



REFOOTURE

from sustainability towards regenerative thinking

To what extent does a food system innovation platform (FSIP) create a move towards regenerative, inclusive food systems (RIFS)?

A place-based participatory approach for tracking change and adaptive learning to take informed action (it's a living process)

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01/02/2023



The motto of our project summarizes the process we run through in REFOOTURE's first phase: from sustainability towards regenerative thinking. In this document we shortly explain the decisions taken to achieve this change. Eventually, the REFOOTURE approach (developed in the project as a whole) is about what the people in the food system innovation platforms (FSIP) can do to jointly develop regenerative, inclusive food systems (RIFS). In a regenerative, inclusive approach, the tracking (or assessment) of actions and change accruing from that action must be an intrinsic element of the group process itself.

Siegmund-Schultze^{Error! Reference source not found.}, M, O' Keeffe^{Error! Reference source not found.}, S. 2023. **To what extent does a food system innovation platform (FSIP) create a move towards regenerative, inclusive food systems (RIFS)? A place-based participatory approach for tracking change and adaptive learning to take informed action (it's a living process).** Wageningen, Wageningen Environmental Research, working paper.

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The REFOOTURE project (July 2020 – March 2023) has been commissioned by University Fund Wageningen and has been financially supported by IKEA Foundation.



Contents

REFOOTURE 2020-2022: Unpacking RIFS – the what, how and why	4
The original starting point and point of diverging	4
The need to define – what are RIFS?	5
Guiding principles for direction	6
How to operationalize an assessment – tried approaches	6
Why regenerative approaches need a different evidence collection process	8
Going forward (it's a living processes)	8



REFOOTURE 2020-2022: Unpacking RIFS – the what, how and why

The first phase of the REFOOTURE project has been used to understand in its entirety the concept of regenerative development and what that may entail. In a nutshell, the main entry point for action are people and their relationship with the places where they live. This led to the need to travel a different course to understand how we should assess such a development processes and why this difference was important. Thus, the overall approach was adapted to conceptualise a comprehensive development approach towards regenerative, inclusive food systems (RIFS) and piloting it in a practical approach. Figure 1 shows the flow of activities and the thinking the project partners went through.

Close exchange and collaboration with project partners of diverse cultural, disciplinary and knowledge backgrounds led to the joint development of the REFOOTURE approach. The approach encompasses what the food system innovation platforms (FSIP) and respectively their members, can do to jointly develop RIFS. **In this reflective and adaptive approach the tracking (or assessment) is an intrinsic element of the FSIP activities towards RIFS. This process itself needs to be regenerative and inclusive.**¹ In this regard, the three lines of work – see document Collaborate to Regenerate – emphasize the need to raise one's own awareness and capabilities, as well as that of the closer group, in order to contribute to a greater whole. As the motto of our project puts, the development we run through was: from sustainability towards regenerative thinking. In the following, we explain and justify the decisions taken to achieve this change.

The original starting point and point of diverging

The proposal of the REFOOTURE project (2020) suggested as key outputs:

- 1. A revised intervention assessment framework including the identification of open knowledge areas.*
- 2. An assessment of selected practical contributions towards regenerative, inclusive food systems (to feed into the reflection of the ToC questions and the white paper in WP2).*

In the proposal we started from the idea that regenerative, inclusive food systems (RIFS) should be assessed through an updated sustainability assessment, where several dimensions are scrutinized using predefined indicators. We investigated several sustainability assessment tools with the attempt to rely on previous work as much as possible. Several typical agricultural practices favored under a regenerative regime are the same as applied in organic farming, which uses certification schemes, though, directed to biophysical production (although the four basic principles developed by IFOAM cover more

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than that). TAPE tool from FAO looked promising at first hand since it covers a broader range of dimensions. The tool assesses the transition of farms to agroecology. However, TAPE focuses on the farm level and does not encompass other actors of the food system. Therefore, we started to review the FAO SAFA (Sustainable agricultural and food system assessment) tool as a potential option. It was found again with this tool that other entities of the food system are again not addressed, what makes this and other tools not suitable for our purpose. The work done on evaluating available tools, crystalized for us that we needed a sharper and clearer definition of RIFS. To measure or monitor something, you first need to know what it is.

