



REFOOTURE



REFOOTURE

A project to advance Regenerative Inclusive Food Systems



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Introduction

Despite all the efforts in recent decades, food insecurity, poverty and nature degradation are on the rise in East Africa. The REFOOTURE project believes fundamental change is needed to solve these issues. They can only be solved by transforming food systems into Regenerative Inclusive Food Systems.

In Regenerative Inclusive Food Systems, people are seen as part of nature, nurturing nature rather than exploiting it. In these food systems, nature and social relationships are regenerated, supporting food security and resilient livelihoods. The REFOOTURE project, which was launched in 2020 with funding from the IKEA Foundation, aims to foster Regenerative Inclusive Food Systems in three East African countries: Ethiopia, Kenya, and Uganda.

The key idea behind REFOOTURE is that innovation is crucial to fostering social, technological, and institutional transformation towards Regenerative Inclusive Food Systems. These innovations should be place-based, rooted in the specific characteristics of a place which is in some way meaningful to the people living there. Local communities, their territory and their surroundings determine the place-based potential for innovations.

Another idea behind REFOOTURE is that, for this transformation to happen, the people involved need to be motivated and have the capacities to take advantage of opportunities to make the food system more regenerative and inclusive. This requires 'doers' (farmers, entrepreneurs), 'enablers' (policy makers, banks) and 'thinkers' (researchers, innovators), and for them to connect and cooperate in better ways so that food systems can self-regenerate.

Evidence-based change

The REFOOTURE project supports local innovation. It helps local people to do experiments and collect evidence about which innovations work, and which do not.

This booklet is one of a series of three booklets and is about the REFOOTURE project. The other booklets are on *Moving towards Regenerative Inclusive Food Systems* and on *Food System Innovation Platforms*. Each booklet can be read on its own.

Reflection and learning are done to find out why, so that evidence-based action can be taken. In this way, stakeholders jointly identify pathways towards more Regenerative Inclusive Food Systems that best fit the East African context.

To enhance collaboration, and experimentation and learning, REFOOTURE established three Food System Innovation Platforms, in Ethiopia, Kenya and Uganda. These platforms are seen as the tools and means to engender development towards Regenerative Inclusive Food Systems. They take action and foster real change by setting up the experiments and doing research, while at the same time strengthening the movement of actors towards Regenerative Inclusive Food Systems.

Food System Innovation Platforms

Food System Innovation Platforms are networks of various actors in the food system: farmers, researchers, and government, private sector, investors, and civil society representatives. In the platforms, these people meet on a regular basis and cooperate, lending support to and learning from local innovation cases – very practical and hands-on initiatives of community-based farmers and local innovators. The platforms also link up with and strengthen other existing networks in the food system.

The platforms apply the working modes of Living Labs and connect 'doers' (farmers, entrepreneurs) with 'thinkers' (researchers, innovators) and 'enablers' (policy makers, financial institutions). Roles are not fixed: a researcher can be a doer, and many farmers function as thinkers. Also, nature itself has a place at the table, and various tools are used to include the 'voice of nature' in deliberations.

The platforms build the motivation and capacity of farmers, entrepreneurs, and researchers to experiment in local innovation cases, and collect evidence from these experiments. The evidence is used to improve innovations, but also to make essential changes in the enabling environment, for example to change policies or increase access to finance or markets.

The platforms are supported by scientists from Wageningen University & Research (Netherlands), Jimma University and Bahir Dar University (Ethiopia), Egerton University (Kenya) and Muni University (Uganda). The scientists are from different disciplines and work together in a transdisciplinary way. The African universities host the platforms' secretariats and manage the day-to-day business.

► Find out more in the separate booklet on **Food System Innovation Platforms** ([DOI 10.18174/629016](https://doi.org/10.18174/629016))



Regenerative Inclusive Food Systems

We define Regenerative Inclusive Food Systems as socio-ecological systems in which farmers, innovators, entrepreneurs, consumers, researchers, and policy makers are working innovatively and embedded in nature to ensure vibrant and healthy ecosystems which enable resilient livelihoods and food and nutritional security for all. The transformation towards such Regenerative Inclusive Food Systems should be fair and just, where no being is left behind. The transition starts from a vision to advance the natural, manufactured, financial, human, and social capital of the food system.

