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RESEARCH

# Redistributing More than Food? Food Access and Agency in German Food Rescue Organizations

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## Abstract

In Germany, food rescue organizations (FROs) – including traditional food pantries and complementary food-sharing initiatives – redistribute surplus food to a new consumer base. While food pantries typically aim to reduce food insecurity, food-sharing initiatives emphasize environmental sustainability by reducing food waste. However, the extent to which both FRO types pursue organizational targets to address the needs of socioeconomically disadvantaged populations and aim to contribute to food security, particularly in terms of access and agency, is underexplored. This study examines FROs' objectives through Luhmann's concept of inclusion via organizational communication, applying a Theory of Change (ToC) framework. Based on 22 semi-structured interviews with managers from both FRO types in a Bavarian district, analyzed using Grounded Theory, the findings reveal heterogeneous and sometimes conflicting goal orientations toward access and agency across and within traditional and complementary FROs, and across all ToC levels. The findings indicate tensions but also synergies between material support and normative goals, shaped by differing views of beneficiaries as either passive recipients or active participants. Traditional FROs emphasize food access with limited user agency, while complementary FROs promote both access and agency to support ecological aims. Hence, both navigate overlapping social, ecological, and institutional responsibilities, with potential implications for users' food security experiences.

**Keywords** Food security · Access · Agency · Food pantries · Food banks · Food-sharing initiatives

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## Introduction

In Germany, about 4.43 million tons of food are wasted annually across the supply chain, including out-of-home consumption (Statistisches Bundesamt 2022). In response, food rescue organizations (FROs) (Hecht and Neff 2019) collect surplus food deemed economically 'inedible' by market actors and redistribute it to distinct consumer groups (Barlösius 1993; Bloom 2010). Among them, food pantries (*Tafeln*) are the more 'traditional' FROs and operate over 975 locations (Statista 2024). They are increasingly relevant non-profit organisations addressing food insecurity amid immigration, ageing populations, and rising living costs. In 2022, 17.6 million individuals faced poverty or social exclusion (Statistisches Bundesamt 2025), and 3.34 million experienced moderate to severe food insecurity (FAO 2025), often referred to *Tafeln* via social welfare offices (Normann 2003). Though providing food and social support, *Tafeln* serve only around two million clients annually (Tafel Deutschland e.V. 2023), and 18% of clients remain food insecure, leaving significant unmet needs (Simmet et al. 2024) and indicating a disconnect between organizational goals and outcomes.

In parallel, 'complementary' initiatives such as *Foodsharing* —founded in 2012— have expanded, using a centralized digital platform to coordinate local redistribution by volunteers (Hecht and Neff 2019). These volunteers (*Foodsavers*) share surplus food within their networks (*Foodsharers*), offering a supplementary or alternative food access and promoting civic engagement. Yet, public discourse mainly highlights environmental benefits, offering little clarity on impacts for food-insecure groups or societal inclusion.

Despite their growing importance, the organizational processes through which traditional and complementary FROs contribute to food security remain under-researched. Studies on food pantries focus more on food availability and quality (Simmet et al. 2017a, b; Eicher-Miller 2020; Oldroyd et al. 2022), the sociopolitical discourse surrounding food pantries (Kessl et al. 2020; May et al. 2020) and the lived and observed experiences of and with users (Haynes Stein 2023; Slocombe 2023; Rivera et al. 2023) than on comprehensive food security (Bazerghi et al. 2016), and rarely address organizational access and agency goals. Research on food-sharing models primarily explores volunteer motivations (Gollnhofer et al. 2019; Schanes and Stagl 2019), organizational sustainability objectives (Almeida Oroski and Da Silva 2023), and ecological impact (Davies and Legg 2018; Yamabe-Ledoux et al. 2023), with a limited focus on governance strategies (Morrow 2019). Comparative studies are scarce (Watson 2019), leaving a gap in understanding food security goals of both types of FROs, particularly regarding access and agency.

This study aims to fill this gap and examines how traditional (*Tafeln*) and complementary (*Foodsharing*) FROs in Germany address food security through organizational practices. Using Luhmann's Systems Theory and the Theory of Change (ToC), it analyzes how goals related to access and agency are defined, communicated, and integrated into practice. The analysis is based on 22 semi-structured interviews with FRO managers. The combined framework offers insight into how FROs align their strategies with broader food security outcomes.

## Food Access and Agency in the Food Security Framework & State of Research

Food access and agency are two of the six dimensions of food security, alongside availability, utilization, stability, and sustainability (Clapp et al. 2022; HLPE 2020). According to the Food and Agriculture Organization of the United Nations (FAO), food security exists "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO 2001). This study emphasizes access and agency as critical dimensions for understanding how FROs seek to address the needs of socioeconomically disadvantaged populations through both material and non-material means.

### Food Access in Traditional and Complementary FROs

Food access comprises the physical, social, and economic means by which individuals acquire adequate food without compromising other basic needs (HLPE 2020). Caspi et al. (2012) outline five key dimensions which Ginsburg et al. (2019) have applied to traditional FROs:

- **accessibility**: geographical location, opening hours, and authorization requirements,
- **acceptability**: meeting individual quality standards,
- **availability**: the variety of food offered per client,
- **affordability**: financial and temporal costs, and
- **accommodation**: consideration of personal schedule and cultural preferences.

