

Using Insights in Sen's Capability Approach to Overcome Design and Execution Challenges in Empirical Development Ethics Research

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In this paper, we support the adoption of an empirical approach in development ethics research and show that the theoretical insights and methodological guidelines in Sen's capability approach (CA) can offer helpful guidance to development ethicists on designing and execution of such research. To this end, we show how specific insights in the CA guide one to identify and engage with relevant stakeholders in extensive dialogues about the ethical issues underlying their development practices and in gathering empirical data for further ethical reflections. Drawing on an empirical development ethics research project we conducted in the fisheries sector of Ukerewe District in Tanzania, we illustrate how the CA supported us in identifying 310 representatives of various categories of small-scale fishers and stakeholders, and in designing and executing empirical development ethics research in the form of progressive stages of dialogues in stakeholder groups. The participants in these stakeholder groups reflected on and assessed their individual and collective values, capacities, roles and interests in the fisheries sector. In turn, we gathered empirical data on (i) the nature and causes of the poverty of small-scale fishers and ways to overcome it, (ii) the moral roots of the prevalence of institutional and professional apathy, and (iii) stakeholders' motivations and concrete actions to support the redressing of the challenges facing small-scale fishers. Later, we used these empirical data to theorise about moving small-scale fishers from poverty to prosperity, and about the development ethic best suited to guide future initiatives in combatting poverty and generating wealth through the fisheries sector in Ukerewe District.

Keywords: Empirical Ethics, Development Ethics, Capability Approach, Small-scale Fisheries, Poverty, Ukerewe District, Tanzania

Introduction

In this paper we reflect on the possibility of designing and executing empirical¹ development ethics research. We hold that it is possible to design and execute empirical development ethics research and illustrate how the use of theoretical insights and methodological guidelines in Sen's capability approach (CA) contributes to overcoming some design and execution challenges that have been noted by certain development ethics researchers. Drawing on an empirical development ethics research project² we conducted in the fisheries sector of Ukerewe District, Tanzania, we specifically illustrate how insights and guidelines in the CA provide criteria for selecting the 'right' study participants, effective framing of research issues and effective engagement of study participants in ethical reflections and deliberations. We also cover their criteria for determining empirical data that may be useful for further ethical reflections.

In the second section of this paper, we describe the nature of development ethics, along with competing perspectives on adopting an empirical approach in development ethics research. We provide a brief description of the context and rationale for pursuing empirical development ethics in the fisheries sector of Ukerewe District in the third section. In the fourth section, we highlight the relevant insights and guidelines of the CA, and their actual uses in the designing and execution of empirical development ethics research in the fifth section. We provide concluding remarks in the sixth section.

Nature and practices of development ethics

Development ethics is concerned with a critical and systematic reflection on "questions about major value choices involved in processes of social and economic development" (Gasper 2012: 120). The practice of development ethics entails thinking about actual development practices, thinking about development theory, and thinking about development planning (Dower 2008; Gasper 2004).

Thinking about actual development practices is done with a view to diagnose and resolve value conflicts, assess the effectiveness of policies in promoting chosen development objectives, and assess valuations of development performance. Thinking about development theory seeks to unveil normative positions and criteria for evaluating good and bad development, and thinking about development planning aims to determine how development planning captures the goals that people consider important in their lives (Dower 2008; Gasper 2004; Goulet 1997).

Dower (2008:184) views development ethics as "an activity of thinking about ethical issues in theories and practices of development" done monologically or dialogically. In a monological approach to development ethics, the development ethicist thinks through things for herself in response to what others have said in discussions and in writings about specific theories or practices of development. By contrast, in a dialogical approach, the development ethicist dialogues extensively with other people about the ethics of "the ends and means of local, national and global development" (International Development Ethics Association: n.d.).

