



Environmental monitoring tool in DestiMED Project: the Ecological Footprint application



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DestiMED Project

(Interreg 2017-2019)

- ✓ 6 Countries
- ✓ 13 Protected Areas (PAs)
- ✓ 13 Ecotourism products
- ✓ 2 rounds of test for **assessing and monitoring products' sustainability**



Project co-financed by the European Regional Development Fund

PROJECT PARTNERS



ECOTOURISM PRODUCTS:

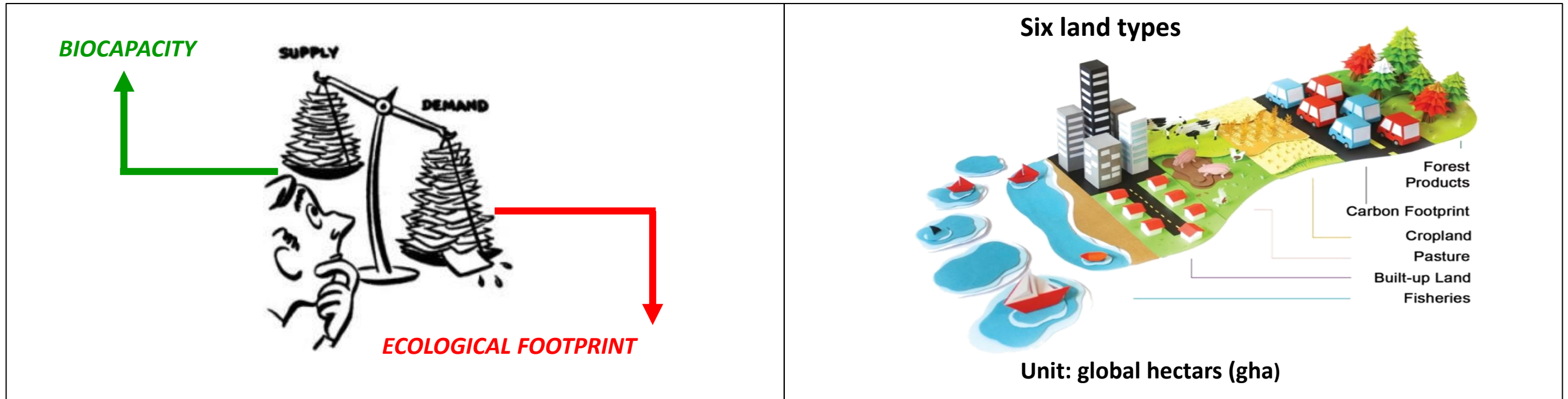
Tourism Products that are based **in and around protected areas**, with local communities and local service providers creating a unique niche-market experience in the Mediterranean, that **supports conservation, deconcentrates tourist flows and tackle seasonality.**

- Off season tourism
- Soft adventure / cultural traveler
- **Low impact** / High quality tourism



Ecological Footprint as monitoring tool

ECOLOGICAL FOOTPRINT: Environmental Accounting tool tracking how much land and water areas **nature provides**, and **humans use** to produce the resources we consume and to absorb our waste



GLOBAL FOOTPRINT NETWORK MISSION:

We help people to take decisions one-planet compatible, in full recognition of the limits of the planet's resources, using **Ecological Footprint**.