Research on food pantries, mainly from the U.S., is based on staff and manager interviews and identifies barriers like limited reach, short hours, poor food quality, and pre-packed distributions that limit choice and increase waste (Chapnick et al. 2019; Ginsburg et al. 2019; Loopstra et al. 2019; Long et al. 2020; Yan et al. 2020; Lanier and Schumacher 2021; Riediger et al. 2022; Huang et al. 2023; Oncini 2023). In Germany, similar quality issues have been documented (Simmet et al. 2018), but other access-related impacts remain underexplored, leaving uncertainties about pantry challenges and strategies.

German pantries typically restrict access by implementing regulated eligibility criteria targeting individuals with financial need (Normann 2003). They employ symbolic pricing to reduce waste and uphold beneficiary dignity, alongside client-choice models to ensure equitable distribution (Sedelmeier 2011). While these practices partially align with U.S. pantries' focus on operational efficiency (Jones et al. 2019; Yan et al. 2020), the balance between efficiency and food security within German pantries remains insufficiently studied.

Similarly, the goals of non-profit food-sharing models are understudied (Michelini et al. 2018). Existing research, primarily consisting of self-reports and ethnographic studies, tends to distinguish digital platforms from local initiatives. Most digital platforms prioritize food safety and logistical concerns over targeted support for socioeconomically disadvantaged populations (Michelini et al. 2020). While some initiatives advocate for "unconditional accessibility" (Davies et al. 2019), concrete strategies to improve accessibility, availability, quality, and adequacy for disadvantaged groups remain largely undocumented.

### Food Agency in Traditional and Complementary FROs

Food agency refers to the chances of individuals to act according to their food preferences, encompassing two dimensions (HLPE 2020; Clapp et al. 2022):

- **food choice autonomy**: self-determined decision of the type and amount of food regarding the preferred production, processing, and distribution quality of food, and
- **capability for food system co-creation**: participating in food policy processes shaping the food system.

An agency perspective emphasizes individuals' capacity to acquire resources within existing constraints, without overemphasizing structural or personal responsibility. It complements the dominant access-oriented discourse in food security research (Calloway et al. 2023).

Research on food pantries rarely examines their role in food agency. U.S. client-choice pantries informally support needs-based selection and empower clients through volunteer-client interactions (Jones et al. 2019). German pantries often lack such structures (Meier and Sowa 2018) but still promote consumption participation (Lorenz 2010), leaving knowledge gaps about their formal or informal strategies for supporting food choice or client participation.

Food-sharing studies offer more insight into agency-related goals. Platforms provide limited financial benefits (Meshulam et al. 2023) but expect user volunteering (Michelini et al. 2020). They focus on raising awareness of food waste and equitable retailer partnerships (Michelini et al. 2020; Davies et al. 2019). Initiatives, in Germany, encourage participation, fair sharing (Engelbutzeder et al. 2023), and promote food literacy (Davies et al., 2019). However, strategies enabling equal material benefit and empowering user engagement are underexplored research gaps.

## Organizational Perspective: Luhmann's Systems Theory

Luhmann's Systems Theory provides a useful framework for the analysis of the goals of food rescue organizations' (FROs) from an organizational perspective. According to Luhmann (1997), in modern societies such as Germany, organizations serve as mediators of social inclusion and exclusion by allocating material and social resources. Unlike broader socio-political understandings focusing on multi-domain participation, for instance, as articulated by Kronauer (2010), Luhmann defines inclusion narrowly and analytically as participation in system-specific communication. This perspective shifts the focus from normative claims to communicative structures through which inclusion is enabled or restricted.

As organizations embedded in functional systems such as the economy or politics, FROs align their communication with system-specific binary codes (Kneer and Nassehi 2000). Within the food system strongly shaped by economic logics, access to food can be coded as having vs. not having food, i.e., possessing food (Reese-Schäfer 2005). From this angle, FROs might seek to rebalance food access by reallocating food to those at risk of material exclusion and communicate this goal in their interactions with stakeholders in their network. Luhmann (2000) distinguishes between two types of goals, which he terms 'programs' and defines as formalized decision-guiding expectations that are essential for

organizational continuity (Süssenguth 2012): normative purpose programs (e.g., inclusion via food distribution, i.e., food agency) vs. conditional programs focusing on operational routines (e.g., logistics under supply variability, i.e., food access). As non-profit organizations, FROs could pursue and communicate both practical and normative goals, integrating economic and social logics toward food access and agency as means or ends (Simsa 2001). In Luhmann's sense, organizational inclusion of individuals occurs through communication and role attribution. By assigning users' roles as active performers (volunteers) or passive audiences (users) (Stichweh 2009), FROs may facilitate the integration of users into organizational processes. In doing so, they might grant access to and/or agency for otherwise unavailable resources for active or passive participants, thereby enabling broader societal inclusion (Luhmann 1997). However, empirical research—especially in Germany—has scarcely explored how FROs communicate and promote food access and/or agency. This study applies Luhmann's Systems Theory to analyze FROs as communicative mediators of inclusion.