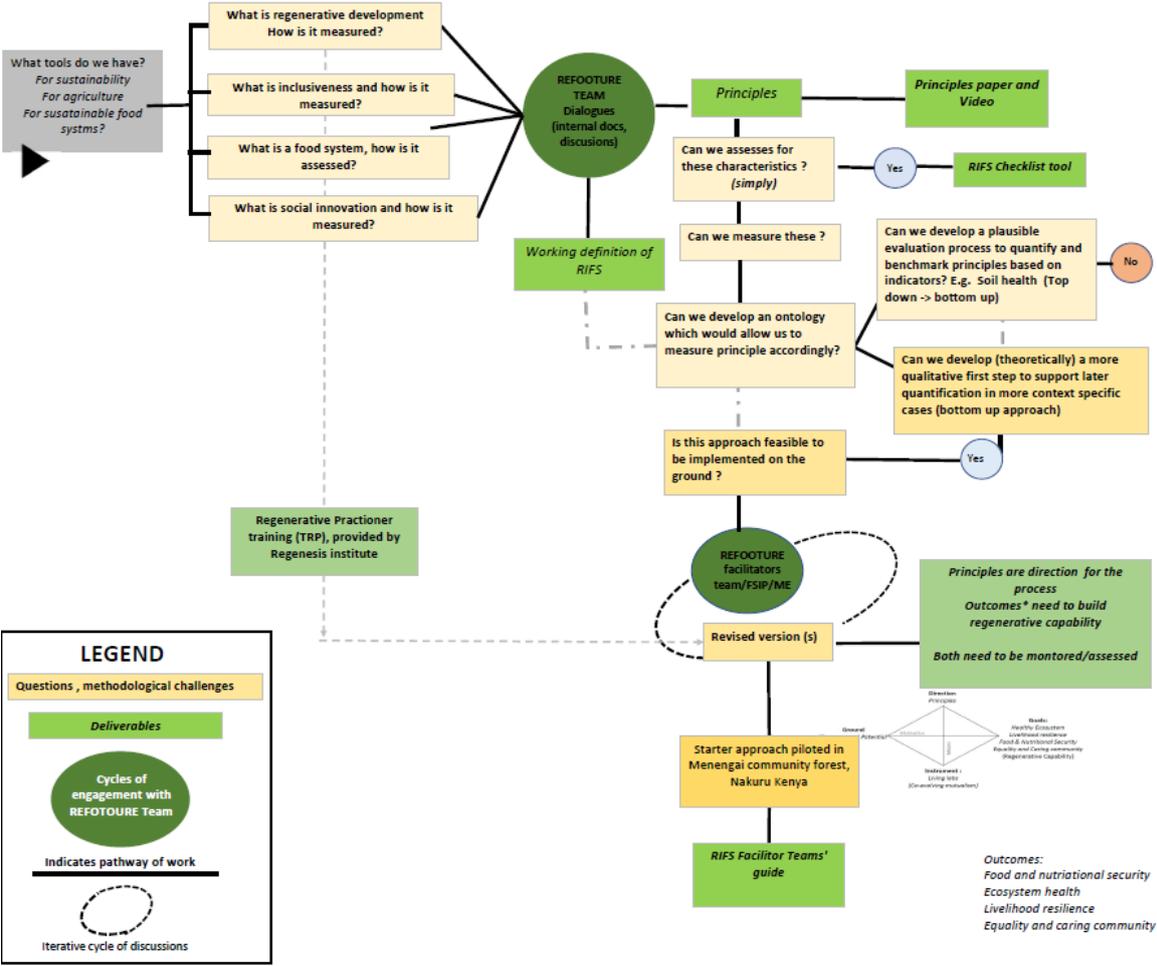


Figure 1: Flow of process to conceptualize regenerative, inclusive food systems (RIFS) and their assessment through members of food system innovation platforms (FSIP): the RIFS principles give guidance for a comprehensive RIFS development approach of the FSIP, where tracking change is one element for action and learning.

