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Surplus food redistribution and healthy, sustainable diets: Exploring the contradictions of charitable food provisioning

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TARA KENNY AND COLIN SAGE

Abstract.

A substantial body of literature points to the necessity of a 'Great Food Transformation' requiring an urgent shift towards sustainable food systems across multiple levels. A key part of this transition is the need to reduce food waste and food loss by 50 percent and where charitable surplus food redistribution is regarded as making an important contribution to this target. Surplus driven charitable food provisioning is now part of the food environment in many countries and is influencing the diets of a significant number of people. Its proponents argue that such work contributes to a more sustainable food system by reducing food waste and food insecurity. However, few studies have examined the factors influencing the governance of food within the charitable food system. This paper seeks to fill this gap in the literature through an examination of recent developments in charitable food provisioning in the Republic of Ireland. Using Cork city as a case study we explore Ireland's charitable food system by examining the motivations, ideas, and practices of key organisations. The paper highlights the growing role of surplus-driven charitable food systems and argues that the redistribution of surplus products for the purpose of reducing food waste and improving economic efficiency requires re-evaluation within a wider appreciation of sustainable diets, and, ultimately, with regard to strengthening the right to food for all.

Key words: food surplus; food waste; food redistribution; poverty; food insecurity; sustainable and healthy diets.

1. Introduction

As outlined by the EAT-Lancet commission report (Willett et al 2019) there is considerable scientific evidence that supports the necessity of a 'Great Food Transformation' denoting an urgent shift towards sustainable food systems for human and planetary health (Willett et al, 2019). Such a transformation is regarded as requiring substantial changes across the realms of production and consumption. Yet though much of the scientific literature has tended to focus on the need for wealthier countries to significantly reduce consumption of animal source and highly processed foods (Kumanyika et al, 2020), much of European public policy discourse has focussed upon food waste reduction helped by the redistribution of surpluses from major food retailers.

On World Food Day, October 16th, 2017, the European Commission adopted guidelines to facilitate food donation within the European Union (European Commission, 2017). This served to frame food waste redistribution as, first, a response to poverty and food insecurity and, secondly, to environmental concerns aligned with promoting a circular economy (EC SANTE/11147/2017). Distributing food surplus - denoting unsold food that would otherwise

Tara Kenny* and Colin Sage**

*Department of Geography, School of the Human Environment, University College Cork. email: tarakenny@ucc.ie

**Independent Scholar; email: c.sage@ucc.ie

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end up as food waste - has become 'standard practice to meet many citizens' needs' (Dowler, 2018: xx). Midgely (2020) proposes two broad types of surplus food redistribution: the type that challenges and the type that brokers. The 'challenger' model is characterised by '...more radical politics, accompanied by less conditional and more plural and collective means of accessing and sharing food' (Midgely, 2020: 354) and is best exemplified by the emerging network of 'pay as you feel' cafés and social supermarkets (Saxena, 2018; Henriques-Gomes, 2018). The 'brokerage' model is reliant on 'brokerage activities between the food industry and the charitable and voluntary sector' (Midgely, 2020: 350), an example being that of a food bank catering to the poor and food insecure. It is the brokerage model that has become the dominant model of surplus food redistribution and is reflected by the institutionalization of food charity (Lambie-Mumford & Dowler, 2014) and the reallocation of government responsibility to address the issues causing food insecurity (Poppendieck, 1998; Riches & Silvasti, 2014; Caraher & Furey 2017; Riches, 2018).

Representing this model of food charity at the European level is the European Food Banks Federation (FEBA) founded in 1986. Similar to its Chicago based international partner, the Global Foodbanking Network (GFN), FEBA's work is concentrated on developing, supporting, supplying and representing food banks across Europe who are '...on the frontlines of preventing food waste and fighting hunger in our communities' (FEBA, 2020). In 2018, 781,000 tonnes of food products were distributed to some 9.3 million people via 45,700 charitable organisations in 24 countries across Europe (FEBA, 2019a:3). Two-thirds of the food flowing through FEBA is derived from surplus, 21 percent from the Fund for European Aid to the most Deprived (FEAD) and the remainder comprise products withdrawn from the market and food collections (FEBA, 2019b). FEBA has played a key role in both the development of a system of food banks across Europe and in the 'corporate capture' of food banks driven by the circular economy paradigm (Riches, 2018).