## Materials and Methods

To investigate the goals of FROs, this study adopted an exploratory qualitative research design. Guided by the Theory of Change (ToC) framework and Luhmann's approach of communicative inclusion, semi-structured interviews were conducted with 22 managers from both traditional and complementary FROs, who were able to provide internal perspectives on the FROs' goals. The interviews were analyzed using the coding procedure of Grounded Theory (GT). Ethical approval for the study was granted by the Ethics Committee of the university with which the author is affiliated (protocol code: 23–038; date of approval: 18.12.2023).

### Methodological Framework of the Interview Guide: Theory of Change and Systems Theory

Non-profit organizations, including FROs, operate under resource constraints and diverse member motivations, requiring a clear shared purpose and aligned strategies. The Theory of Change (ToC) framework, widely used in international development (Vogel 2012) and applicable in high-income contexts, supports the development of project strategies by distinguishing between inputs, activities, outputs, outcomes, and impacts (Rogers 2014).

In this study, ToC guided the design of the first part of the interview guide (see Supplementary Information, Table 1) to examine how FROs define and pursue material and ideational goals related to food access and agency, whether independently or sequentially (Funnell and Rogers 2011). Here, surplus food is the material input, and activities engage stakeholders to create value across three levels (Michelini et al. 2020; Novikova 2022):

- **outputs**: short-term, tangible effects (e.g., food access);
- **outcomes**: mid-term, non-material changes (e.g., food literacy, dignity);
- **impacts**: long-term societal shifts (e.g., reduced structural barriers, increased agency).

Additionally, Luhmann's Systems Theory was used to create the third part of the interview guide. This part asked about users' organizational integration, i.e., the types of target groups, their expected behaviors, and their roles, as well as the anticipated communicative interactions between volunteers and users.

### Profile Datasheet

Via an additional profile datasheet, operational data on FROs, including volunteers, users, and distribution site numbers, estimated food quantities and types per client, and distribution schedules were collected. The presumed socio-economic background of users and the founding years were also recorded.

### Sampling Strategy and Interview Duration

This research is part of a larger project investigating FROs at the local level in a Bavarian administrative district. Convenience sampling was applied by identifying all 14 Tafeln and 10 Foodsharing organizations in this district by reviewing the websites of the umbrella organizations and contacting each FRO by phone and email. For the first seven FROs, the research topic on social inclusion was disclosed; the others were requested to generally report on organizational processes. The final sample comprised 14 *Tafeln* and 8 *Foodsharing* groups. Both types of FROs mainly operated in medium-sized municipalities (BBSR 2024). *Tafeln*, independently or via (church) providers, served 68 to 1,200 registered households, whereas *Foodsharing* initiatives had 71 to 604 volunteers (see Tables 1 and 2). Snowball recruitment was employed to gather the perspectives of multiple managers per FRO. However, the capacity of the managers was reportedly insufficient, resulting in only one manager per FRO participating in the study. Interviewed managers were predominantly

**Table 1** Sample characteristics: traditional FROs

| Traditional FROs (Pantries) | Year of foundation | Municipality Size[1] (pantry site location) | Affiliation: Independent pantry / (Church) provider | Registered households |
|---|---|---|---|---|
| I5 | 2005 | medium | independent | 1,200 |
| I6 | 1992 | medium | independent | 300 |
| I9 | 2006 | small | Church provider | 770 |
| I11 | 2006 | medium | Church provider | 134 |
| I12 | 2008 | medium | independent | 700 |
| I13 | 2009 | rural | Provider | 150 |
| I14 | 2004 | medium | independent | 800 |
| I15 | 2013 | small | independent | 270 |
| I16 | 2005 | small | independent | 300 |
| I17 | 2004 | medium | independent | 700 |
| I18 | 2012 | medium | Church provider | 300 |
| I19 | 2007 | small | independent | 500 |
| I20 | 2007 | rural | Church provider | 68 |
| I24 | 2007 | small | Church provider | 325 |

[1] Municipality sizes according to the Federal Institute for Research on Building, Urban Affairs and Spatial Development, (BBSR 2024): rural: up to 4,999 residents; small: up to 19.999 residents; medium: up to 99.999 residents

**Table 2** Sample characteristics: complementary FROs

| Complementary FROs (Foodsharing) | Year of foundation | Municipality Size/Rural[2] | Registered Foodsavers |
|---|---|---|---|
| I1 | 2012 | medium | 502 |
| I2 | 2019 | medium | 161 |
| I3 | 2017 | medium | 604 |
| I4 | 2019 | small | 71 |
| I7 | 2014 | medium | 270 |
| I8 | 2019 | medium | 120 |
| I10 | 2018 | medium | 296 |
| I21 | 2015 | rural | 262 |

[2] A rural *Foodsharing* initiative here means that it collects the food mainly from a rural district surrounding the nearby medium-sized town

retired men (*Tafeln*) or women under 50 (*Foodsharing*). Interviews were conducted on-site for *Tafeln* and in private settings for *Foodsharing* (December 2023 to June 2024), lasting 1 h 53 min on average (range: 43 min–2 h 41 min).