Calls are increasingly being made to adopt empirical approaches to doing development ethics better in concrete situations. For instance, the International Development Ethics Association (IDEA) urges its members to consider engaging in ethical reflections that are firmly rooted in and informed by development

practices, so as to better articulate ethical values and formulate ethically authoritative development policies. In line with the position of IDEA, and contrary to the scepticism of Loughlin (2011) and Oduor (2010), Christen and Alfano (2014) underscore the unique contribution of an empirical approach in generating empirical data relevant for ethical theorising.

Christen and Alfano (2014:13-14) argue that some empirical data (i) contribute to effectively framing an ethical problem, (ii) serve as indicators of the feasibility of ethical thought, and (iii) serve as foundations of normative theories. Nonetheless, Christen and Alfano also note the challenge of adopting an empirical approach that lies in identifying, designing and utilising relevant empirical methods for ethical reflection and gathering empirical data that is useful for ethical reflection. We consider these valid concerns of Christen and Alfano (2014) and proceed in the next sections to show how insights in the CA can inform on overcoming such challenges to design and successfully execute an empirical development ethics research project.

Context and rationale for empirical development ethics in the fisheries sector of Ukerewe District

In 2010, the government of the United Republic of Tanzania issued the second *National Strategy for Growth and Poverty Reduction* (NSGRP II). The strategy provided guidance on national initiatives to expedite inclusive economic growth, facilitate massive poverty reduction, and improve the standard of living and social welfare of people from 2011 to 2015 (URT2010). Specifically, the NSGRP II called on key stakeholders in the fisheries sector to design and implement interventions that would offer opportunities for poor people who participate in or depend on this sector for their livelihoods to improve their lot, by generating wealth to improve their lives and overcome their poverty.

We considered the NSGRP II's appeal to key stakeholders in the fisheries sector to be an urgent call to reflect critically on the processes that create and perpetuate the poverty of the small-scale fishers and the impact poverty has on their human dignity, agency and well-being, and to undertake relevant reforms. We determined that an empirical approach to development ethics focusing on the fisheries sector could contribute substantially to this initiative, and selected the fisheries sector of Ukerewe District as our case study.

Ukerewe District comprises 38 small islands in Lake Victoria in Tanzania. It is located at latitude 1°43'16" S and longitude 33°06'52" E. The district covers an area of 6 400 km², of which 640 km² (i.e. 10%) is land and the rest, comprising 5 760 km² (i.e. 90%), is covered by water. In 2002, the population of the district was 260 831 people, which rose to 345 147 people by 2012 (URT 2013). Most of the district's population engages in fisheries-related activities, such as catching, processing, trading, or transporting fish, boat building, net mending and selling inputs for fishing.

The Ukerewe fisheries sector is part of the Lake Victoria fisheries sector. Its commercially important species, namely the Nile perch (*Latesniloticus*), *Dagaa* (*Rastrineobolaargentea*) and Tilapia (*Oreochromis niloticus*), attract huge investments and contribute considerably to national fish production, GDP and

foreign exchange. For instance, in 2010, the Lake Victoria fisheries sector hosted 95 303 full-time fishers (which is 53.7% of the 177 527 full-time fishers in the country), and its fisheries production was 243 564 400.0kg, a 70.2% contribution to the total national fisheries production of 347 156 950.0 kg (MLFD 2012). In 2010, the export of Nile perch from Lake Victoria fetched foreign earnings of USD 139 666 995.10, which was 74.5% of the total fisheries foreign earnings of USD 187 427 053.51 in that year.

The official data for the years between 2005 and 2010, however, indicated alarming increases in poverty of fishers and the fishing communities along Lake Victoria in general, and in the Ukerewe District in particular, amidst the wealth potential of their fisheries sector. For instance, the computed records of TZS 340 000 GDP for Ukerewe District for the year 2010/2011 reveal that, on average, one citizen in that district earned and spent TZS 930 (USD 0.56) per day, which is far below the Tanzanian national poverty line of TZS 1 500 per day. Regarding non-income poverty indicators, the National Sample Census of Agriculture 2007/08 (URT 2012) unveiled unsatisfactory conditions of houses, well-being and assets in most households in Ukerewe District.