Described as a channel between welfare services and the food industry (Butcher et al, 2014), food banks and other forms of charitable food provisioning are now a staple element of society across the globe (Riches & Silvasti, 2014). Yet there is growing disquiet around the use of surplus food to feed those who are food insecure - or as Riches (2018) observes, 'left over food for left behind people'. Other questions have raised the appropriateness of such 'corporatized' (Booth and Whelan, 2014; Riches, 2018) responses to social policy failure (Lambie-Mumford, 2018) and social justice concerns (Riches, 2011; Booth & Whelan, 2014). These issues have led to a number of academics questioning whether charitable food distribution models have become part of the problem of food insecurity as opposed to part of the solution (Berry, 1984, Poppendieck, 1998; Riches, 1997, 2011; Fisher 2017) solving neither the problems of food insecurity nor food waste (Caraher and Furey, 2017). While some '[Food] waste is a logical and unavoidable consequence of eating' (Evans et al, 2012:9), surplus food production is a particular condition of industrial food systems (Weis, 2007) characterised by excess, mass produced and increasingly, processed foods. And as Messner et al (2020) highlight, current food waste prevention efforts are heavily weighted towards food waste management, whilst ignoring the structural nature of food surplus production and overconsumption (Messner, 2020).

Concerns in relation to the types of food being distributed and their impact on health (Lindberg et al, 2015; Castetbon, 2016; Garratt 2017) have also been noted, particularly in the context of long-term reliance which is a reality for many of its users (Morris, 2015; Kenny & Sage, 2019). In this regard, the lack of fruits, vegetables, and dairy products have been documented as problematic (Simmet et al, 2017) as has the 'abundance of durable products with high fat and sugar contents' (van der Horst *et al.* 2014: 1512). On the other hand, research also points to the potential of surplus redistribution contributing to social good (Blake, 2019) and improved food security and nutritional outcomes for its users (Carrol and O'Connor, 2016;

Hebinck et al, 2018; Weymes and Davies, 2019). However, such interventions must be delivered with health in mind (FAO, 2019), particularly when the brokerage model of surplus food redistribution, reliant on a food system increasingly dominated by ultra-processed food (Baker et al, 2020), is becoming a permanent rather than an emergency feature of food environments across the globe (Ronson & Caraher, 2016). Moreover, with agency now recognised as a critical dimension of food security (HLPE, 2020), this adds a further layer of consideration when attempting to align the brokerage model of surplus food redistribution with food security claims and brings attention to the types of relationships and practices embodied within surplus food redistribution.

If we are to move from 'feeding people to nourishing people' (Haddad et al, 2016:30) a broader framework for assessing the brokerage model of surplus redistribution is necessary. While efforts are ongoing to improve the food environment through healthy food policies (GoI, 2014), this has not yet extended to the charitable sector. For example, the brokerage model remains preoccupied with narrow, short-term achievements in reducing food waste as measured by gross quantities moved through charitable redistribution. If it is to be regarded as offering a potentially sustainable solution then it will need to consider the longer-term unintended consequences of the values, ideas and practices embodied within charitable relationships, better comprehend the diversity of food practices within low-income groups (Redman, 2019), and recognise that while poorer households are as likely as high income households to want to eat 'healthier' foods, the experience of poverty and their wider food environment inhibits their ability to do so (Nevarez et al, 2016). Indeed, in charitable food environments, where dietary choice is limited or unavailable at the level of the end-user, food governance, defined as "how decisions are made, by whom and with what effect...and draws attention to the role of values not just facts" (Mason and Lang, 2017: 261) becomes a pertinent variable in exploring the factors that influence food flows and, consequently, diets. As Midgely (2020: 349) notes, while much of the dissonance is centred on the surplus food material 'more critical insights are necessary to explore the redistribution process and the various reallocations of responsibility for reducing waste and hunger as well as the various values and relations that are incorporated into this exchange and the encounters and actions that redistribution may stimulate'.

Using Cork city as a case study, the objective of the paper is to map the growth of Ireland's surplus redistribution system and to explore the social and cultural forces influencing the governance of surplus food. Specific questions which this embedded case study aims to address are: What factors have influenced the growth of Ireland's surplus driven national food banking system? What societal and cultural factors influence the flows of food? And in their current form can these arrangements contribute towards more healthy and sustainable food systems? While we acknowledge that the existence of food charity is itself a signifier of a deeply inequitable society which makes achieving a more sustainable food system an arduous endeavour, we equally recognise that the growth of the brokerage model of surplus food redistribution signals its likely permanency and further expansion. As such, this renders its inclusion in research pertaining to the transition towards healthy and more sustainable diets, critical.

