

**Name:**

Energy productivity

**Definition:**

The energy productivity of the farm is the crop yield (kg) per MJ of energy used for crop production.

**Method of calculation:**

It is calculated by dividing the crop yield between the energy input (energy used in the farm management) derived from the provision of inputs and that used in the management practices on the farm.

$$\text{Indicator} = \frac{\sum_i (EP_i \times A_i)}{A_T}$$

Where:

Indicator: Energy productivity (kg/MJ)

EP<sub>i</sub>: Energy productivity of crop *i* = crop yield (kg/ha) / Energy used (MJ/ha)

A<sub>i</sub>: Area assigned to the crop *i* (ha)

A<sub>T</sub>: Total area considered (ha)

**Interpretation:**

Higher energy productivity means better use of energy by the crop. The higher is the value means that less energy is required per crop yield unit, and therefore the farm is more environmentally sustainable.

**Information source:**

The surfaces, inputs and crop yields data: obtained in a farmers survey.

The energy associated with each input and output: obtained in bibliography.

**Bibliography and references:**

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