Furthermore, media and research reports increasingly unveiled evidence of the unsuccessful struggles of most local fishers in the Lake Victoria fisheries sector in general, and in the fisheries sector of Ukerewe District in particular, to generate enough wealth through the fisheries activities they undertake, while powerful actors and investors in the fisheries sector were accumulating wealth and becoming prosperous. For instance, the highly controversial documentary film, *Darwin's Nightmare*,³ used real-life characters to highlight the extent of the poverty –the impoverishment of local people and the exploitation, injustices and suffering experienced by people in the fishing communities– amidst the wealth generated by fisheries in Lake Victoria. The threats to the survival of the fisheries sector and of small-scale fishers and the fishing communities eventually started to receive dedicated attention in NSGRP II.

We chose Sen's CA with the purpose of using its insights to inform the effective designing and execution of our empirical research. We wanted Sen's CA to serve as a point of departure and provisional guide for ethical reflection and deliberation on the nature of poverty experienced by small-scale fishers, and on concrete actions to combat it.

Uses of the insights of the capability approach in designing and executing empirical development ethics research

Sen's capability approach (CA) is an analytical and normative framework for assessing and measuring inequality, poverty and well-being. Dissatisfied with measuring inequality, poverty and well-being purely in terms of income, negative liberties, basic needs and utility, Sen devised the capability approach, which assesses and measures human life as it is lived and people's real opportunities and freedoms to live the lives they value.

In Sen's CA, human beings are understood as essentially reasoning beings and free choosers (Sen 1999, 2010). Sen (1999) argues that human beings are not mere receptacles for resource inputs and satisfaction; rather, they are active agents who set their own goals, make their own choices, and pursue and realise their own

valued goals. An 'agent' is "someone who acts and brings about change" (Sen 1999:19), and 'agency' means "the freedom and ability of human beings to pursue valued goals and bring about achievements that they consider valuable" (Sen 1985: 203-204). Given the awareness of the efficacy of agency, Sen (1985: 208) argues for social arrangements that enable every human being to become an 'active agent' and to exercise 'agency freedom' to "bring about the achievements one values, and which one attempts to produce".

In addition, Sen (1999) maintains that freedom is a principal determinant of individual initiatives and social effectiveness. Freedom contributes to fostering people's opportunities to have valuable outcomes and to enhancing their ability to help themselves and to influence the world (Sen 1999). It follows that a free human being, as conceived in the CA, is one who "has the opportunity to function (as a human being) and to pursue goals he or she values" (Deneulin 2014: 34).

With its conception of human beings as essentially reasoning and free beings, the CA claims that the freedom to achieve well-being is of primary moral importance, and that freedom to achieve well-being should be understood in terms of people's real opportunities to do and be what they have reason to value (Robeyns 2013). In light of this idea, therefore, Sen's CA aims to describe, assess and measure people's well-being in terms of their practically possible opportunities to achieve various life outcomes, and the processes of social development in terms of their contributions to depriving or expanding people's real opportunities to pursue and realise specific aspects of life (Sen 1985, 1999, 2010). Accordingly, the normative position of the CA is that all just social and institutional arrangements ought to provide, protect and guarantee people's effective opportunities and freedoms to lead the kind of life they value (Sen 1999, 2010).

Functionings, capability and entitlements are important and interrelated conceptual elements of Sen's CA. These elements facilitate the effective empirical description, assessment and measurement of inequality, poverty and well-being in societies. *Functionings* are various states of life and activities that people recognise as important and want to pursue (Sen 1999). There are *being* functionings (i.e. the more stable characteristics of a person, such as self-respect or personal agency) and *doing* functionings (i.e. the specific behaviour of the person, such as communicating in an assertive fashion). According to Sen (1999), people can comprehend and choose various states of being and doing, but they can only pursue and achieve these valued states and attain certain levels of well-being when they control the relevant and adequate capabilities. Therefore, the successful pursuit of chosen and valued being and doing functionings depends on the individual's capability set.