<u>Methods</u>

The paper draws upon data gathered through an embedded case study approach (Yin, 2014) designed to explore the growth of surplus food redistribution in Ireland, the workings of the local charitable food environment in Cork city and environs, and the types of food flowing through the wider charitable food system. Research methods for this wider study included: a survey to establish which charities are engaged in surplus food redistribution; a survey to measure the level of food insecurity experienced by people using one food bank in Cork city;

food inventory analysis to examine the types of food being distributed nationally through one surplus stream; and in-depth, semi-structured interviews with local and national food aid providers to explore their practices, motivations, ideas and experiences. For the purpose of this paper, data is presented from the latter method alone. The interviews took place between February and September 2017 and consisted of 21 participants, spanning 18 organisations and representing both paid employees (n=7) and volunteers (n=14) involved in charitable food provisioning both locally (Cork remit) and nationally. Interviews were recorded, subsequent to written consent, transcribed verbatim and lasted between 45 and 90 minutes with analysis facilitated by NVivo 11 and using thematic analysis (Braun and Clarke, 2006). For clarity, organisations in direct contact with the end user are referred to as direct providers (DP) whereas intermediary organisations that facilitate the transfer of food from retailers or manufacturers to the DPs are referred to as indirect providers (IP) and have no contact with the end user (Pollard et al, 2018). Direct providers cover a range of food aid services including: (i) delivering food parcels into the homes of those registered for such services; (ii) operating food banks, drop-in hot meal centres and outreach soup runs; and (iii) providing food as part of supported accommodation or housing scheme.

2. The growth of surplus food redistribution in Ireland

In the decade following the economic crisis of 2008-10 Ireland witnessed a rapid expansion of charitable food services (Hebinck et al, 2018) and the establishment of what would become Ireland's 'national food banking system' (Food Cloud, 2020). A number of factors have influenced the way in which the charitable food sector in Ireland has developed. These include: significant reductions in government funding to the community and voluntary sector post economic crisis (Harvey, 2012); the gathering pace of corporate social responsibility (CSR) discourse (Sweeney, 2007); government campaigns to 'increase awareness and understanding of the value of philanthropy and planned giving amongst all sections of Irish Society...' (Forum on Philanthropy and Fundraising 2012:12); and an overall deepening of the neoliberal rhetoric across many aspects of Irish society (Negra and McIntyre, 2019). Accordingly, since 2012 substantial changes have occurred with regards to responses to household food insecurity (labelled as 'food poverty' in Ireland). These include the disbandment of Healthy Food for All (2006-2016), Ireland's only organisation with a specific remit to tackle food poverty; the introduction of the Fund for European Aid to the Most Deprived Persons (FEAD) to tackle social exclusion and poverty; and the introduction of not-for-profit social enterprises carrying out food bank functions. The growth of surplus food redistribution in Ireland is widely celebrated (Kenny and Sage, 2019) and occurred at a time when Ireland had the fastest growing economy in the EU28 in four of the previous five years (Parliamentary Budget Office, 2019: 4). At the same time, poverty is a persistent problem. Low paid employment, which affects 23 percent of Ireland's full-time workforce, is a significant contributory factor to Ireland's high rates of inequality (Sweeney, 2019) as is precarious employment (Nugent, 2017). Ireland was, and still is, in the midst of a protracted and severe housing crisis (Wickham and Hearne, 2017). Today, private rent is 57 percent higher than it was in 2012, 68,693 households are on the social housing waiting list and 10,448 people, including 1,685 families, are living in emergency accommodation (Social Justice Ireland, 2020). In Cork city, where this research was carried out, charities responding to issues of intergenerational poverty, low paid employment, unaffordable rents, and a homelessness crisis are key surplus food recipients and, typically, this is not a short-term arrangement (Kenny and Sage, 2019).

Central to the development of Ireland's food banking system were two not-for-profit social enterprises established to address the issue of food waste and food poverty. The Bia Food Initiative (BFI) was launched in Cork in 2012 and FoodCloud (FC) one year later in Dublin. In late 2016, the BFI became FoodCloud Hubs (FCH) after merging with FoodCloud. While both

organisations function as intermediaries between the food industry and charitable organisations and as such do not have any contact with the end user, their mode of operation varies. FC, described as operating 'at the coalface of waste and hunger' (Davies, 2019: 66), operates via a mobile application and a cloud-based platform that connects retailers directly with charities. The charities then choose to collect the surplus food from a retailer directly at a designated time and on a specific day, or for delivery via a team of volunteers. There is no associated cost for the recipient charities. In 2018, FC redistributed 1,086 tonnes of surplus donated by Tesco, Aldi, Lidl, and Musgraves Marketplace: 'the equivalent of 2.5 million meals' (FoodCloud, 2019), where any 0.49kg of food or liquid equates to one meal.