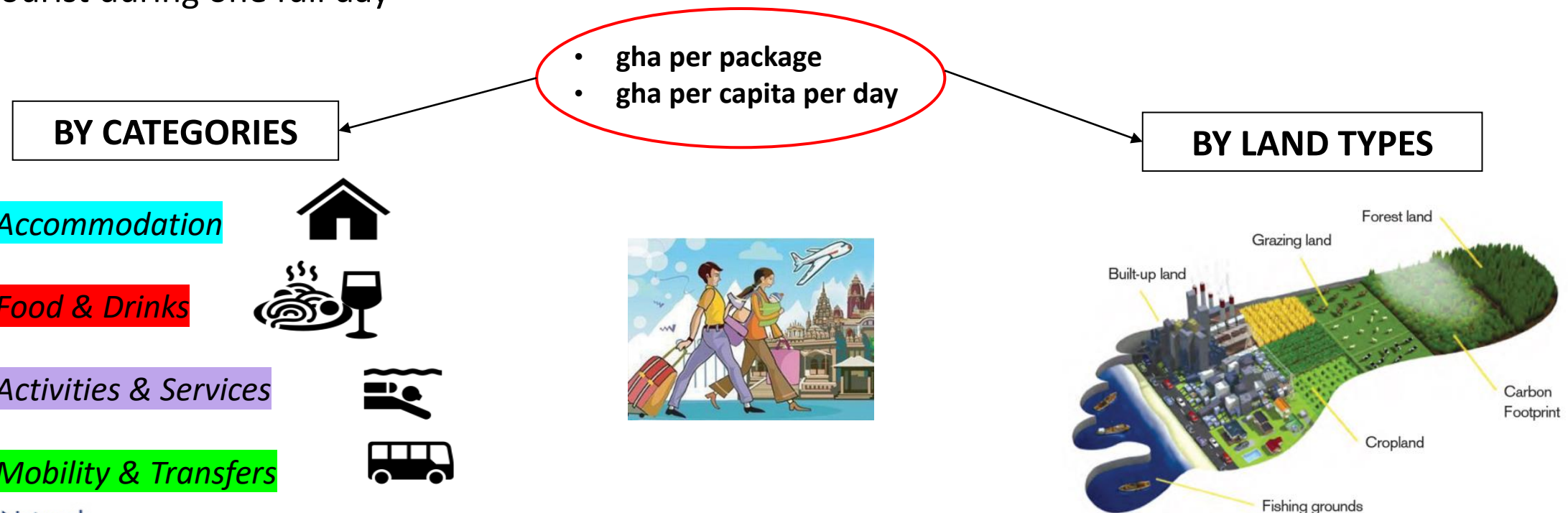


Ecological Footprint of ecotourism packages

Process of the analysis




- **Ecological Footprint of a package:** it measures the overall Footprint impact of the entire ecotourism package, given a specific number of tourists and a specific duration.
- **Ecological Footprint per capita per day:** it measures the Footprint impact caused by each single tourist during one full day





DestiMED Ecotourism Footprint Calculator





Project co-financed by the European
Regional Development Fund

**Welcome to the Ecotourism Footprint calculator
developed by the DestiMED project**

Email

Password



[Forgot password?](#)

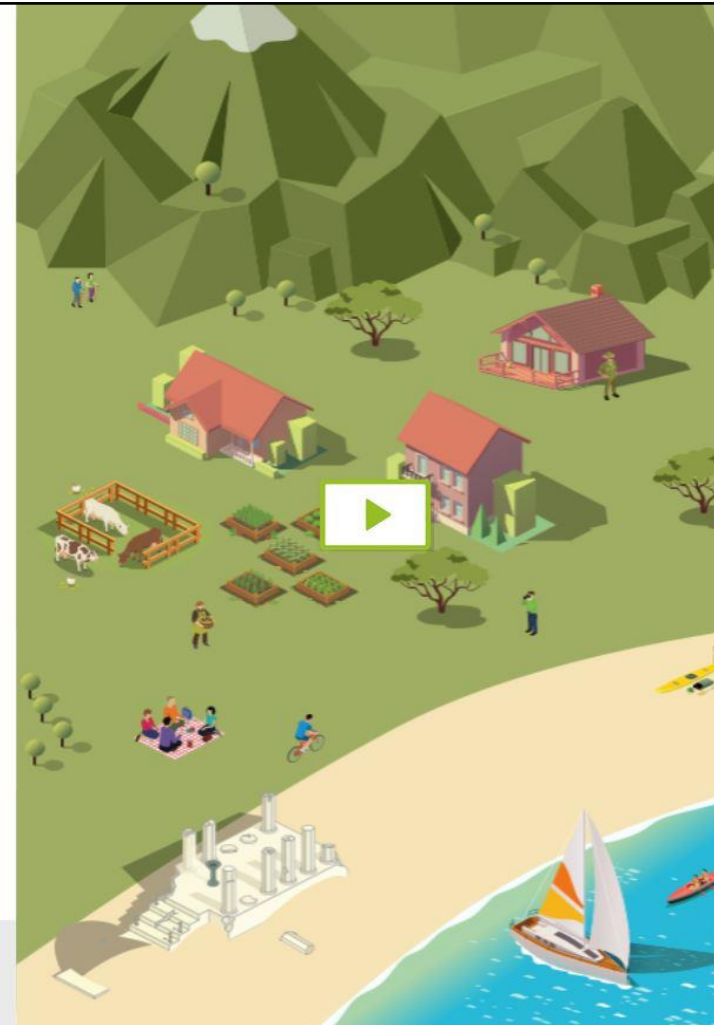
Log In

or

Continue without registration

Don't have an account? [Register](#)

 [Calculator Guidelines](#)  [Sample Result](#)





Analysis input data: Accommodation

Accommodation

This category includes parameters related to each hosting facility involved in the ecotourism product to host the tourists. Per each hosting facility included in the ecotourism product, please answer the following questions.