### Data Processing and Analysis

After audio-recording and transcription in German language (*noScribe*, v0.4 beta, or *f4x*, 2023), the author and a student assistant verified the content and anonymized the transcripts in *MAXQDA* (v2022). The data analysis followed GT, with an emphasis on constant comparative analysis within and across both FRO types (Strübing 2018), and was informed by Luhmann's Systems Theory as a sensitizing concept to guide the focus on communicative processes of inclusion. Systematic memo writing in loops supported the development of possible interpretations beyond the manifest contents of the single interviews during the coding process (Corbin 2021). GT allowed for staying open to different shades of goals, including restrictive types of food security goals, and enabled differentiating causal conditions, strategies, and consequences – i.e., contextual factors, goals, and impacts of FROs (Strübing 2018). The coding began with deductive categories derived from the ToC (outputs – outcomes – impacts), followed by open and axial coding in line with GT, generating inductive subcategories (Strauss 1991). To ensure intersubjective validation, multiple data sessions were conducted with social science colleagues. The English translations of the relevant quotes for reporting this research were produced with AI assistance during the development of this manuscript, and the author verified their semantic accuracy.

## Results

This study investigates the extent to which traditional and complementary food rescue organizations (FROs) in Germany—specifically, *Tafel* associations and *Foodsharing* initiatives—pursue and communicate goals toward enhancing food security (food access and agency), based on their perceptions of users' organizational roles. The results reveal distinct goal orientations both between and within traditional and complementary FROs, occurring across all levels of the Theory of Change (ToC) (see Fig. 1). However, inter-group differences between traditional and complementary FROs are more pronounced than intra-group variations. Goals are presented by ToC levels, categorized by FRO type.

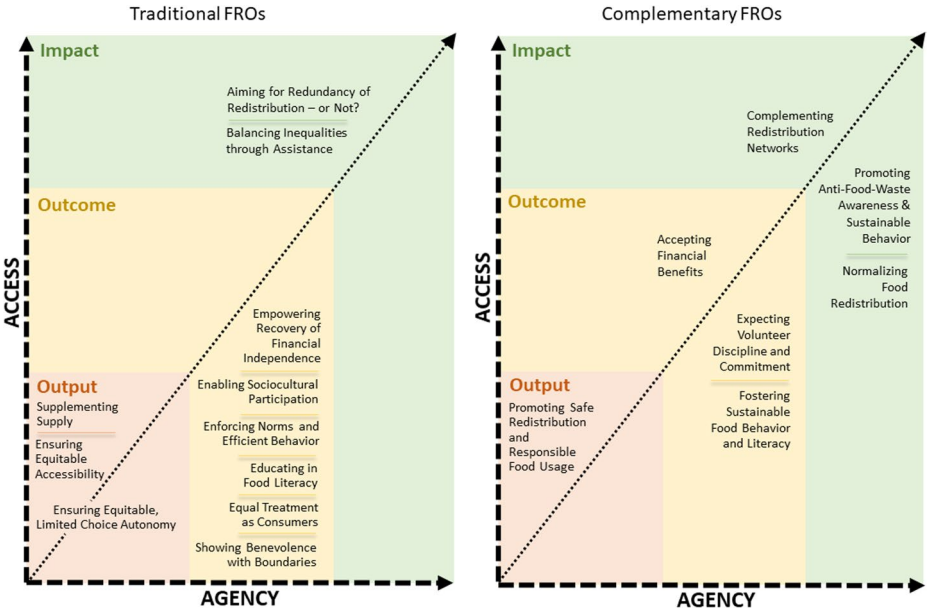



**Fig. 1** Goals of traditional and complementary FROs

## Outputs: Short-term, Material Goals Toward Food Access and Agency

### Ensuring Equitable Accessibility

Traditional FROs primarily aim to ensure immediate, equitable food accessibility tailored to the needs and circumstances of economically disadvantaged groups. They promote geographic equality by situating pantries near public transport, implementing shuttle services, or fixed distribution schedules. As one pantry manager using pre-packed distribution explains:

> "We have dealt with the time allocations. The fact is that, predominantly, our clients come by public transport. Predominantly means over 50%. So, if they have a different time corridor every week, then they have a problem." (I5, Sect. 540).

Pantries using the client-choice model with rotating slots seek to enhance geographical accessibility by allowing early visits for clients who rely on public transport. Some want to improve physical accessibility by delivering to those with health issues, while most prioritize entry for these clients. All aim to ensure time-based accessibility through transparent communication and fair client rotation, benefiting clients' "mental health" (I15, Sect. 65) during waits. They prevent financial barriers by requiring small, household-size-adjusted contributions, besides fostering food value. Pantries also aim to enhance socio-psychological and cultural accessibility, i.e., accommodation, by providing low-threshold communication, including instructions in relevant languages. However, this openness may raise intercultural tensions amid rising user numbers, reducing motivation among long-term German clients. To address these and shame-related barriers, pantries focus on public relations

and enabling more anonymous visits, while avoiding admission freezes to keep accessibility for every client.

### Supplementing Supply

According to the managers of traditional FROs, all aim to provide a supplementary food supply with the objective of enabling their designated beneficiary groups to meet dietary needs alongside social benefits or low pensions. However, achieving adequate and equitable distribution across households depends on the availability of donated food, as one manager explains:

> "We are the bridge between abundance and scarcity. We support, but we are not a supplier. The supplier is the local supply centre, where there is a Lidl, an Aldi, and an Edeka. These are the suppliers, and they cost money. And we are just a supporter. And we can't pass on what we don't have. There are other food pantries that buy food. So, big donors then go to the food market, buy it, and distribute it to the needy. But that has nothing to do with the food pantry concept." (I5, Sects. 476–479).