FCH, operates a more traditional food bank type service where surplus food is collected from a variety of food businesses ranging from food processors to retailers and redistributed to some 259 charities across Ireland via three national warehouses. To cover the costs of storage and transport, participating charities pay a nominal fee. In 2018, FCH distributed 819 tonnes of surplus donated by 117 food companies (FoodCloud Hubs, 2019). Both streams of surplus food redistribution, virtual (FoodCloud) and warehouse (FoodCloud Hubs) have grown exponentially since their establishment (see Box 1) and are now a key, and likely permanent, component of Ireland's response to food poverty and food waste. Today, known as simply FoodCloud, they are the first Irish member of FEBA, and work closely with the GFN (FoodCloud, 2020). As demonstrated in Box 1, the growth of the charitable food sector in Ireland has been aided by both corporations and numerous government agencies.

Box 1. Timeline of recent developments in charitable food provisioning, Ireland.

2012: Bia Food Initiative (BFI), established in Cork City with Tesco donating €60,000 initial start-up costs and a further €40,000 worth of infrastructure (1).

2013: FoodCloud established in Dublin with financial support from Tesco

2014: Minister for Social Protection announces a three-year funding contract for the Bia Food Initiative (2).

2014: Food Cloud announce partnership with Tesco providing $\[\in \] 250,000 \]$ for a one-year contract. National roll-out begins across Ireland and FoodCloud founders win the Social Entrepreneur Ireland Impact award of $\[\in \] 100,000 \]$ and two years of business support (3).

2016: Fund for European Aid to the Most Deprived Persons begin pilot study through FoodCloud Hubs. Opel joins FoodCloud as their transport partner and FoodCloud expands to the UK (4).

2016: BFI open two new warehouses in Dublin and Galway, merge with FoodCloud and become known as FoodCloud Hubs (FCH). By October 2016 3,320 tonnes of food -7.2 million meals - had been redistributed (5).

2017: '8,300 tonnes of food or more than 18 million meals have been diverted from landfill' and 20 million meals were distributed to charities across Ireland and the UK (6).

2017: FoodCloud awarded €111,407 through Ireland's Department of Food and the Marine, Rural Innovation and Development Fund to support 'food companies and charities in rural Ireland to solve the problem of food waste through surplus redistribution' (7).

2017: Tesco 'pledged €150,000 to tackle food poverty' through Tesco's community chill campaign offering free fridges and freezers to charities enabling them to store and distribute more food (8).

2018: FCH becomes a member of FEBA and partners with Nestle (9).

2019: FC and FCH become known as simply FoodCloud. FC present to the Food and Agricultural Organisation (FAO) on how 'FEBA and FAO can work together to create sustainable solutions to reduce food waste and achieve SDG 12.3' (10)

2019: FC announces plans for expansion to Australia, Czech Republic and Poland (11).

2019: FC noted as a key actor in the prevention and reduction of Ireland's food waste in the Government of Irelands Climate Action plan 2019 (12).

Sources: 1. Hosford (2014); 2. Welfare.ie; 3. Gibson (2014); 4. Murphy (2016); 5. Think Business (2016); 6. Cleary, 2017; 7. Agriculture.gov.ie (2017); 8. Redfm.ie (2017); 9. FEBA, (2018); 10. FEBA & FoodCloud (2019); 11. Whelan (2019); 12. GoI, (2019).

Cork city, often referred to as Ireland's 'Food Capital', is Ireland's second largest city with a population of over 200,000. Areas of deprivation exist throughout the city, with particular cohorts of the population experiencing persistent social exclusion, poverty, and poor health outcomes. In line with the national trends, these groups include single parent families, ethnic minority groups, people with disabilities, and the homeless (Cork City Profile, 2018).