Regenerative Inclusive Food Systems differ from the food systems we have today, because in them people's relationship with nature is fundamentally different. In Regenerative Inclusive Food Systems, people nurture nature's processes to build resilience and devise adaptation strategies that will enable them to cope with climate change and other future shocks. Regenerative Inclusive Food Systems also evolve differently in different places, as they are specific to a particular place and the people living there.

REFOOTURE developed five principles of Regenerative Inclusive Food Systems:

- sense of place and purpose,
- social-ecological design for innovation,
- connectedness,
- fair, just and inclusive transition and
- design for renewal.

These principles guide the overall process, starting with personal thinking and acting.

► *Find out more in the separate booklet on **Regenerative Inclusive Food Systems** ([DOI 10.18174/629017](https://doi.org/10.18174/629017))*

Long-term perspective

Transformation of food systems takes years. The REFOOTURE project is therefore also a long-term project, divided into separate phases. The first phase of the REFOOTURE project – from 2020 till early 2023 – was about unpacking the concept of Regenerative Inclusive Food Systems and Food System Innovation Platforms. It started by establishing the commitment of stakeholders, who want to jointly experiment, learn, and contribute to Regenerative Inclusive Food Systems in East

Africa. During the first phase, tools and ways to operationalise the systems transformation were developed. In the next phases, the project will consolidate the Food System Innovation Platforms in order to build the capacity, the relationships and the innovation support services needed for evidence-based development of Regenerative Inclusive Food Systems. Evidence to support the success of the REFOOTURE approach will gradually emerge over the coming decade.

REFOOTURE?

REFOOTURE stands for rethinking and redesigning the future of food towards a Regenerative Inclusive Food System.

RE relates to regenerative, but also stands for reviewing, rethinking, redesigning, renewing. RE refers to the activities that are taking place in the Living Labs and beyond.

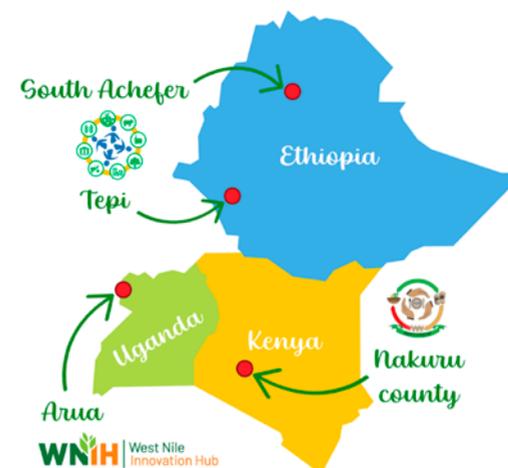
FOOTURE is our merging of the words 'food' and 'future'. FOOTURE and FUTURE sound similar, illustrating the intrinsic dependency between our food and our future, which is certainly the case for East Africa.

The word REFOOTURE denotes co-creativity: jointly creating a better future of food.

REFOOTURE supports East African partners in the Food System Innovation Platforms to operationalise the principles of regeneration and inclusivity, thus leading to the transformation of their food system.

Where do we work?

The REFOOTURE project works on food-system transformation in Ethiopia, Kenya and Uganda. Food System Innovation Platforms have been established in Ethiopia (in South Achefer district and the Teppi area), in Nakuru district in Kenya, and the West Nile region in Uganda. Each area has its own specific food system and challenges, which are described in more detail in the booklet on Food System Innovation Platforms.



Location of the three Food System Innovation Platforms.



REFOOTURE partners

The REFOOTURE project is run by Wageningen University & Research (Netherlands), Jimma University and Bahir Dar University (Ethiopia), Egerton University (Kenya) and Muni University (Uganda).

Each Food System Innovation Platform was established and is hosted by one of the African universities. These East African universities host the three Food System Innovation Platforms established in the three countries. In addition, the role of the African universities was to identify existing regenerative and inclusive initiatives in the region. They supported local communities to work on innovation and do experiments, creating evidence on what works and what does not work. They linked local communities with entrepreneurs and presented lessons learnt to policy makers and others. In the second phase of REFOOTURE, the role of the African universities will shift towards building capacity and motivation of the Food System Innovation Platforms themselves to take over these activities.