### Ensuring Equitable, Limited Choice Autonomy

All traditional FROs aim to provide autonomous and equitable food selection. To this end, they implement a fair rotation system for client groups and prohibit self-service, while ensuring all available food is visibly displayed. To enhance food diversity, rare items like dairy are rationed, and shelf-stable products are purchased additionally. These measures aim to facilitate more autonomous, though not fully independent, selection from a diverse range of fresh foods.

### Promoting Safe Redistribution and Responsible Food Usage

Complementary FROs, unlike systematic provisioning, aim to ensure proper food redistribution in line with food safety standards. This approach supports ongoing collaboration with food-providing businesses, which integrate collections into their operations. According to managers, *Foodsavers*—active voluntary participants—help promote safe food use through hygienic collection with gloves and maintaining a continuous cold chain to prevent intoxication, thereby ensuring "meaningful" (I10, Sect. 771), i.e., human consumption of the rescued food.

> "So, from the bakeries, for example, if there's normal bread or pastries in there, of course, they don't have to be refrigerated. It's really about prepared dishes of meat or sushi, or if I get things like meat, sausage, or fish from a discount supermarket, the cold chain must definitely be maintained. So, it can only be interrupted for a maximum of 20 minutes, and you really have to pay attention to that. (I21, Sect. 73)

In summary, traditional FROs (food pantries) are concerned with the immediate, tangible objective of enhancing the accessibility and choice opportunities for food for economically disadvantaged demographics. Conversely, complementary FROs (*Foodsharing* initiatives)

lack a systematic orientation toward these specific groups. Instead, they prioritize a safe and business-compliant redistribution of surplus food by their volunteers.

## Outcomes: Ideational, Non-material Goals Toward Food Access and Agency

### Showing Benevolence with Boundaries

In the mid-term, all traditional FROs seek to demonstrate benevolence toward clients through food redistribution. Rooted in church-based Christianity or altruism, pantries accept clients with emergency needs and treat them as equals, not "second-class people" (I20, Sect. 166), ensuring respectful and communicative interactions. To fulfill their mission and assist those in "emergency" (I20, Sect. 27), they rely on welfare providers to assess clients' financial need, reducing administrative burden and performing the pantries' key "function" (I15, Sect. 161) of preserving dignity amid hardship by maintaining distance. In return, pantries expect polite behavior, appreciation, and trust toward volunteers.

### Equal Treatment as Customers

The majority of pantries aim to offer clients' treatment equivalent to that of customers in the primary food markets, as one manager explains:

> "Needy. I've never liked the word. Because I think it's simply customer, which gives people a much better feeling when they're called customers, because a customer pays for something. No matter where. […] They don't want everything for free. Because it's a part of normality that you pay. Reduced, but pays for. It took me a while to realize and understand this way of thinking. As I said, they do not want too many do-gooders at all. […] Many of them really want to be able to decide for themselves what they need, what they want, and then finance it." (I20, Sects. 288–290).

To imitate customer treatment, pantries charge a nominal, affordable fee. However, most pantries restrict clients' food choices, thereby neglecting other essential dimensions of the customer experience.

### Educating in Food Literacy

Some pantries also aim to (re)educate clients in food literacy, as clients are often perceived as lacking the necessary competencies—evident in their rejection of foods they cannot prepare. To achieve this, pantries seek, albeit to a limited extent, to provide individual guidance on shelf life and safe consumption, especially for clients with non-German backgrounds.

### Enforcing Norms and Efficient Behavior

For all pantries, it is more important that clients support a norm-conforming and efficient distribution process. Clients are expected to behave "normally" and align with pantry "values" (I5, Sect. 530), including politeness and acceptance of the order of distribution and the food distributed without requesting alternatives. To align client behavior with volun-

teer norms and values, volunteers sometimes feel the need to "teach them how to behave" (I11, Sect. 21). For efficient redistribution, pantries emphasize adherence to scheduled times "[…] so that the waiting times are simply not so long […]" (I16, Sect. 595).

### Enabling Sociocultural Participation

Food redistribution, in most pantries, is part of promoting clients' sociocultural participation. To reduce "social isolation" (I12, Sect. 35), the goal is to create a communicative "meeting spot" (I12, Sect. 440), where clients receive peer and volunteer support. Some FROs also organize social activities with non-clients. Above all, pantries aim to enable participation by freeing financial resources, allowing clients to afford other sociocultural activities, such as visiting a coffeehouse or cinema. Thus, by offering material relief, pantries seek to facilitate broader societal participation.

### Empowering Recovery of Financial Independence

To reduce the number of "steady customers" (I16, Sect. 581), some pantries aim to promote clients' financial independence. To this end, they refer clients to social and financial counseling services, such as welfare providers, to support life improvements. Certain pantries, particularly those affiliated with welfare organizations, offer on-site services like job and debt counseling. Others, however, follow the principle that fostering independence requires limiting support.

