



LIFE Project Number
LIFE15 ENV/GR/000257

LIFE PROJECT NAME or Acronym
LIFE-F4F (Food for Feed)



Data

Action:	C1: Monitoring of the impact of the project actions
Partner:	ESDAK – HMU - HUA
Deliverable:	C1.1: First evaluation of performance indicators

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1. Introduction

The concept of environmental indicators relevant to quality of life is a broad one, and an ideal set of criteria would detail the quality of a number of mediums (including soil, water and air) on people's access to environmental services and amenities, as well as looking at the impact of hazards on human health and environmentally responsible behaviour

The LIFE Regulation puts more emphasis on the programming period 2014-2020 in measuring and monitoring the quantitative and qualitative environmental and climate action outcomes and thus the actual impact of the LIFE programme. To report on the success of the programme in relation to the performance indicators defined in Article 3 Paragraph 3 of the LIFE Regulation, the LIFE multiannual work programme for 2014-2017 defines a comprehensive set of outcome indicators at the programme level.

1.1. Qualitative and quantitative outcome indicators at the project level

The F4F project needs to report on its outcomes and be regularly monitored and evaluated based on the outcome indicators defined at the project level. F4F project reports on a set of key indicators corresponding to the sector or priority area on which the project focusses, as well as on further mandatory key indicators concerning the project's societal and economic outcomes. Beyond these indicators, reporting on at least one complementary key indicator is mandatory in order to reflect the multipurpose character of the project and the synergies it creates.

1.2. Key indicators and parameters covered

The concept for this Action is the assessment of the impact of the project's realisation in a variety of parameters during the project's pilot and possible full-scale implementation.

Up to now and during this reference period, the project has entered the second operational period after the conclusion of the initial operational period. The complete list of key indicators for the project is reproduced below. Concerning the evaluation of performance indicators, from this period of the project the following indicators have been assessed, as presented in the paragraphs below.

2. F4F - Key Performance Indicators (KPI)

2.1. Waste - Waste management

Description of indicator and target value

Annual reused quantity of food waste: 150 (metric tonnes per year).

A high level of consumption and tourist activity in the area is leading to increased waste generation. An estimated thirty thousand (30.000) metric tonnes of food wastes from the hospitality sector are produced in the area of the project annually.

The management of waste is a major component of the Local Authorities' annual budget and management should provide optimal savings and benefit the community and the environment. The project's actions aim to reduce the generated food waste by ~0.5% annually.

Data

Reused quantity of food waste 2018 (7.5.2018 – 31.10.2018): **149.5 metric tonnes**.

Evaluation

It was possible to collect and treat the aimed quantity of food waste from the participating hotels during the first operational period (initialisation period).

2.2. Resource efficiency - green circular economy

Description of indicator and target value

No. of companies where green circular economy practices are implemented: 5

During the project and up to the end of it was estimated that at least 5 companies where green circular economy practices are implemented will be involved. Such companies are relative to the waste management, hotels, animal farms, etc. When a full unit will be developed more than 50 companies is estimated to be involved.

Data

Number of companies where green circular economy practices are implemented (2018): 4

Evaluation

During the project and up to the end of it is estimated that at least 5 companies where green circular economy practices are implemented will be involved. Such companies are relative to the waste management, hotels, animal farms, etc. When a full unit will be developed more than 50 companies is estimated to be involved. At the end of 2018, four companies (hotels) were involved in the project.

2.3. Greenhouse gas emissions

Description of indicator and target value

Avoidance of GHG emissions

Avoidance of CO₂ by **50 metric tonnes CO₂eq/ year**

Avoidance of Other greenhouse gases (CH₄) by **550 metric tonnes CO₂eq/ year**

The reduction of GHG contributes positively to the mitigation actions of Climate Change.

Data

Avoidance of CO₂ by **31.3 metric tonnes CO₂eq/ year**

Avoidance of Other greenhouse gases (CH₄) by **344.5 metric tonnes CO₂eq/ year**

Evaluation

The slight less than expected GHG emission avoidance relates to the lower quantity of food waste collected and treated.

2.4. Resource Coverage / Range of the environmental / climate change impact

Description of indicator and target value

Total human population and area to be affected by the project

Total human population to be affected by the project (mandatory for floods/droughts, air, noise, climate adaptation): **11.000,00 of individuals** to be affected by the project

Permanent Population: **1.000,00 of individuals** to be affected by the project

Visitors / tourists: **10.000,00 of individuals** to be affected by the project
Total area to be affected by the project: **400 km² of total area** to be affected by the project

Data

7 May 2018 – 31 October 2018

Total human population to be affected by the project (mandatory for floods/droughts, air, noise, climate adaptation): **11.000,00 of individuals** to be affected by the project

Permanent Population: **1.000,00 of individuals** to be affected by the project

Visitors / tourists: **10.000,00 of individuals** to be affected by the project

Total area to be affected by the project: **400 km² of total area** to be affected by the project

Evaluation

The project achieved the aimed targets in terms of population and total area.