The role of WUR

Wageningen University & Research (WUR) supports the African universities in setting up and developing the Food System Innovation Platforms. WUR provides concepts, organises joint sense-making dialogues, sets up protocols and provides support in using these. In addition, WUR researchers disseminate the evidence in the international playing field. WUR also plays a role in supplying technical assistance and helping to boost innovation and collect evidence. In all these activities, WUR collaborates closely with representatives of the local East African universities.



Ethiopia

In Ethiopia, REFOOTURE's work is coordinated by Stichting Wageningen Research Ethiopia (SWR Ethiopia), an international NGO registered in Ethiopia since March 2021, and affiliated to Wageningen University & Research. SWR Ethiopia serves as a hub for several projects that WUR undertakes with diverse partners in Ethiopia.

The activities of the Food System Innovation Platform are hosted by two Ethiopian universities.

Jimma University (www.ju.edu.et) is one of Ethiopia's leading and oldest universities and has a focus on community engagement. It was founded by the amalgamation of the Jimma Institute of Health Science and the Jimma College of Agriculture in the 1980s. Jimma University has six campuses, over 2,000 academic staff and currently hosts nearly 49,000 students.



Bahir Dar University (www.bdu.edu.et) is a public university located at the source of the Blue Nile and the shore of Lake Tana. It was founded in 1999 on the merger of two institutions, the Polytechnic Institute, and the Pedagogy Academy. The university aspires to be one of the leading research-intensive universities in Africa and the first choice in Ethiopia by 2030. It has five colleges, four institutes, two faculties, two academies, and two schools spread over nine campuses in Bahir Dar City. The university has over 2,000 academic staff and more than 40,000 students.



Kenya

In Kenya, the Food System Innovation Platform is hosted by Egerton University (www.egerton.ac.ke), the oldest institution of higher learning in Kenya. Egerton University is a public university and seeks to generate knowledge and offer education and training to society for national and global development, especially in the field of agriculture and related disciplines.





Uganda

The Food System Innovation Platform in Uganda is hosted by Muni University (www.muni.ac.ug). Established 2013, Muni University is the only public institution of higher learning in the entire West Nile region of Uganda. The University envisions itself as the 'community university' with graduates that have the skills and passion to work with a variety of stakeholders towards transforming lives in their community.

Together with development partners, the University addresses critical societal challenges in the refugee settlements and host communities of the West Nile region. Muni University has strong ties with the West Nile Development Agency (WENDA), a local government umbrella organisation for the districts, cities, and municipalities of the region.



Facts about the first phase of REFOOTURE



Duration: July 2020 - March 2023



Implementing partners: Wageningen University & Research, Jimma University and Bahir Dar University (Ethiopia), Egerton University (Kenya) and Muni University (Uganda)



Number of researchers involved: 29



Funding: IKEA Foundation



Supported by: University Fund Wageningen

Key outcomes

3

Food System Innovation Platforms in 3 countries established and officially launched

3

International dialogues organised

1

Project website developed

5

Principles of Regenerative Inclusive Food Systems defined

4

Websites describing activities carried out in the Food System Innovation Platforms and results

19

Innovation cases with experiments supported

1

Evidence platform established: www.evidence-platform.online

26

Training sessions given

15

Reports and briefs developed. Find all working documents, briefs and other shared resources at www.wur.nl/en/project/refooture-food-futures-eastern-africa.htm

Above all: REFOOTURE has changed the mindset of the participants in the three Food System Innovation Platforms





The REFOOTURE approach

The aim of the first phase of the REFOOTURE project was to unpack the concept of Regenerative Inclusive Food Systems and explore pathways towards these. Dialogues at different levels were organised to integrate perspectives of the various actors involved. Situational analyses were conducted to survey existing regenerative and inclusive initiatives, and to assess where there was a need for a platform to support these. After this Food System Innovation Platforms were established. The platforms increased the capacities, motivation, and engagement of farmers, entrepreneurs, and others in the food system in the food system to work on experiments that could lead to regeneration and inclusiveness, which we call local innovation cases. From these, evidence was collected on what innovations work and what do not, and why. Reflection and learning then followed, and action was taken based on consideration of the evidence.