### Fostering Sustainable Food Behavior and Literacy

Complementary FROs aim to educate both volunteering *Foodsavers* and food-receiving *Foodsharers* on best practices for "sustainable" (I10, Sect. 653) food waste behavior. Volunteers are expected to accept the surplus food in full, regardless of their subjective perceptions of its quality. By subordinating their own food preferences, volunteers should undergo deeper "sensibilization" (I8, Sect. 218). Conversely, complementary FROs aim to educate recipients of surplus food about household food waste and to provide guidance to improve food appreciation and modify their behavior.

### Expecting Volunteer Discipline and Commitment

All *Foodsharing* initiatives aim to coordinate volunteer activities to ensure compliance with collection agreements with food businesses. Volunteers are expected to follow the "code of conduct" (I10, Sect. 9) concerning food safety and punctuality. Additionally, volunteers assuming leadership roles in establishing and managing business partnerships are intended to support the overall functioning of *Foodsharing* initiatives.

### Accepting Financial Benefits

To promote surplus food redistribution, all *Foodsharing* initiatives allow volunteers and beneficiaries to receive personal financial benefits. One manager, to whom the research

topic of 'social inclusion' was disclosed, notes that income assessments are not conducted, but simultaneously states:

> "Well, there are enough people in Germany who suffer from poverty and right now with inflation and so on, but even before they [new *Foodsavers*, author's note] have been grateful when they get free food, it's mostly fresh and good food that we actually always get, and the food pantry is just a bit shameful, so if you can't afford to buy food, but don't want to go to the food pantry either, then food sharing is another way to get food relatively anonymously." (I1, Sect. 249).

The acceptance of financial benefits was also mentioned by other managers of initiatives, to whom the research topic was not disclosed in advance. From the perspective of the managers, volunteers' limited household size and consumption capacity led volunteers to redistribute surplus beyond their own households. However, to avoid perceptions of providing a "free supply", volunteers are expected not to be "super greedy" (I2, Sect. 60), but to "do it out of conviction […]" (I2, Sect. 141).

Consequently, in the mid-term, both types of FROs pursue goals toward their target groups that secure the seamless redistribution activities of the FROs. However, additionally, traditional FROs aspire to ideational socio-economic enhancement in the lives of their clients. Conversely, complementary FROs only tolerate such positive immaterial outcomes and/or perceive them as part of the goal of contributing to food waste reduction.

## Impacts: Long-term Goals Toward Food Access and Agency (Societal Functions)

### Balancing Inequalities through Assistance

In the long term, all traditional FROs aim to ensure a continuous provision of food assistance to counterbalance economic inequalities. They recognize a persistent need for immediate emergency support, driven by benevolence and pragmatism. One manager states: "We don't go to all this trouble just to close down again the next day. We set out to help!" (I12, Sect. 302). An ongoing, affordable financial entry fee, public relations, and educational work should sustain redistribution and advocacy operations.

### Aiming for Redundancy of Redistribution – or Not?

However, half of the pantries also aim to become redundant as demand decreases with reduced inequalities. This shrinking process is considered ethically necessary, as distributing begged food is viewed as unacceptable. One manager explains:

> "And on the other hand, we have organizations like the food pantries […], we're not the only ones […] to support the poorest in our society with begged food. And that is wrong. And our aim is to abolish the food pantries/not abolish the food pantries, that's wrong. Let the food pantries become redundant! That would be the right expression. Let the food pantries become redundant so that everyone has so much that they don't have to go to the food pantry." (I12, Sect. 563).

In contrast, the other half of pantries do not aim for redundancy, primarily due to disappointment with the state's failure to address poverty and ensure "societal peace" (I17) by increasing social benefits. Some intend to continue their work as they are limited to practicing daily emergency relief due to a lack of capacity, or rely on the national pantry association to amplify their political voice. Notably, others also seek state recognition through financial compensation for their voluntary efforts to reduce food insecurity.

#### Complementing Redistribution Networks

In the long term, all complementary FROs aim to supplement existing surplus food redistribution networks. By adhering to the agreement '*Tafel* first' between the national Foodsharing platform and the national pantry association, *Foodsharing* initiatives aim to uphold the "basic right to food" (I2, Sect. 153) within the redistribution field and focus on reducing waste. In particular, the *Tafeln* are perceived as 'the other big players' in the food rescue field, leading managers to automatically communicate this goal.

#### Promoting Anti-Food-Waste Awareness and Sustainable Behavior

All *Foodsharing* initiatives aim to raise awareness of food waste in private households and promote structured behavioral change to reduce waste and related carbon emissions. They perceive themselves as an "ecological movement" (I8, Sect. 30) and seek to disseminate information widely to encourage more consumers to engage in surplus food redistribution. Additionally, they strive to conduct redistribution as sustainably as possible, such as by setting distance limits between *Foodsavers*' residences and collection points.

#### Normalizing Food Redistribution

Local *Foodsharing* initiatives ultimately aim to normalize food redistribution, albeit indirectly. They report no overarching political motivation, partly due to disillusionment with governmental inaction on food waste prevention, and partly because they feel represented by the national *Foodsharing* platform association. However, anticipating a transformation in business practices, *Foodsharing* initiatives promote maintaining business partnerships and increasing businesses' visual awareness of surplus food. Yet, their goal is not to reduce surplus food through this visualization but to have businesses organize redistribution within the business sector, which would eventually render *Foodsharing* obsolete.

