

# CLIF – Climate Impacts of Food: Communication-Guidelines

## Recommendations for target group-specific and needs-based communication

These communication guidelines present important findings on environment-related consumer communication. The focus here is on sustainability communication on the impacts of food and thus represents the starting point for the design of the CLIF prototype tool.

In addition to defining the target group, this document also sets out the objectives and core functions of the selected communication tool, as well as the decision-making process. The methodology used and the resulting selection of impact categories are also described and the final visualisations in the various project regions are derived.

### 1. Objectives and Core functions

The aim of the CLIF tool is to communicate the environmental impact of food to consumers in a simple, understandable and comparable way and to provide retailers with an instrument for analysing product ranges. The website should be multi-layered and, in addition to simple overview information, also provide more in-depth information for consumers. Overall, the aim is to have a general steering effect towards plant-based nutrition, which leads to a trade-off between the best possible level of detail for consumers and avoiding irritation due to possibly incomprehensible ratings.

Due to the generally high level of interest in healthy diets, the link between healthy and sustainable diets should be utilised. Accordingly, the comparison between products and corresponding recipe ideas were integrated.

However, it should not be understood as ‘communication with a raised finger’, so that the health aspects are not at the focal point.

### 2. Definition of the target group

The target group of the CLIF tool was defined based on the consumer survey. This was based on the TTM framework (TTM Stages of environmentally oriented dietary behavior), which defines five stages for consumers towards environmentally conscious purchasing behaviour (1. pre-contemplation, 2. contemplation, 3. preparation, 4. action, 5. maintenance & stabilisation).

Based on this model, the project team defined consumers as the core target group in the third phase (Preparation).

This is where the greatest potential for behavioural change is to be found. Consumers from this group are particularly willing to use labels on products and websites as a source of information on sustainable nutrition. The current use of websites is still low among consumers from this group, but the willingness is there, and it will be an important task to direct their attention there.

The aim of the project is also to enable retail companies to use the communication tool to analyse their product range in terms of environmental impact, identify hotspots and make decisions based on this towards a more sustainable product range selection.

### 3. Selecting the type of tool (website)

Labels and websites have proven to be the most important media for consumer education as part of the consumer survey. Due to the difficulties in implementing labels against the background of country-specific regulations, the website format was selected as a suitable medium for the CLIF tool.

The website was developed as a 'mobile first version' so that mobile access, for example via smartphone, is characterised by a simple and clear application. Programming a specially developed app would have involved a disproportionate amount of additional work, especially as the user experience of the 'mobile first version' of the website is comparable to that of an app.

As part of the consumer survey, all four countries were asked which sources of information on sustainable nutrition are currently used and will be used in the future. Websites were in second place in South Africa and Germany. In Thailand in third place and Paraguay in fourth place. Although labels received more approval overall, this option was ruled out at an early stage due to the different regulations to be observed.

Websites are primarily visited by an interested and informed target group and therefore offer the opportunity to present multi-layered information.

Nevertheless, reaching consumers with information offerings has also proven to be challenging in this context, as none of the information sources surveyed is favoured by a clear majority (>50%).

## 4. Development Process

During the tool development process, various requirements were defined and associated possible implementation options were discussed and realised. The starting point for this was the selection of a methodology for measuring the environmental impact of food that is robust, globally established and also scalable in terms of implementation within the project, as well as the specification of the environmental impacts to be communicated as part of this methodology (Chapter 4.1.). Based on this, the country-specific optimal representations were developed (Chapter 4.2).

### 4.1. Methodology for measuring and selecting environmental impacts

A key question for the communication tool is deciding which environmental impacts should be communicated to consumers and companies and for which of these impacts methods and the necessary data are available for implementation at a scaled, globally applicable level.

As a globally applicable and recognised method for measuring the environmental impact of food, the life cycle assessment (LCA) method plays a central role. While LCAs are standardised via the ISO standards, there is still no overarching agreement on a harmonised procedure that could, for example, enable comparability between products. The European Environmental Footprint (EF) process provides the greatest degree of harmonisation in this matter. For this reason, the prototype of the communication tool was based on the Product Environmental Footprint (PEF) method.

In order to find out which environmental impacts, or impact categories, are of central importance in the food sector, our project partner corsus conducted a multi-stage survey of experts using the Delphi method and additional statistical analyses to confirm the results. For more detailed information, please refer to the separate *corsus* Data and Usage Guideline<sup>1</sup>. The results show that the areas of climate change, eutrophication, ecotoxicity, water utilisation and biodiversity play a particularly important role. Consequently, the prototype communication tool is PEF-based (with some adaptations) and is limited to the impact categories mentioned above.

During possible further developments, both methodological optimisations (e.g. bonus-malus system to fill gaps in the PEF methodology) and expansion options (e.g. around social issues) should be examined.

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<sup>1</sup> Rödder, Marius; Amado, Talita F. (PHD); Appel, Paul: corsus-corporate sustainability GmbH: Data and Usage Guideline, Hamburg: 2024

#### 4.2. Communication of environmental impacts

Complex consumer testing was carried out to implement the environmental impacts defined above as comprehensibly as possible in geographically and culturally different regions.