Facilitation of place-based innovations

In REFOOTURE, local, place-based innovation is a key mechanism to foster the transformation towards Regenerative Inclusive Food Systems. Territory and surroundings play a determining role in place-based innovations. In each of the three Food System Innovation Platforms, several innovation cases were identified that have the potential to contribute to the development of Regenerative Inclusive Food Systems. In the first phase of REFOOTURE, 19 innovation cases were selected for more intensive support to enable them to mature. You can read more about these innovation cases and the context in which they operate in the booklet on Food System Innovation Platforms¹, and about how they were supported by the REFOOTURE project.

Collecting evidence

The REFOOTURE project builds scientific evidence on what innovations work and those that don't. It does so by testing, validating, and reporting reporting on place-based innovations in a systematic way. This is done by the farmers and local innovators, in cooperation with researchers. In the first phase, in-depth studies were conducted to uncover systemic bottlenecks and constraints of the project and

connect practical and scientific knowledge.

The evidence was used to improve innovations, but also to advocate changes in the wider food system, for example changes to policies or for increased access to finance or markets. This process of evidence-based change is described in more detail in the booklet on Food System Innovation Platforms.

Evidence and learning on ongoing and future experiments will be documented and shared via the evidence platform (www.evidence-platform.online) and through international dialogues. The evidence platform is an online tool to facilitate dialogues among different actors at different levels. External parties and project members are invited to reflect on insights from the project.



¹ DOI 10.18174/629016

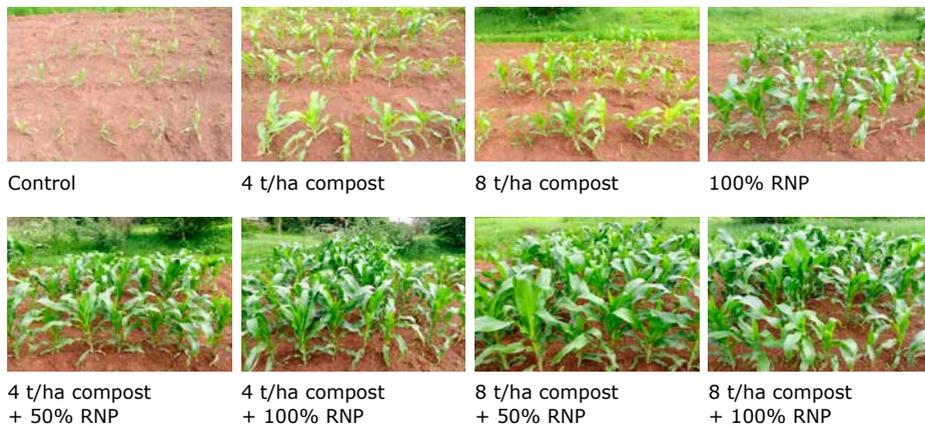


Gaining evidence on combining compost and mineral fertiliser

In South Achefer, in Ethiopia, the price of mineral fertiliser has recently risen enormously, and many farmers cannot afford to buy it. In an experiment, farmers together with researchers found that mineral fertiliser could be partly replaced with compost. Combining four to eight tons of compost per hectare with half of the recommended mineral fertiliser rates gave better yields, improved soil health and was economically feasible.

The experiment was set up as part of the South Achefer Living Lab in the REFOOTURE project. The farmers, who are part of the Living Lab, agreed to experiment with different rates of application of compost and mineral fertilisers to find out what gave the best results. They submitted samples of their compost for lab analysis to verify its nutrient composition.

Doing the experiment with farmers in a real-life situation allowed for joint learning and co-creation of the innovation. It opened up space for learning by doing and screening context-specific solutions which fit the biophysical and socio-economic contexts. The experiments were preceded by an exploration phase, which brought together farmers, researchers, and others for joint visioning and identifying an action agenda on regenerative and inclusive practices. Results of the experiment were documented as evidence. This was used to inform other farmers, and in advocating a change in government policy on agricultural extension.



Capacity building

As explained in more detail in the booklet on Food System Innovation Platforms, an important aspect of the REFOOTURE project's approach was to build capacities, motivation, and engagement among various actors at different levels. The partner-teams managing the Food System Innovation Platforms received training and skills development, which they in turn used to train and support farmers, innovators and other stakeholders in the day-to-day practice of working on the innovation cases.