The Society of St. Vincent de Paul (SVP) is one of Cork city's oldest and most well-known charities and indeed a key charity in the area of charitable food provisioning. The basic operating unit of SVP are referred to as local conferences and at the time of data collection, a total of 41 conferences were operating in the greater Cork city area (personal communication). In 2014, SVP established an initiative to store, pack and distribute food parcels during the Christmas period via other SVP conferences. In 2018, this food bank became a permanent feature of Cork's charitable landscape operating weekly throughout the year (SVP, 2018). Cork city is also serviced by a number of charities that provide a mixture of short, medium and long-term housing for homeless persons, support services (provision of sleeping bags, food and clothes) to homeless persons, women experiencing domestic violence, and individuals unable to live independently. Cork city has one longstanding drop-in centre traditionally known as a soup kitchen, 'Penny Dinners'. This charity, operating since the time of the Great Famine provides free hot dinners, sandwiches, and desserts, 365 days a year, in addition to food parcels on request and during the Christmas period. The city is also serviced by a number of additional charitable organisations offering meals and food parcels on site and on the streets. At the time of data collection, the most recent addition to Cork city's charitable food landscape was 'Feed Cork', the city's first self-described food bank founded by the Cork Church, a Christian organisation. Feed Cork opened in May 2017 and initially distributed between 140-200 food parcels every Wednesday, containing a three-day supply of food, including perishables, to individuals and families. In their first year of operation, over 7,000 people accessed this food bank. Today, based on the Feed Cork model, five additional food banks have been established across Ireland under the 'Feed Ireland' banner and supported by FoodCloud, FEAD, a number of corporations and local businesses (Feedcork, 2021). Both direct and indirect providers assume a gatekeeper role in the diets of a significant number of people relying on food charity. Within these relationships, various motivations, practices, and ideas shape these food flows and, as we show, result in unintended consequences.

3. Socio-cultural and economic factors influencing food flows

(i) <u>Motivations and practices</u>

While the relief of food poverty and reducing the environmental impact of food waste are two primary motivations for facilitating and engaging with surplus food redistribution, other issues quickly become entangled. The idea that the charitable redistribution of food waste can address food poverty and insecurity, is used as a powerful device to enlist engagement from state agencies, the food industry and the general public given its emotive resonance.

'...we give food to charities and we do talk about that a lot and there is a good reason for that – people care about charities, they don't care about the environment in the same way...how do we get buy in from everybody – from state and food industries – you have to present what it is that you do and the kind of thing that resonates with people (P4, IP)

For indirect providers while the notion of 'saving' food waste has strong environmental motives, for the direct charitable providers the monetary savings that can be made by engaging with surplus redistribution is a major benefit for it then allows them to expand the range and reach of their other services to needy clients. For example, one direct provider explained how

they went from paying one euro per chicken fillet to now paying €24 for an entire meal for fifty people '... that's ice-cream and food to take away too...' (P23, DP). The narrative at the level of the indirect providers, as well as that of the donating retailers, is that '... donating food enhances the charities' provision of services' (P1, IP). However, one unintended consequence of supplying free or very cheap food to charities has been the loss of support for local and small food businesses: 'We would normally (have bought) 10 kilos of mince a week and now we are getting 10 kilos of cooked mince...' (P12, DP) (see also Kenny and Sage 2019).

Refusing food is an option, but most do not with a number of volunteers noting how they never refuse anything '...because we will always get rid of it' (P15, DP). While some charities do have a choice as to what food they want to accept, in practice this choice is limited and depends on what is available: 'It just goes by what's there, usually bread and bread rolls...we always get doughnuts and cakes and stuff' (P23, DP). It is clear that indirect providers operate 'at the behest of donors' (P1, IP), particularly since their business model rests upon developing and maintaining good relationships with both the food industry and charities to maintain their supply and market. Hence, enrolling charities to take the food, otherwise known as 'on-boarding', is a necessary task with a dedicated 'charity support team' in order to meet the requirements of those donating the food: '...[FC] have to do a roll out in Lidl ... Aldi or a Tesco and they need charities for those slots ... 100 stores ... they will have 5 slots each week (P4, IP) and consequently require a charity to fill these slots by taking the surplus food that is made available on a specific day and time.

This 'onboarding' practice has resulted in charities which would traditionally have given out food vouchers or cash, to now use food surplus first and foremost. Some charities have expanded their services upon request from indirect providers: '...at the time it was one day a week and the amount of food that we got increased to everyday then...' (P15, DP). Charities have also adapted to accommodate the food flows with one direct provider now tailoring their purchased food needs around those supplied by FC. Indeed, all DPs interviewed here within the supported housing and homelessness services have incorporated surplus food into their daily work and FCH, in particular, was noted as an important source for staples such as vegetables, yoghurt, butter and milk, items that charities traditionally would not have received via public donations. As one charity noted, FC is used for 'lashing out food with short expiry dates' (P12, DP) for their residential homes and soup runs while FCH products are used for cooking meals in the shelter.