To enable a clear presentation of the complex environmental impacts, aggregation into a single score (with subordinate, accompanying focus information) is essential. Based on a broad market research of internationally existing environmental labels, three presentation options on a five-level scale and the corresponding graphic realisation were created (so-called click dummies).

These were then discussed in the four project regions in stakeholder workshops with the aim of defining the strengths and weaknesses of the individual options as well as a country-specific favoured option (see Chapter 5 for the final presentations). Geographical and cultural differences became clear, such as the fact that the use of a scale with Indian-Arabic numbers could be helpful in Thailand and that the order should not be 1-5 but 5-1 compared to Germany, for example, due to existing differences in the assessment and grading systems in the respective school systems.

This means that there cannot be one communication tool that is equally comprehensible globally, but that it should always be tested and individualised on a culturally specific basis.

A quantitative, representative study based on the results of the stakeholder workshop subsequently confirmed the country-specific comprehensibility of the selected presentation options.

### 5. Final presentations and country-specific content

Following the consumer surveys and various expert workshops in the respective project countries, the following final presentation options were selected and defined. A large number of requirements and criteria were taken into account for the final, five-stage designs of the respective target regions.

## Deutschland:

Ananas

B



Ananas

Impact Score



Umweltauswirkungen



## Paraguay:

Piña

ligero

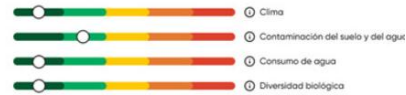


Piña

Nivel de impacto



Categorías de impacto



## Südafrika:

Pineapple

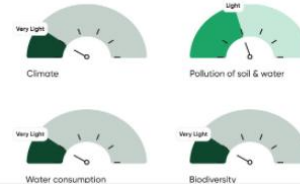
Light



Pineapple

Impact Score  
Light

Impact Categories



## Thailand:

เนื้อสับปะรดดิบ

น้อย



สับปะรดสด

จำนวน  
น้อย

การประเมินระดับผลกระทบ



For the presentation in **Germany**, the single score is shown with the corresponding letter (A-E). In addition, the entire range from A-E is shown and the corresponding score is highlighted graphically. The results of the respective environmental impacts in the dimensions of climate, soil and water pollution, water consumption and biodiversity are shown on a colour gradient divided into five areas (dark green → light green →

yellow → orange → red). The separate colour gradient with the corresponding letters is intended to resemble the *Nutri-Score*, which is already familiar in Germany.

The presentation for **Paraguay** is similar to the German presentation, but here on the product overview page a label was chosen that describes the score qualitatively (muy ligero → ligero → moderado → pesado → muy pesado). However, the letters A-E are still used on the product detail page. The environmental impacts in the various dimensions are presented in the same way as in Germany.

For the target region of **South Africa**, a label was chosen not only for the product overview page, but also for the product details page (very light → light → moderate → heavy → very heavy). A speedometer similar to the display on an analogue scale was chosen to show the various environmental impacts. A pointer points to the corresponding result section on the speedometer, which is also highlighted in colour.

A qualitative label was also favoured on both product pages in **Thailand**. The display of the environmental impact appears similar to that in Germany and Paraguay with the colour gradient divided into five areas. However, unlike in the other two countries, the result is not simply indicated by a white dot in the corresponding colour range, but by a number from 1-5, which indicates the result in the corresponding colour range. It should be noted here that the number 5 reflects the best possible result and the numbers for the Thai display must therefore be read in descending order from 5 to 1. Thailand therefore uses a label, the colour gradient and numbers.

## 6. Conclusion and Outlook

In summary, it can be said that reaching consumers with information offerings proved to be challenging, as none of the information sources surveyed were favoured by a clear majority (>50%), at least in the project countries. However, in order to present the complex interrelationships of environmental sustainability communication in the best possible way, the website was chosen as the most suitable means.

Life cycle assessment (LCA) was also chosen as the appropriate methodology for measuring these environmental impacts. According to the Delphie study<sup>2</sup> by *corsus*, the most relevant environmental impacts around sustainability communication on food are climate change, eutrophication, ecotoxicity, water use and biodiversity. Against the background of the ongoing international harmonisation processes for LCA

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<sup>2</sup> Rödder, Marius; Amado, Talita F. (PHD); Appel, Paul: *corsus-corporate sustainability GmbH: Data and Usage Guideline*, Hamburg: 2024

methods and to ensure comparability of products, the prototype of the CLIF communication tool is based on the Product Environmental Footprint (PEF) method.

The presentation of the results and their comprehensibility was ensured in the respective project countries by means of various consumer surveys. In addition, so-called click dummies of the communication tool were discussed in several stakeholder workshops in order to determine the final country-specific presentation options. Since there can be no 'one size fits all' communication tool, at least in this context, it is extremely important to work out the socio-cultural and country-specific differences and to check them for comprehensibility.

In addition, further enhancements are required: Both methodological optimisations (e.g. bonus-malus system to fill gaps in the PEF methodology) and extensions (e.g. in the social sector). This also applies to the application level. For food retailers, for example, a digital receipt with an ecological footprint could be incorporated into an overall assessment of one's own purchases in order to enable both personal improvement potential and a comparison with other users in the form of 'gamification'.