Various in-country exchange visits were organised within the countries to build capacity on how to form Food System Innovation Platforms. International cross-country exchange visits among the three East African countries helped the group to better understand the concept of Regenerative Inclusive Food Systems. Finally, the capacity of the REFOOTURE team itself was built through bi-monthly mini conferences, during which we jointly reflected on our own concepts and activities, especially the operationalisation of the theory underlying Food System Innovation Platforms, and the concepts and assumptions involved.

Transdisciplinary collaboration

Linking actors from various backgrounds and learning together is a demanding task for a team. It requires a transdisciplinary approach, where the knowledge of people with diverse backgrounds is combined. When people with different scientific backgrounds work together, this is called interdisciplinarity. Transdisciplinarity goes one step further, by including non-academic knowledge holders from outside universities. REFOOTURE adds yet another dimension by integrating these different kinds of knowledge and perspectives from different countries and cultures, and by including South-South and South-North cooperation.



Lessons learnt and future outlook

Here we share some lessons that we learnt from REFOOTURE at a project level that may be useful for other projects aiming at Regenerative Inclusive Food System development. We have also used these lessons to develop our plans for the second phase of REFOOTURE.

Dialogue and long-term commitment needed

REFOOTURE started from the idea that, to address the challenges East African countries are facing today, their food systems need to change fundamentally – towards Regenerative Inclusive Food Systems. Regenerative thinking is a relatively new concept and often restricted to regenerative agriculture. Realising a shift of mindset from sustainable thinking to regenerative thinking is a major change. It entails much more than just transferring experiences and methods. This was underestimated at the start of the first phase of REFOOTURE, as there was no shared understanding of the concept of Regenerative Inclusive Food Systems. To develop this, the consortium organised several targeted dialogues amongst its partners. In addition to these internal dialogues, much effort was spent on dialogues with local innovating communities and between partners in the Food System Innovation Platforms. Topics discussed included *What are Regenerative Inclusive Food Systems?* and *How can a Living Lab way of cooperation contribute to Regenerative Inclusive Food Systems?*. The answers to these questions are context and space specific. In the first phase of REFOOTURE, five principles of Regenerative Inclusive Food Systems were defined, and proved to be a useful to guide for dialogues.

It is important to understand that these dialogues were needed to develop convergence on concepts and a common vision on Regenerative Inclusive Food Systems across the East African partners.

Engaging in such a dialogue also requires the mental space to be able to listen, be open to other opinions and bring together different forms of knowledge. The dialogues proved crucial to developing shared understanding, motivation, and competences for working on innovations and opportunities that contribute to Regenerative Inclusive Food Systems.

In the second phase of REFOOTURE, the focus of the project will shift towards building the capacity and motivation of Food System Innovation Platforms to organise similar dialogues on their own. These dialogues will be organised with local innovation communities and other regenerative and inclusive initiatives in the region. Policy makers, investors and other private sector parties will be involved as well, to work on an enabling policy environment.

Working on concrete examples

The movement towards Regenerative Inclusive Food Systems is still in its infancy, so there are few experiences and concrete examples. Local people, as well as stakeholders, need to see and experience tangible effects to become inspired and motivated to change.

In the next phase of REFOOTURE, more and more extensive examples will be implemented, and experiences will be systematically analysed and documented. The Food System Innovation Platforms will support more experiments in co-creation workshops with farmers and local innovators, thus creating more regenerative and inclusive initiatives and providing examples that will promote better understanding of their potential.

Assessing the development of Regenerative Inclusive Food Systems

At the start of the project, we started from the idea that Regenerative Inclusive Food Systems could be assessed by doing an updated sustainability assessment. We thought we could adapt previous work on assessing sustainability initiatives, using predefined indicators for dimensions such as soil health, agricultural production, or income. But after investigating several existing sustainability assessment tools, we discovered that assessing Regenerative Inclusive Food Systems is about evaluating changes in people's attitude and their relationship with nature. It is also about evaluating the quality of processes for change, evolution, and transformation. In the second phase of the REFOOTURE project, we will use the five guiding principles of Regenerative Inclusive Food Systems to further shape our assessment framework.