The need to define – what are RIFS?

To more clearly differentiate from other approaches, we sought a better description of what regenerative, integrative food systems entails and what underlying values and aspects we can make explicit. As we looked more deeply

into the literature, we found that regenerative development is primarily an approach that is suitable for virtually all transition processes. It emphasizes the quality of processes for change, evolution, and transformation, where the attitude of people and their relationship with nature is the core premise. The need to define RIFS was also combined with the need to find orientation – what was our goal? What did we want to see? This step helped to well align with the project’s theory of change.

After multiple dialogues within the consortium and with FSIP partners the **RIFS concept has been defined** and its definition endorsed.

Regenerative inclusive food systems are socio-ecological systems that are working innovatively with nature to ensure vibrant and healthy ecosystems which enable resilient livelihoods and food and nutritional security for all. In this fair and just transition, no being is left behind. (REFOOTURE, 2021)

Guiding principles for direction

We summarized the qualities of RIFS in the interconnected guiding principles. They build the basis of the overall project approach of food system innovation platforms (FSIP) facilitating the transition towards RIFS. Five RIFS principles have been developed that are to serve as a compass in the pursuit of transforming current food systems towards their true potential of achieving multiple goals i.e. food and nutrition security and sovereignty, healthy ecosystems, resilient livelihoods and equality in caring communities. These principles are: (i) sense of place and purpose, (ii) socio-ecological design for innovation, (iii) building connections, (iv) fair, just and inclusive transitions, (v) design for renewal (it's a living process). It is a set of nested principles. This means that at any one time, in the development process you may see several simultaneously occurring.

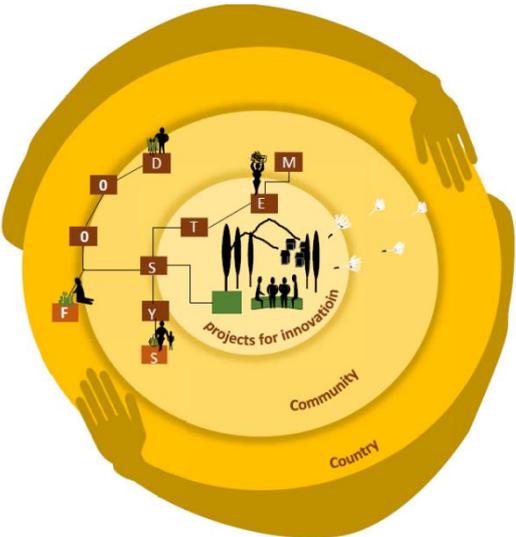


Figure 2: Graphical representation of the nested RIFS principles.

How to operationalize an assessment – tried approaches

The **video explaining the principles** is one attempt to support the understanding and to familiarize project partners and other interested people with this approach. The **working paper about the guiding principles** to support a transition towards RIFS gives the scientific basis and outlines the argument for rethinking and transforming current food systems in a regenerative

and inclusive manner. The goals of regenerative, inclusive food systems and the principles to guide such systems are presented in that paper.

Building further from the guiding principles and the goals of RIFS, we turned to establishing an ontology specifically directed towards the RIFS principles (Figure 3). We subsumed under each principle several goals that we described by objectives, with the aim to make objectives measurable through several indicators. A simple Excel-based **scoping tool** was developed and applied to innovation cases. This scoping tool allows to quickly judge qualities of cases on their consistency with regenerative, inclusive food systems. It gives a first idea, while in practice it is a rough checklist rather than a practical tool for learning and action.