Thus, in the long term, both traditional and complementary FROs seek to secure their continued existence, whilst also preparing for their own abolition in the interests of achieving greater goals. The fundamental difference between the goals of these two types of FROs lies in the consideration of users: While traditional FROs aspire to align with their users' ongoing needs regarding food access and agency, complementary FROs place a higher priority on ecological values and the business's profit motives than on the needs and aspirations of the participating users.

## Discussion

This study examined the goals of traditional and complementary food redistribution organizations (FROs) concerning food access and agency for socioeconomically disadvantaged individuals. Findings reveal a heterogeneous array of organizational goals, reflecting both ethical synergies and tensions, and shaped by diverging expectations about the role and contributions of target groups.

### Divergent Goal Orientations of FROs: Food Access vs. Food Agency

Traditional and complementary FROs diverge in prioritizing food access or agency. Traditional FROs focus on meeting the immediate and mid-term material and immaterial needs of marginalized groups. Rooted in volunteer-driven benevolence and a normative aim to reduce socioeconomic inequality, they promote equitable food distribution, financial autonomy, and sociocultural participation. At the same time, FRO managers frequently describe traditional FROs as a temporary compensation for perceived gaps in state-provided social security. This perception of external societal conditions appears to determine the scope of action of traditional FROs in the long term, including the establishment of a more or less stable and rigid food redistribution system. From the managers' perspective, users' agency within the FROs is limited to a certain degree of food choice and is instrumental, primarily serving access within the pantry system while neglecting co-creation in their distribution structures.

Complementary FROs, by contrast, prioritize reducing food waste throughout their practices, driven by ecological concerns. They mobilize volunteers' sustainability practices to foster responsible food use in households and businesses in the short term. Food access within their redistribution system functions as a temporary means to support systemic change and normalize surplus redistribution in the long term, thereby substituting governmental inaction. Thus, while traditional FROs treat food security as an end, complementary FROs employ it as a strategic tool for environmental 'programs' (goals) (Luhmann 2000).

### Benefits and Conflicts of Implementing Divergent Goal Orientations

Despite their differing emphases on food access or agency, both traditional and complementary FROs articulate goals that aim to address both dimensions of food security. These aims involve navigating both tensions and potential synergies in practice. In traditional FROs, the goals related to food access, as framed within the Theory of Change (ToC), often involve ensuring equitable distribution by limiting autonomous food choices on the material level. Likewise, on the ideational level, the goal of restricting user involvement in co-creating the pantry system (e.g., through the enforcement of norms and efficient behaviors) is intended to promote a minimum level of agency—within the pantry (through limited choice) and beyond (through consumption participation). Hence, from the pantry managers' perspective, the short- and mid-term balancing of access and agency appears to be a key goal in achieving a baseline of food security. This conceptualization aligns with earlier findings (Normann 2003; Sedelmeier 2011; Jones et al. 2019; Yan et al. 2020).

However, when the goals are examined across all ToC levels, internal conflicts in traditional FROs become more visible, resulting in a dichotomous orientation. One orientation

focuses on maintaining and improving the system of food assistance by promoting equitable access, efficient logistics, and user education. At the same time, another orientation reflects a vision in which traditional FROs gradually become obsolete, by limiting choice during the redistribution process and applying empowerment-based strategies to prepare clients for participation in mainstream society.

Complementary FROs, in contrast, articulate goals that prioritize food agency over access to food. On the material level, these goals favor smooth and responsible redistribution over individual choice, aiming to ensure the ethical and safe use of surplus food. On the ideational level, volunteers' access (i.e., accepting financial benefits) is intended to support broader agency-related goals, including sustainable behavior, food literacy, and long-term commitment. These orientations support continued redistribution and aim to ensure food safety adherence, thereby extending the scope of previous research on food-sharing models by highlighting the specific strategies for achieving food safety (Michelini et al. 2020).

Still, a comparison across the ToC levels shows that complementary FROs are also shaped by a dichotomous goal orientation. One set of orientations—consistent with earlier studies (Davies et al. 2019; Michelini et al. 2020) —seeks to promote anti-food waste awareness and behavioral change through user education and ongoing redistribution by their organization. The other orientation focuses on preventing organizational indispensability, for example, by not explicitly promoting food access among volunteers, thereby supporting the normalization of food redistribution within the private sector.

### Role Expectations and Impacts on Agency

The divergent perceptions and tensions surrounding food security goals in traditional and complementary FROs stem from differing assumptions about the sociocultural backgrounds of their target groups and the extent of their expected participation. Both FRO types operate through surplus food redistribution, but their programmatic expectations differ significantly. Complementary FROs expect their participants to be, or become, ecologically literate and actively engaged through committed volunteer work. Framed as contributing to the broader aim of a sustainable food system, these expectations align with navigating ethical goal conflicts typical of non-profit organizations (Simsa 2001). However, this active contribution model implicitly targets individuals with higher socioeconomic status—those who are knowledgeable, time-flexible, and materially able to integrate into a redistribution system shaped by business operations—thereby excluding those who cannot meet these criteria from exercising their food agency in the frame of complementary FROs.