To steer and monitor progress at the project level, the use of capabilities, opportunities and motivation as key performance indicators has proven to be helpful. Focusing on capabilities, opportunities and motivation of local communities and staff proved to be a good way to support them in the co-creation of innovations towards Regenerative Inclusive Food Systems. The quote below illustrates the importance of addressing change from a stakeholder perspective and giving attention to what motivates people.

“Some are motivated by increased productivity that will come along with increased income and improved livelihoods. Improved food and nutrition outcomes are of interest to the government, and development partners. Increased opportunities for business are a direct motivation for transporters, bankers, marketeers, and the government through increased revenue. The opportunity to carry out applied and basic research targeted at solving challenges within the food system is also a motivation for researchers.”

Tewodros Tefera, Country Manager Ethiopia REFOOTURE project

Building a strong North-South Partnership

REFOOTURE has been managed in a flexible, agile, explorative and experimentative fashion. The teams were actively engaged in learning from their actions and interactions. The close collaboration between WUR and the East African partners resulted in a strong North-South Partnership, which enabled the project to blend context with science. The multi-country approach and the way it was put into practice through cross-country visits and multiple learning events has also fostered a strong South-South partnership. This in turn supported cross-fertilisation and the start of an East African movement towards Regenerative Inclusive Food Systems. In the first phase of REFOOTURE, WUR had a clear steering role. In the second phase, there will be a stronger leading role for the East African partners.

Celebrate diversity

There is a rich diversity of ways in which Regenerative Inclusive Food Systems can be developed and how Food System Innovation Platforms should play a role in this

process. The platforms can be established in different ways and for different reasons. Identifying and acknowledging context-specific entry points made it clear that the way of working should also be context or space specific. We should allow a bottom-up and place-based approach to be used, in which visioning plays a key role. This process helps to convene stakeholders involved in designing Regenerative Inclusive Food Systems: local innovators together with business, science, and government.

Based on the rich diversity we discovered, we not only perceive a need to consolidate concepts and practices, we also believe we have created a foundation upon which to build further. Several stakeholders – from government, science and practice in the three countries – clearly stated the desire and need to further explore how Regenerative Inclusive Food Systems can solve regional food systems challenges, and what this approach can contribute to people, food security and nature regeneration.



Shared experiences

- Five RIFS principles in a nutshell (video): tinyurl.com/RIFS-video
- O’Keeffe, S. and Siegmund-Schultze, M. (2022) *Guiding principles to support a transition towards Regenerative Inclusive Food Systems (RIFS)*. Wageningen: Wageningen University & Research, working document. tinyurl.com/Guiding-principles-RIFS
- Siegmund-Schultze, M. and O’Keeffe, 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 University & Research, working document. tinyurl.com/tracking-RIFS-development
- Reemer, T., O’Keeffe, S., De Groote, B., Murage, P., Kigiri, D., and Ndambiri, P. (2023) *Collaborate to Regenerate. A guide for teams to start mobilising people towards regenerative and inclusive food systems*. Wageningen: Wageningen University & Research, working document. tinyurl.com/Collaborate-to-Regenerate

Websites

- REFOOTURE project www.wur.nl/en/project/refooture-food-futures-eastern-africa.htm
- Nakuru Living Lab nakurulivinglab.org
- South Achefer Living Lab ethiopianlivinglab.org/home-south-achefer
- Teppi Living Lab ethiopianlivinglab.org/tepi-living-lab/
- West Nile Innovation Hub www.westnileinnovationhub.org

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East Africa faces serious food insecurity, poverty, and nature degradation. To deal with this multiple crisis, a fundamental change in the food systems of the region's countries is required. That was the premise of the REFOOTURE project, launched in 2020 with funding from the IKEA Foundation. The aim of this ongoing project is to foster Regenerative Inclusive Food Systems in Ethiopia, Kenya and Uganda.

This booklet provides an overview of the REFOOTURE project, its approach and the lessons learnt. The booklet is part of a series of three booklets. The other two booklets are on the concept of Regenerative Inclusive Food Systems ([DOI 10.18174/629017](https://doi.org/10.18174/629017)) and on Food System Innovation Platforms ([DOI 10.18174/629016](https://doi.org/10.18174/629016)), which are vehicles to move towards such food systems. Each booklet can be read on its own.

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