We further populated a long wish list of potential more in-depth indicators, using again content of the before-mentioned tools. The idea was to let stakeholders validate and choose indicators when assessing their interventions. To streamline the wish list, we started with **soil health as an example** in a stepwise approach. However, soil health is still debated in the science community and no generally agreed standard exists either. Another comprehensive process would have been needed to define benchmarks for soil health per location, and what this would mean in the context of regeneration.

To try and frame the benchmarks and what could be scales of regeneration, we formulated qualitative descriptions for RIFS objectives on a 5-level scale from degenerative over sustainable to regenerative to serve as a basis for use in FSIP processes (Figure 3). We adapted the LENSES Rubrics tool developed by Clear (Centre for Living Environments and Regeneration)². However, in discussions within the REFOOTURE team it became clear that this material was too extensive and translation into practical workshop situations for on the ground applications would be a challenge in the initial project phase.

Goal 2.1 Supports Circularity					
Explanation	One of the core premises of ecological design is the need to transition our social systems to a greater reliance on renewable resources through recycling, reusing and dematerialisation. We need to be able to mimic the fundamental designs, networks and structures of nature, while at the same time enhance those diverse natural systems by becoming more aware of ecological feedback ¹ . For regenerative food systems, the holistic approach promoted by agroecological practices is very valuable ² . One of the principles of agroecological practice is circularity, with the goal of "redesigning food systems based on the principles of circular economy, as this can help address the global food waste challenge by making food value chains shorter and more resource-efficient." ³				
	Degenerative	Sustainability minus	Sustainability	Sustainability plus	Regenerative
Material use* (Reduce, reuse and recycle) establishing a process for dematerialisation	No consideration of quantity, quality, or appropriateness of materials used (exploitative); extravagant, wasteful or trendy solutions implemented (no long-term vision); results in the premature failure of innovation, no durability and relevant communities have little or no interest; innovation leaves a large environmental burden (after use)	Limited consideration is given to reuse and reduction of materials; appropriate selection of materials ruled out due to extra effort involved; wasteful and lack of care; results in eventual failure of innovation; little durability and relevant communities have limited interest; innovation leaves a minor environmental burden (after use)	Selects only materials that are needed or make significant positive contributions (people, profit, planet); materials are used in appropriate quantity, quality and character; the innovation has the potential to be durable and long lasting; relevant for communities; innovation can be reused, recycled, leaving little or no environmental burden	Through creative exploration, discovers solutions that eliminate or reduce the need for some materials; considers reusing existing materials first; explores options for indigenous knowledge and more nature-based solutions; the innovation has durability with the potential to be long lasting and adaptive; very relevant for communities; innovation can be reused, recycled or upcycled or cascaded, with no environmental burden	Inspires solutions that creatively eliminate or dramatically reduce the use of materials; elegantly simple answers unearthed; includes indigenous knowledge, biomimicry and more nature-based solutions; the innovation has built-in resilience; very relevant for communities; innovation promotes complete biodegradation or direct rejuvenation of supporting ecosystems.
<small>Reference: 1(Shu-Yang, Freedman et al. 2004, Sundkvist, Milestad et al. 2005, Mang, Haggard et al. 2016), 2. (Dahlberg 1993, Dahlberg 1994) 3. (Gliessman 2006, Fao 2018) *The basis of this rubric was derived from the LENSES Rubrics produced by CLEAR, the Centre for Living Environments and Regeneration: Fort Collins, CO, USA, 2016 (Plaut, Dunbar et al. 2012)</small>					

Figure 3: An example from the developed RIFS rubrics showing the scales from degenerative to regenerative for Principle 2 (socio-ecological design for innovation), Goal 2.1 Supports circularity.

² <https://www.clearegeneration.org/lenses/>. There are also several publications which have described and implemented this framework and tool.