In contrast, traditional FROs primarily target low-income groups, such as unemployed individuals, and expect only minimal food literacy, limited to the passive receipt of preselected food donations. Positioned as recipients of volunteer benevolence, clients of traditional FROs contribute passively to reconciling the ambivalent aims of charitable food provision (Simsa 2001). This model reinforces a form of structural heteronomy that appears fixed; enabling greater agency or restructuring participation would risk dismantling the system and denying future socioeconomically disadvantaged clients' access to food aid without additional investment in alternative coping strategies, such as participation in complementary FROs.

By highlighting the role of communication in shaping food agency, i.e., focusing on the agency-related communication of managers, this study advances current research on tradi-

tional and complementary FROs (in Germany). While prior social science research (e.g., Lorenz 2010) has emphasized the importance of traditional FROs in facilitating consumption participation, it remained unclear whether promoting sociocultural inclusion was an intentional organizational goal, and through which communicative strategies it was to be achieved (Luhmann 1997, 2000). This study addressed this gap by examining how pantries conceptualize and communicate food agency, thus contributing to a more nuanced understanding beyond the prevailing focus on access, food quality, and the sociopolitical dimension in food pantry research (in Germany) (Simmet et al. 2017a, b; Eicher-Miller 2020; Oldroyd et al. 2022; Kessl et al. 2020; May et al. 2020). Furthermore, it introduces a social justice perspective into the discourse on food-sharing initiatives (in Germany), positioning food agency as a key dimension of this debate (Murray et al. 2023).

### Methodological Reflections and Limitations

This study's cross-sectional design limits insights into how FRO goals evolve over time. However, the networked embeddedness of goals within the daily practices and other goals of FROs was touched upon in several goal descriptions. Excluding profit-oriented, digital, and hybrid models reduced perspective diversity. Interviewing only one manager per FRO limits transferability and contrasts with ToC's multi-stakeholder approach (Rogers 2014). Moreover, focusing solely on managers' perspectives did not allow for a deeper reflection on the extent to which FRO goals are reflected by stakeholders surrounding FROs, including political stakeholders and users. Additionally, the role of religious affiliations—especially in Christian-majority Bavaria—remains underexplored. The different framings in the interview requests, which disclosed or concealed the research topic on "social inclusion" goals, had little impact on the goal communication in the interview situations, as revealed in the analysis of the same types of FROs with and without disclosure. In general, managers focused more on practices than goals, complicating goal analysis. Findings suggest ToC's hierarchical model overlooks the networked, interdependent nature of FRO goals, where normative aims (e.g., inequality reduction) both guide and result from practice. Resource constraints limited theoretical sampling to alternating analyses across FRO types.

### Outlook for Decision Makers in the Food Redistribution System

This study found divergent goal orientations between traditional and complementary FROs, as well as internal goal conflicts within each type. In the daily practice of traditional FROs, these tensions – often based on ethical conflicts – are either overshadowed by operational priorities or deliberately downplayed to protect the public image of the organizations and maintain access to target groups and food providers. However, such divergences may also hinder the broader effectiveness of traditional FROs in addressing food security—beyond existing resource limitations, which already compromise food quality and choice. This challenge extends to food-sharing initiatives, which similarly rely on attracting individuals seeking financial relief and businesses looking for measures of corporate social and ecological responsibility. To enhance food security, decision-makers in the food redistribution system should strengthen public recognition of the role that complementary FROs strive to play in supporting individuals facing temporary or long-term financial hardship. Furthermore, some tensions in the daily implementation of goals for both types of FROs could be resolved

by communicating sociocultural intentions more directly and openly within and beyond their food redistribution systems.

## Conclusions

This study reveals divergent food security goals in traditional and complementary FROs serving socioeconomically disadvantaged groups. Traditional FROs prioritize basic needs and access with limited user agency, while complementary FROs emphasize ecological goals and active user engagement, albeit with less direct access or choice. Despite their differences, both types of FROs employ ambivalent ethical strategies—improving food security while restricting agency to maintain operational efficiency. Using Luhmann's understanding of communicative societal inclusion through organizations, along with the Theory of Change framework, helped uncover this complexity and the contradictions in goals. Overall, this research calls for a reconceptualization of both FRO types – not just as food providers but as actors navigating social, ecological, and institutional responsibilities. Their differing approaches may have implications for users' food security and nutrition-related outputs. Future research should deepen understanding of how food security can be equitably addressed across different organizational models of food redistribution, incorporating both organizational and user perspectives.

### Abbreviations

GT Grounded Theory
FAO Food and Agriculture Organization of the United Nations
FRO Food Rescue Organizations
ToC Theory of Change

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**Data Availability** The data presented in this article are not readily available because the data are part of an ongoing study. Requests to access the data should be directed to the corresponding author.

## Declarations

**Ethics Approval and Consent To Participate** The study was conducted in accordance with the Research Ethics Committee of the university with which the author is affiliated and which assesses ethical aspects of research on animals and human beings carried out at this university (protocol code: 23–038; date of approval: 18.12.2023). Written informed consent was obtained from all subjects involved in the study.

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