Page 1 | Page 2 | Page 3 | Page 4 | Page 5 | Page 6

Accommodation Name

Accommodation Name

Is the accommodation used for the entire stay?

☒ Yes ☐ No

Accommodation type:

☒ Resort

☐ Hotel

☐ Agritourism / Guesthouse

☐ Lodge


☐ Apartments renting/B&B

☐ Campsite (hosts stay in tents)

☐ Other

Is this hosting facility open all year long or only in holiday season

☒ All year ☐ Seasonal opening



- General information and characteristic (i.e. type of accommodation, opening season etc)
- Number of **workers**
- Total number of **bed-nights**
- Building **surface**
- **Energy consumptions**, including:
 - Electricity
 - Heating system
 - Water heating
- Consumption/production of **alternative source of energy** (solar, PVs, LPG, geothermic, etc)
- **Good and services** provided (i.e. laundry, replacement of linen, etc)



Analysis input data: Food & Drink

Food & Drink

This category includes parameters related to each single meal that is envisioned in the ecotourism package, including breakfast, lunch, dinner and any other type of food-related activity (i.e. wine/food tasting, tea/coffee breaks, snacks etc.). Per each meal envisioned in the ecotourism product, please answer the following questions

Day 1 | Day 2 | Day 3

Meal type: [Delete Meal](#)

☒ Breakfast

☐ Lunch/light lunch

☐ Dinner/light dinner

☐ Wine/food tasting

☐ Other (e.g. tea/coffee break; aperitive; snack)

Indicate the service provider and its name and location for this meal:

Hotel: ▼

Food&Wine

hotel

Meal details

Category	Item	Origin	Mode of Production	Qty
Cereal	Cereals, breakfast	INTERNATIONAL	N/A	0.5 (kg)
Cereal	Bread	LOCAL (up to 60 km Away)	ORGANIC	1.2 (kg)

- **Origin of ingredients:**
 - On-farm
 - Local (up to 60km)
 - National
 - International
- **Mode of production of ingredients:**
 - Organic
 - Non-organic
- **Quantity** of ingredients (expressed for the entire group)
- **Cooking time** and type of **stove**
- Number of **workers**



Analysis input data: Mobility and Transport

Mobility & Transport

This category includes parameters related to all kind of transfers and movements envisioned throughout the package and needed to move tourists from one place to another as well as any kind of goods required for the group of tourists (i.e. equipment transferred for performing an activity, picnic-based meals delivered to the group, etc.). Per each single transfer throughout the ecotourism product, please answer the following questions:

Day 1 | **Day 2** | Day 3

Name of the transport service provider [Delete Route](#)

Discovery

Describe the point of origin and point of destination for this route:

- ☐ From airport/station/port to the hotel
- ☐ From hotel to airport/station/port
- ☐ From hotel to restaurant
- ☐ From restaurant to hotel
- ☒ From hotel to activity
- ☐ From activity to hotel
- ☐ Moving of equipment for activity
- ☐ From activity to activity
- ☐ From restaurant to activity
- ☐ From restaurant to airport
- ☐ Other

- **Duration** of the route
- **Distance** covered
- Type of transportation (**motor vehicle** or different)
 - Fuel type
 - Fuel efficiency
- Number of **workers**



Analysis input data: Activities and Services

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Activities & Services

This category includes parameters related to the services and activities envisioned in the ecotourism product (i.e. excursions, visits, PA-related activities, birdwatching, kayaking, snorkeling/scuba diving, etc.). Per each activity envisioned in the ecotourism product, please answer the following questions:

Day 1

Day 2

Day 3

Name of the activity

Delete Activity

local estate visit, historical visit and farm harvesting (show cooking)

Does the activity have any green/sustainable label or certification?

☐ Yes
 ☒ No

Does the activity require any transfer of equipment (for instance bikes to be moved from the storage to the venue of the activity)?