Why regenerative approaches need a different evidence collection process

We searched for other entry points to engage FSIP members with the regenerative, inclusive thinking. FSIP are finally our means for nurturing regenerative, inclusive food systems. Assessing those and tracking change, is then one of many steps towards more regenerative, inclusive societies. Critical systems thinking and guidance for actions towards regenerative, inclusive food systems need clear attention in the FSIP. We outlined such a comprehensive approach, across work packages, as the **RIFS development through FSIP** (intended to be provided as a booklet, earlier called REFOOTURE approach). It provides a stepwise narrative, built upon the project's Theory of Change (ToC) and Theory of Action (ToA). It highlights phases for reaching goals of regenerative, inclusive food systems through the instrument FSIP. The approach is based on the interconnected RIFS principles which give direction, starting from the ground, i.e., the place-based potential. Conceptualizing regeneration as a developmental approach, any assessment must serve its cause, namely supporting people (of the FSIP) in their search and efforts towards RIFS. The definition of what and how to track is therefore an inherent part of the developmental procedure – defined, carried out and interpreted by the people themselves. The document **Collaborate to Regenerate** illustrates very first phases of the approach. It describes a learning by doing exercise of initial steps required. The novelty is in the fusion of the regenerative inclusive thinking with multi-stakeholder workshops – as expressed by the title Collaborate to Regenerate.

The case presented in Collaborate to Regenerate is **the first attempt to implement the REFOOTURE approach in a coordinated and planned way** within a FSIP, putting theory into practice. The **Story of Place**, an accompanying document to Collaborate to Regenerate, is a model for what geographical and historical information from existing sources should be collected to provide an informed basis for local-level decision making in the FSIP. **Annex III of Collaborate to Regenerate** (please consult there for more details) shows how one can collect through participant observation, photographing and discussion with people the material required to describe the initial situation towards RIFS goals and principles.



Figure 4: Two key documents outlining on the ground approaches for bringing theory into practice.

Going forward (it's a living processes)

Further phases covering the definition of the tracking of changes by the FSIP members will be addressed in subsequent workshops, which are again taking the principles and goals of RIFS as direction. Methods for data collection, analysis and interpretation will be an envelope that fits around these initial findings. It can be developed in any number of directions, depending on the resources and man power available to the FSIP (e.g. digital terrain maps, to ecosystem modelling, to soil and crop analysis studies) and may draw on citizen science approaches, which have a clear learning potential and promote own responsibility and empowerment in place of depending on external experts and specialized labs. In some cases, supplementation with laboratory measurements might be useful, for example, if required for mandatory reporting as part of certifications or national dashboards. **In summary, the tracking of earmarked issues is an element of the developmental actions the FSIP members take. Hence, visioning the future, understanding the place and creating an evidence baseline, planning what to change (from where to where) and how to make and observe change, carrying out respective actions, understanding outcomes, reflecting on the actions' usefulness, and adapting actions accordingly are interrelated steps towards RIFS and need therefore coordination.**

Regeneration is a continuous process, it is not a destination. This means that it is the differences that occur over time that we are looking for. Even if one achieves relative stability around a perceived point near a regenerative, inclusive optimum, factors in the food system will challenge this over time and require further efforts to ensure regeneration. Regeneration, then, is neither an end point nor a linear process. **Regeneration is a constant interplay and effort, which is nurtured by values (principles) of a regenerative, inclusive thinking and culture.**

The stronger the local embeddedness, for example, by processes of production and trade that responsibly use and develop diverse types of local resources, including the nurturing of the communities' social and human capital in a FSIP and beyond, the more resilient such food systems can become over time. In this dynamic process, however, it is equally important to open up and stay in contact with the nested levels in a responsible manner.

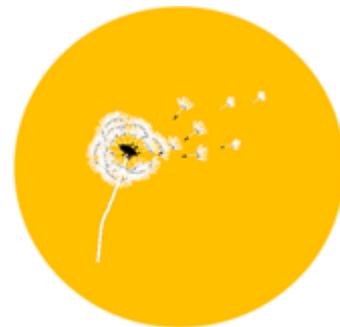


Figure 5: Icon for Principle 5 – it's a living process.