The excess food has also encouraged more food to be distributed beyond their usual arrangements in an effort to utilize the surplus. 'We also give them sandwiches when [they're] leaving plus... juice, fruit, crisps, biscuits...' (P3, DP). Despite the best efforts of charities to distribute the donated food in order to avoid being responsible for throwing food out, food surplus still ends up as food waste - but in the charities' bins. Several charities mentioned that bread, baked goods, and burger buns were a particular problem: 'one week I filled one of those big wheelie bins with bread ... '(P7, DP). This same interviewee attributed some of this waste to the lack of respect for free food: '... if you just fire it out to people... people have no respect for it' (P7, DP). The increased availability also influenced food flows with charities distributing food they would not usually purchase: 'we get ...quite a lot of stuff we wouldn't buy anyway - yogurts, Taytos [crisps], fancy biscuits...so the nutritional value is not of much use but they get eaten anyways' (P12, DP). Highly processed food was a widely reported staple of surplus food streams: 'Taytos come regularly, and packets of soup and spaghetti Bolognese mix... always brown and white bread and burger buns and hot dog buns – you get loads of them every week (P 11). Two direct providers offering food parcels noted an increase in the availability of specific fruits and vegetables. However, not all direct providers have the capacity to distribute fresh foods and this influences the types of food being redistributed.

(ii) Food culture

Perceptions of 'demand' in terms of forecasting what the end users will eat also impact on the food types flowing through this system. For example, one interviewee noted how 'homeless people do not like very rich foods, they are not used to it... if it's a young girl, intravenous drug users - they love fast food' (P12, DP). Another noted how 'they all [end users] just love little bits ['treat foods]' (P21, DP). These generalisations influence what food is both accepted and given out. Another interviewee explained that their clients tend to be in the mid-sixties and are 'very plain eaters' hence healthier 'grainy nutty bread' would not be suitable. Yet, it was acknowledged that perceptions concerning what people do and do not like to eat does change: "...when I started here 15 years ago, they didn't do salad - people didn't like salad, and they didn't do pasta or rice [and now they do]' (P12, DP). This also impacts the decision-making process of the indirect providers who report that this food (instant noodles, cakes, meat products, dairy, and only certain fruits such as bananas and apples) is what charities want. As explained by one indirect provider, certain products, such as smoked salmon, that they feel will not be wanted by the direct provider will be declined. This was attributed to charities being unfamiliar with how to use these products and led to the suggestion that the charities working with surplus should become familiar with different types of food and be more creative with what they serve: '...the charities in many ways have to change as well in that they should be...learn[ing] to use lentils and chickpeas' (P1, IP). This issue of lack of familiarity with certain 'modern foods' was also suggested as being both problematic and influential in terms of what foods are accepted at the level of the DPs, or in this case, what foods get thrown out. 'Avocadoes are something we get a lot of lately ... but half the time they are dumped because the lads don't know what they are ... '(P7, DP).

At the level of the intermediary organisations, there was an inherent acceptance of food waste for numerous well documented reasons such as marketing, branding, convenience, best before dates. As such, education at the household level was perceived as the most beneficial way of preventing food waste at this time given that there will 'always be waste' in the market: '...household waste is also a massive issue and education at that level and then on a government level. You are probably never going to get it very much at a market level or the production level' (P4, IP). Advocating for more up-stream responses to food waste before the food gets to the point of redistribution, was considered not possible in the immediate future. However, advocating for incentivising food donation at the policy level was being considered at the time, and creating further uses for surplus such as engaging with childcare facilities, unable to afford food: '...then from our perspective it's not taking anything away from the markets because you are actually developing food use in localities...' (P4, IP).

(iii) Disconnect between health and food poverty

The idea of health as a separate issue from food security and food poverty was prominent throughout each level of the charitable food system. When participants were asked if they had concerns for their clients' health regarding the food supplied, it was not seen as the immediate worry '...the alternative is don't feed them at all and let them drop to the ground' (P2, DP). Another interviewee descried the reality as '...when you are in her situation you will eat what you are given' (P8, DP). Tailoring food towards health concerns were outside the capabilities of most food aid providers for reasons such as the charities themselves being reliant on surplus but also due to health not being a priority issue in the face of competing challenges. 'A lot of them have diabetes, high blood pressure and heart problems...when it comes down to the level that we are at with food, you don't ask that question ...' (P15, DP). Dietary health concerns are perceived as less significant in comparison to other issues: 'they probably start their day with alcohol ...without having any food so they actually eat very little of anything that you give

them' (P21, DP). Specific dietary requests, including catering to age, culture, religious beliefs, are also outside their capabilities 'They [the minority community in Cork city] say to me that's all Irish food – I say it's food ... food is food if you don't have any you know...' (P15, DP). Supplying less healthy food items was justified by indirect providers suggesting that for some populations, healthier food items are not suitable or conducive to the person's circumstances and that this is the types of food that is requested by charities based on their knowledge of what people want and what people can use.