2.5. Implication of NGO (mandatory) including interventions supporting EU environmental and/or climate change policies and of other stakeholders

Description of indicator and target value

NGO: 3

Local Authorities: 1

Regional Authorities: 1

other interventions supporting EU environmental or climate change policies: 1

Data

NGO: 0

Local Authorities: 2

Regional Authorities: 1

other interventions supporting EU environmental or climate change policies: 0

Evaluation

Two municipalities (Local Authorities), Municipality of Heraklion and Municipality of Hersonissos, and the Regional Authority of Crete are implicated with one or another way to the project.

2.6. Information and awareness- General public reached and/ or made aware of

Description of indicator

Website (number of individuals reached): 15.000 visits

Other tools for reaching/raising awareness of the general public

Events/exhibitions; print; other media (videos, broadcasts): 5,000 individuals

No. of copies of articles, newspapers or brochures distributed: 25

Active participation in events: 500

General public (no. of individuals covered/survey): 500

Data

*Website (number of individuals reached): **14.146 visits (8,973 unique visits)***

Other tools for reaching/raising awareness of the general public

*Events/exhibitions; print; other media (videos, broadcasts): **3,300 individuals***

*No. of copies of articles, newspapers or brochures distributed: **12***

*Active participation in events: **130***

General public (no. of individuals covered/survey): **120**

Evaluation

The project is on course to achieve the set targets in terms of population reached and/ or made aware of the issues related to the project.

2.7. Capacity building

Description of indicator

Networking and other professional training or education

Professionals (No. of individuals trained): 200

Networking (No. of individuals): 80

Conferences (No. of individuals): 50

Open days – workshops (No. of individuals trained): 200

Data

Professionals (No. of individuals trained): **285**

Networking (No. of individuals): **18**

Conferences (No. of individuals trained): **0**

Open days – workshops (No. of individuals trained): **180**

Evaluation

The project achieved the aimed targets in terms

2.8. Jobs

Description of indicator and target value

Full-time equivalents (FTE) - Permanent (no. of FTE): 12,00

Unskilled: 2,00

Skilled: 10,00

Data

Full-time equivalents (FTE) - Permanent (no. of FTE): **4,00**

Unskilled: **2,00**

Skilled: **2,00**

Evaluation

The project is at the development stage and it is not possible to fully evaluate this indicator at this stage. However, some progress towards the creation of permanent jobs has been achieved.

2.9. Economic growth

Description of indicator and target value

Running cost/ operating costs during the project and expected (in case of continuation/ replication/ transfer after the project period): 200,000,00 €/year

Capital cost expected (in case of replication/ transfer/ continuation after the project): 1,500,000,00 €

Savings/ revenue expected in case of replication/ transfer/ continuation after the project: 2,000,000 €/year

Data

Not available

Evaluation

It is not possible to evaluate this indicator at this stage

2.10. Payback time

Description of indicator and target value

Payback time: 3 years

Continuation - Bank loans and others: 1

Replication - Public funding and bank loans: 3

Data

Not available

Evaluation

It is not possible to evaluate this indicator at this stage

3. Epilogue

Key Project-level Indicators (KPI) are a measurable value that demonstrates how effectively the F4F project is achieving key objectives. KPIs set for the F4F project are referred to a full-scale implementation of the F4F process, after the end of the project.

It is a properly developed and implemented KPI programme, which incorporates regular review processes during which the PMB assess the meaning of the results and develop corrective actions, if necessary. However, the duration of the project was extended for a year, as it was almost a year behind schedule, due to licensing and consequent start-up delays. At this stage, due to lack of reliable information, is challenging to assess any positive or negative deviations for some of KPIs' targets.

However, the F4F process has made significant progress towards the KPIs. Almost one hundred and fifty (149.5) metric tonnes of hotels' food waste have been diverted from landfill (KPI = 150), resulting in the avoidance of 376 metric tonnes of CO_{2eq} (KPI = 600). Thirty-seven (37) metric tonnes of dried animal feed were produced as a result of the initial operation of the Solar drying/ Pasteurisation pilot unit.

The Solar drying/ Pasteurisation Pilot Unit has successfully been constructed and it is already operating on full scale basis, and no further delays are anticipated for the forthcoming operational periods of the project, deviations are not expected from the set targets.