# Functional analysis

## The need

Who’s the users: food producer (solid food, not liquid food)

What kind of product: 4 kind of product

* Vegetables, moist food
* Aromatics and medicinal plants
* Cheese
* Nuts

What’s the aim: Dry food with airflow

Causes:

* improve food conservation
* create new products

## Functional analysis

For that product, we imagine 5 different phases. Except the 2 main phases, the utilisation phase and the supplying phase, all of other phases is optional and we tried to developed a product which can integrate, or not, that phase, according to user’s desire.

### Utilisation phase – Drying phase

User

Food

External energy

Météo

T° ext

Dryer

Legislation

PF1

UF1

UF4

CF2

CF1

UF2

UF5

FS3

**Principal function:**

* PF1: Dry dietary products

**Using function:**

* UF1: Be ergonomic
* UF2: Capacity (kg/week producer units, transfer it in technician units)
* UF3: Respect of alimentary law - Material choice
* UF4: drying speed – optimisation of the heating and airflow drying
* UF5: drying homogeneity – optimisation of convection

**Constraint function:**

* CF1: Product quality (T° regulation)
* CF3: pollution sonore
* **Detailed of that function in technical solution on Using phase/FAST document**

### Supplying phase

* PF1: be simple to supply and to empty food

### Cleaning phase

* PF1: Be washable

### Stocking phase

* FS1: Take a minimum of place

### Transport phase

* Be transportable

### Maintenance/optimisation phase

* UF1: Be reparable
* UF3: Be adaptable to different kind of product