"...say you are dealing with an alcoholic ...there is quality food there and you educate the charities to give them chickpeas and lentils and they have the runs (diarrhoea) for the week and they have to go into hospital and are put on a drip... so the whole quality food thing – you got food poverty and you got nutritional poverty" (P1, IP).

Food poverty and health were also separated as a means to justify the type of food flows: 'it's very hard to be an organisation that advocates specifically for food poverty if we are saving food that is nutritionally not great, pallets of crisps for instance' (P4, IP). At the same time, the accessibility component of food security, perceived as the lack of food, was also used to rationalise efforts: '...we are not necessarily the advocate for food poverty, we advocate for the accessibility element' (P4, IP). Similar to the views of the direct providers, consideration of the longer-term implications of diets based on surplus foods known to be health demoting is regarded as beyond their remit '...what happens when a person is sick and they are only used to eating pizza and chips? So in terms of the long-term thing with people, that's a much wider social issue' (P1, IP).

4. Discussion and Conclusions

The post economic crash environment, increasing awareness of the problem of food waste amongst society in general, the opportunism of indirect providers, and the development of new direct services, have contributed to a growing charitable food environment in Cork city in which provision of surplus food is central. This presents both opportunities, in terms of increased access to a variety of foods made available to charities, but also a number of challenges many of which are entangled in the values and ideas, practices, and motivations of the actors involved. The paper has revealed how understandings of food security and nutritional poverty are widely regarded by direct and indirect providers as separate issues and where dietary health considerations are, at best, a secondary matter. This is further compounded by the idea that healthier food items would not be as popular or as easy to 'get rid of'. Across both direct and indirect providers, a general view – although not shared by all direct providers - is that charitable recipients are accustomed to, or simply prefer, highly processed food, and plain food. Acknowledging that circumstances, such as homelessness, do restrict what food a person can eat in some situations (Share and Hennessy, 2017), these ideas represent a degree of class-based stereotyping evident within Ireland's charitable food system. However, it is also important to note that a number of direct providers reported incidences of food donors outside the now formalized surplus redistribution channels donating food that is of substandard quality or unfit for consumption indicating that these perceptions extends beyond the relationships explored here. The notion of 'poor food for poor people' is not unique to Irish society and reflects the class-based stereotypes exhibited in other countries (Smith Maguire, 2016). As described by one direct provider, judgements on what people relying on charity eat and do not eat are not a recent phenomenon and, importantly, can and do change. Cork city is a diverse and multicultural city and the people using these charitable food services base form a diverse group. It is then entirely plausible and likely that the dietary preferences and practises within this group, brought together mostly by low income, are as varied as those reported within lowincome groups in other high-income countries (Nevarez et al., 2016; Redman, 2019).

In some instances, and where the resources and will to handle perishable goods exist, surplus food redistribution has contributed to a more varied 'charitable diet', with a noted increase in foods such as vegetables, meat, and fruit that traditionally would not have formed a key element of the charitable food environment (Simmet et al, 2017). A primary factor contributing to food poverty and poorer health outcomes is low income (Friel and Conlon, 2004) and this impedes access to healthier food and the ability of parents to introduce their children to these often more expensive food. Tastes are developed over time and require repeated exposure and, for families with minimal food budgets, the risk of food waste associated with trying a new food is unaffordable (Daniels, 2015). In theory, surplus food redistribution could minimise the cost related to introducing children and adults to otherwise economically inaccessible foods. However, this works both ways: while healthier foods do form a part of surplus food flows, large amounts of baked goods, snack food, confectionary, and individually and heavily packaged food will contribute to keeping highly processed foods the most accessible or only option for low-income communities. In this regard, and when health is not a primary concern or consideration, there are questions around the role of charitable food redistribution, unintentionally reinforcing poor diet related health outcomes within low-income communities. This signals the need for further research focusing on the composition of food flows disaggregated by the degree of processing. There is a growing body of evidence pointing to the detrimental health, cultural, social and environmental implications stemming from ultraprocessed food (Fardet & Rock, 2020, Baker et al, 2020) and this requires consideration in the context of the brokerage model of surplus food redistribution.

