to ideas
- ➤ Not involving team in discussion/ decisions
- ➤ Not understanding skill of people
- ➤ Blame culture









## Transportation



**Transportation** is the unnecessary or excessive transportation of materials, products, items and equipment that adds no value. Too much transportation should be avoided and is often the result of areas spaced far apart, poor layouts, poor flow or materials/ resources/ equipment/ tools being in unsuitable locations.

#### Examples of Transportation on Farm:

- > Transporting feed
- ➤ Transporting supplement/ minerals
- ➤ Moving calves from one area to another
- > Transporting cows
- > Transporting milk to feed calves









### Inventory



**Inventory** is materials, product or resources that are in excess of what is needed to get the job done or produce your milk. It is often evident as too much stock of something.

### Examples of Inventory on Farm:

- > Too many animal medications
- > Too much grass seed
- > Too many chemicals
- > Too many supplements
- > Too many teat wipes
- > Too many inflations
- > Too much calf meal









**Motion** is any movement of people which does not add value to the product. Motion waste is related to human movement. It is inherent on our farms.

#### Examples of Motion on Farm:

- Bending to reach taps
- > Excess walking to get tools
- Searching for items
- > Driving motorbikes to follow cows in
- > Driving a tractor back and forth to collect something









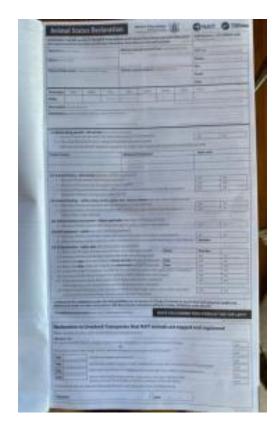
## Extra-processing

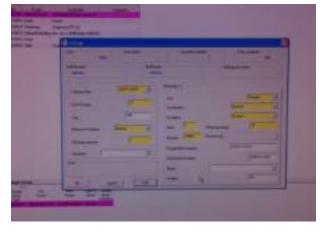


**Extra-processing** is where a process or person works hard, but not necessarily smart, or does more than is necessary to deliver the expected outcomes. This creates a waste which is not always easy to see and can often be mistaken as part of the process. The effort adds no value to the product (our milk).

Examples of Extra-processing on Farm:

- > Entering the same information multiple times
- > Collecting information that is never used
- Over-spraying teat spray





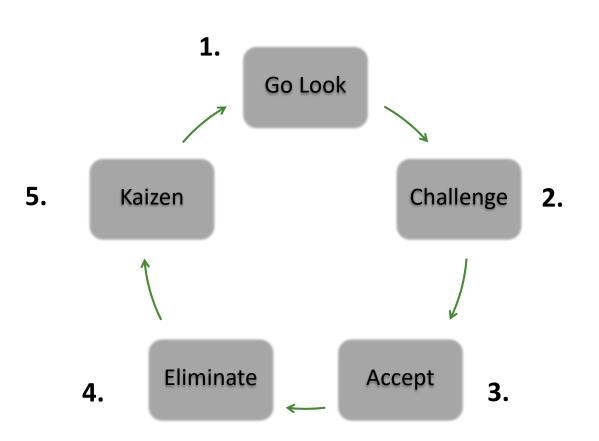


## Steps to eliminate Waste



Eliminating Waste can be difficult. The biggest barrier for farmers is to challenge the status quo and accept that certain tasks or activities they are currently doing are in fact waste – they are not adding any value to the milk product.

Once you accept that there is Waste, you will learn to see this Waste every time you are on farm. Eventually you can work on reducing or eliminating this Waste. This is part of the continuous improvement cycle.



### Waste Walk



A Waste Walk is a lean activity that helps you to get started. You need to go, look, see your farm, make observations of your current process and start to spot any of the 8 Wastes in your jobs/ tasks or activities on farm.

Use this template to make observations on your farm and try to list as many of the 8 Wastes as you can find.

### •Walk around a farm area and observe the people at work, animal movement, tractor/ equipment/vehicle movement. •Observe an example of each type of Waste below and think about how it could be eliminated or reduced. •Pick 3 of the improvements to be implemented immediately. Waste What do you see? **How to Improve? Defects** (Rework) **Over-production** Waiting Not using Resource **Transport Inventory** Motion **Extra-Processing**

**FARM Waste Walk** 

## Summary



- Waste exists in every farm business
- Elements of Waste are found in every activity/ task we do on farm
- Waste consists of the 8 Wastes DOWNTIME
- We must learn to 'SEE" the Waste to be able to tackle it
- These 8 Wastes add considerable cost and inefficiencies to our farms
- > To reduce or eliminate Waste we must first accept that it exists

# Action plan for your farm

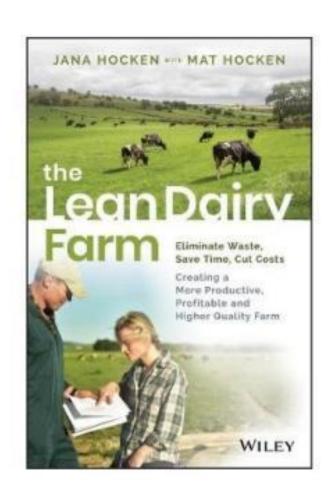




- 1. Discuss the 8 Wastes with your family or staff
- 2. Think about what % waste you might have in your farm processes
- 3. How much cost does this waste add to your farm business?
- 4. Use the Waste Walk template to walk around your farm and make observations
- 5. Identify at least 3 examples of each Waste type
- 6. Think about how you could reduce or eliminate each of these wastes you have identified
- 7. Prepare an Action Plan for yourself to implement the improvements you have identified.

## Do you want to know more?





If you are inspired to implement Lean management on your farm, there are many additional resources you can use including our book The Lean Dairy Farm which is a practical step by step guide to implementation of several key lean tools. You can also visit our website for more comprehensive online training, videos, examples and other helpful resources.

### Visit us at www.leanfarm.nz







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