☐ Yes (then please fill a mobility survey)
 ☒ No

Indicate the number of staff involved in providing the service/activity:

2

Indicate the duration of the activity in hours:

2

Indicate the distance covered during the activity (e.g. hiking or sailing)

Activity does not involve any move

The activity includes any motor vehicle:

☐ Yes
 ☒ No

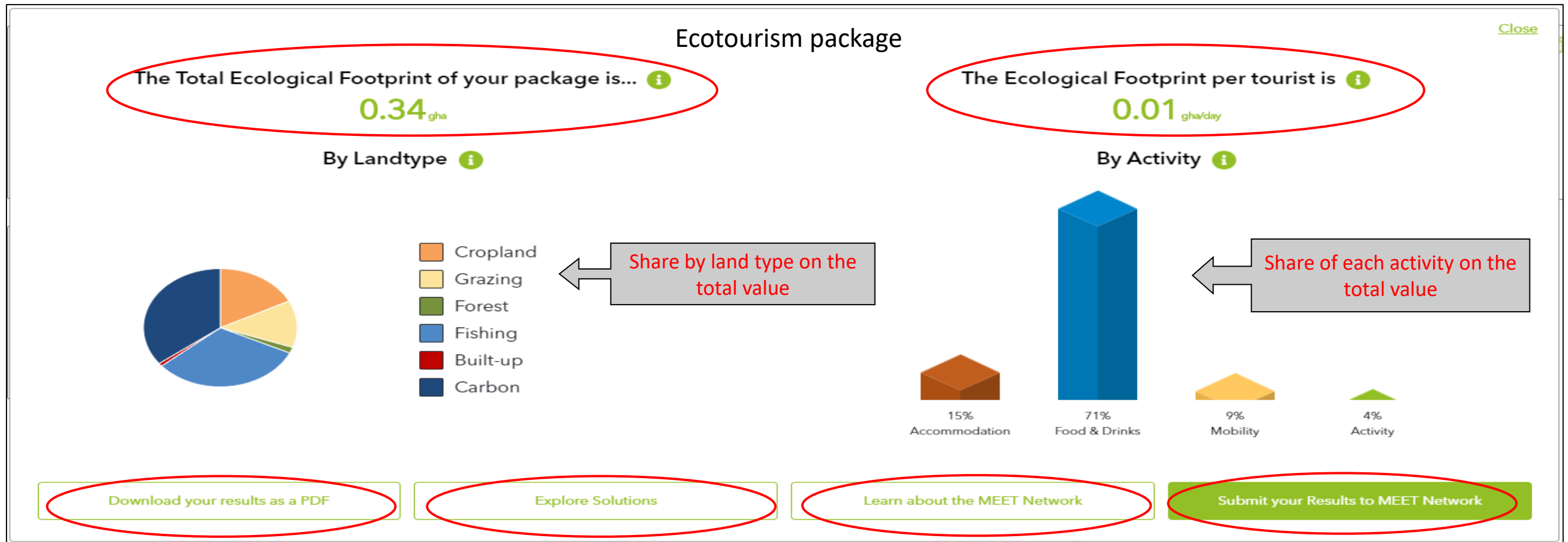
- **Duration** of the activity
- **Distance** covered
- **Means of transportation** used
- For any **motor vehicle** used:
 - Fuel type
 - Fuel efficiency
- Number of **workers**



DestiMED Ecotourism Footprint Calculator: Results

Calculator provides results in **multiple ways**, with the possibility to:

- Download results in PDF format
- Explore solution to reduce the EF → [Global Footprint network.org](https://www.globalfootprintnetwork.org)
- Eventually connect with, and receive support from, the MEET network





Benefits of the Ecological Footprint for Ecotourism Stakeholders

You cannot manage what you do not measure!!

PROTECTED AREAS MANAGERS

Understanding the Biocapacity of the local area



LOCAL SUPPLIERS

- **Enter as pioneers in a new market**
- **Reduce and optimise the costs**
- **Increase market resilience**