Ultimately, the goal for indirect providers is to move as much surplus as possible to reduce food waste and for the direct providers to simply 'put food on the table' for those who cannot afford to buy it. However, in some instances, the lack of a monetary component in the charitable donation of food surplus serves to hide several unintended consequences. First, there is the lack of choice and agency on the part of end users - which is present in the 'pay what you feel' shops – making them appear as passive beneficiaries. Secondly, this food carries something of a moral imperative in that it 'should be eaten rather than thrown out' leading to efforts to redistribute food beyond immediate need or demand. This unintentionally leads to excess consumption of energy dense foods and increased metabolic food waste which carries significant health and ecological costs (Toti et al, 2016). Finally, while much is made, especially by the corporate retailers, other donors and indirect providers, of the millions of euro reportedly being saved by food charities, this comes at a cost in the form of reduced support for local food businesses, such as the butchers noted earlier. Here, small retailers, some with long-standing ties to regional suppliers, lose sales to local charities who now receive large volumes of donated foods sourced from corporate retailers' global supply chains.

The increased availability of surplus and the necessary 'on-boarding' process required to make the system work efficiently, has also led to more charities distributing more food. Similar to other charitable food environments (Lorenz, 2015), surplus food is not redistributed because people are hungry but, rather, because it is available. This supports Seibel's (1996) theory that charities will expand to protect their futures by creating new recipients and Poppendieck's (2000) observation that, when charitable food systems are developed with multiple resources, actors, and livelihoods invested in it, growth will ensue. Hebinck et al (2018) suggest that the food system's declining ability to deliver food security has led to the expansion of food assistance initiatives. While we acknowledge the rising demand for these services under the prevailing economic circumstances of precarity and austerity, we would argue that the increased availability of food surplus has contributed to an increase in the establishment and expansion of charitable food provisioning as evidenced by the growth in Ireland demonstrated in Box 1.

While charity is an accepted, longstanding, societal response to food poverty and poverty more generally in Ireland, the supports provided by national and local government in assisting the establishment and maintenance of indirect services indicate that surplus as a response to poverty and food waste is a government strategy, albeit a hands-off one, as much as a philanthropic-corporate one. It is instructive to note in this regard that the sector is included in Ireland's Climate Change Action plan (GoI, 2019). Yet it also maintains the historical precedence of the community and voluntary sector being responsible for issues of social welfare (Donnelly-Cox, 2011; Miller 2014) that distract from addressing the generative causes of poverty and food waste. Corporate support was, and still is, key to the development, maintenance, and growth of the contemporary charitable food system. This situation is not unique to Ireland with Riches (2018) noting the degree to which the charitable food system has become a corporate powerhouse, supported by governments across Europe (Riches, 2018). This makes advocating for real food waste prevention, rather than disposal via donation as per the European Union food waste hierarchy, a near impossible task for indirect services relying on government and corporate funding, and indeed food waste, for their business to work (Lindbaum, 2015; Messner et al, 2020). Their preference is not to interfere with market processes: hence their call for micro level consumer education rather than macro level structural intervention. Ultimately, charitable redistribution is reliant upon a continuous overproduction and excess supply of food from retailers, wholesalers, manufacturers, and processors in order to maintain the constant flow of 'surplus'.

It could be argued that the charitable food system is simply a reflection of the conventional food system and as such poses no additional risks to those relying upon it. However, the difference comes in the form of at least some degree of choice and agency afforded to conventional consumers, and in the motivations, beliefs and values outlined here of those governing what food is fed to those without the economic means to purchase their own needs. While in agreement with Cloke and his colleagues (2016) that the sheer diversity of charitable organisations prevents any 'singular reading', the findings presented here, while not representing all shades of opinion of the those interviewed, do highlight particular discourses which make aligning the brokerage model of surplus food redistribution with achieving more sustainable diets, a difficult task.

In conclusion it is clear that while charitable food redistribution has been co-opted as a solution to the problem of food waste, little consideration has been given to the potential outcomes stemming from such arrangements. The paper suggests that the practices, values and ideas embodied within the brokerage model of surplus food redistribution lead to a number of unintended consequences, while the types of food being distributed require closer attention. While opportunities exist to use surplus to improve access to better food, we have identified a number of obstacles to progress in this direction. These include: the conceptualisation of food poverty and environmental concerns as issues disconnected from health; the discourses surrounding the food cultures of low-income consumers; and the practices that lead to the redistribution of often highly processed food beyond immediate need. However, a tangible step in the right direction would be a commitment from those involved to begin to align environmental goals and health concerns. Overall, the paper highlights that the redistribution of surplus products for the purpose of reducing food waste and improving economic efficiency requires a re-evaluation within a wider appreciation of sustainable diets and, ultimately, strengthening the right to good food for all.

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