THE TOURISM SECTOR

Attract green tourists





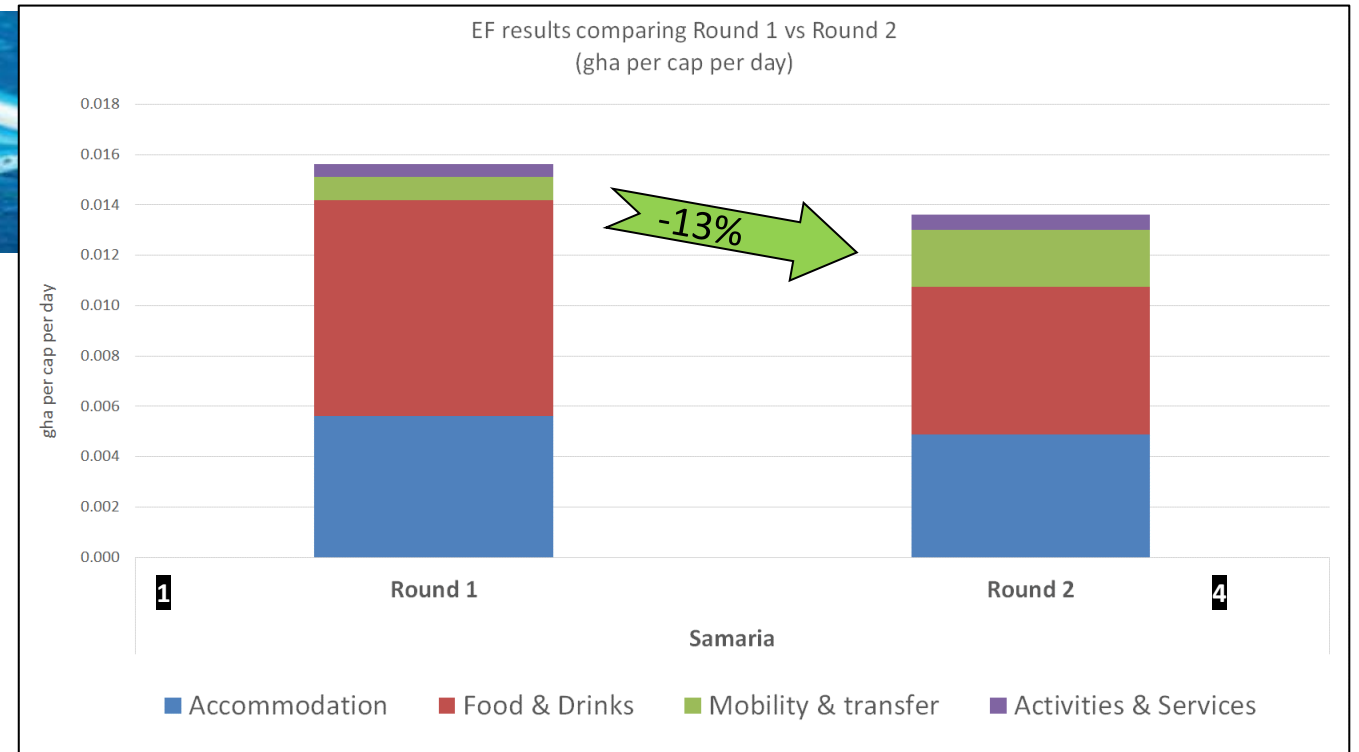
Case study

Samaria National park (Greece)

- Round 1: 0.0156 gha per tourist per day
- Round 2: 0.0136 gha per tourist per day
- Variation: -13%**

Round 2 vs. Round 1:

- Accommodation: -13%
- Food & Drink: -32%
- Mobility & Transfers: +146%
- Activity & Service: 5%



2

Recommendations from Round 1

Accommodation

- Always favor small-scale traditional facilities with attention for the use of alternative energy
- Provide facilities with suggestions on how to improve energy efficiency, energy and water savings

Food & Drinks

- Opt for a more balanced diet, low in protein and rich in vegetables, cereals and legumes.
- Reduce the amount of calories and increase share of local food products.
- Limit the consumption of meat to one serving per day
- Opt for low trophic-level seafood (e.g., sardines, prawns, etc)
- Provide shorter and lighter lunches

Mobility & Transfer

- Opt for alternative modes of transportation (i.e. bikes or e-bike) at least for the short-distance transfers
- Consider the use of public transportation

Activity & Service

- None of the activities in Round 1 required motor vehicles: this is a good practice to maintain in Round 2
- Limit the number of employees to a maximum of 1 or 2 persons

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Implementations for Round 2

Accommodation

- A more eco-friendly facility was chosen for the first night. Other facilities remained the same since they are small scale
- All facilities in the area were included in a nationally funded program for reducing energy by substituting appliance, changing windows and doors, initiating small renewable energy sources etc.

Food & Drinks

- Most of the served food was produced on farm or locally (up to 60 km and even less).
- Meat and protein food is essential but they were reduced to one meal per day.
- Only one meal of the package was based on low-trophic level seafood
- Vegetables and legumes consumption was implemented as well as the "on farm" and local organic food
- Lunch breaks were slightly reduced in time and portions

Mobility & Transfer

- Presence of PA staff was reduced to lower the total movement of the PA's vehicles
- Motor boat transfer excluded from the package

Activity & Service

- PA staff did not participate as much as in Round 1



**THANK YOU FOR
YOUR ATTENTION!**



DestiMED

For more information:

<https://www.footprintnetwork.org/our-work/sustainable-tourism/>

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Global Footprint Network
Advancing the Science of Sustainability

<https://www.meetnetwork.org/calculator>