Capabilities are the real opportunities or freedoms that people have for pursuing and achieving the various states of being and doing they consider important in their contexts (Sen 1999). Examples of capabilities are the political freedoms, economic facilities, social opportunities, transparent guarantees and protective security that contribute to enhancing and enriching the lives that people can lead (Sen 1999). As such, political freedoms comprise real opportunities in the political arena that enable people to practise their civil and democratic rights; and economic facilities include real opportunities in economic spaces that enable people to engage in economic production, exchange and consumption. Social opportunities include real opportunities in the social services sector, such as education and health care,

which people utilise to be and live better; transparent guarantees are opportunities that enable people to engage with one another in open and trusted ways; and protective security comprises opportunities that provide people with social safety nets and the means to mitigate risks.

Entitlements represent various commodities over which a person has the potential to establish ownership and command (Sen 1999). Entitlements are structured by and regulated through social relations, legal and political structures, and market conditions (Sen 1985, 1999, 2010). There are trade-based entitlements, production-based entitlements, own-labour entitlements, and inheritance and transfer-based entitlements. Thus, individual persons and households can obtain entitlements through production, trade, own labour power, inheritance and transfers, and the use of public goods and social security (Sen 1981, 1984, 1995, 1999). Sen (1995: 63) observes that entitlements generate capabilities, which in turn facilitate the realisation of valuable *being* and *doing* functionings.

While noting the interrelatedness of *functionings*, *capabilities* and *entitlements* in the actual lives of people, Sen nonetheless argues that assessments of the states of inequality, poverty and well-being experienced by people should focus on *capabilities*, because these contribute to enabling people to conceive, plan and pursue their own conception of a good life. Similarly, Sen (1999) holds that people who lack or are deprived of basic capabilities fail to pursue and realise the aspects of life and socio-economic goals they value, and eventually they end up in low levels of well-being. In light of this stance, Sen (1999, 2010) has convincingly argued that inequality, poverty and well-being should be evaluated in terms of *how people are able to live*, *the actual opportunities* people have, and *the freedoms* they enjoy in sections of society, such as in health, in education, in community engagement, and in the economic and productive sectors.

Sen's CA can be used for different purposes, ranging "from the preliminary one related to the clarification of abstract concepts into measurable entities, up through the final phase of a coherent organization of results" (Chiappero-Martinetti and Roche 2009:57). In line with this thinking, for instance, Comim (2001:14) argues that one can use the concepts and arguments provided by the CA to illuminate the analysis of cases of factual interest, or use its framework and procedures to conduct empirical analysis and discuss issues that other approaches fail to address.

In the stage of designing our empirical research, we employed the insights of the CA to gain clarity on the meaning of *poverty* and *poor people*, and the contents and scope of *pro-poor interventions*. By doing this, we sought to gain conceptual clarity to better focus the exploration of what might constitute the poverty of small-scale fishers and concrete actions to combat it. The theoretical elements of the CA, namely functionings, capabilities and entitlements, offered us an insightful, three-pronged approach to describing poor people. First, poor people are persons who value and want to pursue and realise certain levels of well-being (functionings), but fail to do so because they lack or have been deprived of important opportunities and freedoms (capabilities). Second, poor people have low levels of basic capabilities and are consequently severely limited from becoming the persons they want to be and doing the socio-economic activities they value. Third, poor people remain in states of low well-being because they fail to access or command commodities (i.e. entitlements) to increase their capability sets.

It follows that states of poverty are essentially states of capabilities deprivation not freely chosen by the people experiencing them. Intrinsically, therefore, poverty comprises different forms of capabilities deprivation, which in turn makes it difficult for people who experience them to do the socio-economic activities they want, to achieve aspects of a good life they value and to own and command important resources to lead flourishing lives (Sen 1999). Accordingly, *pro-poor interventions* ought to target the removal of conditions that constrain poor people from participating in activities with the potential to raise their levels of well-being and to expand the opportunities or freedoms that enable them to pursue and realise their valued aspects of a good life (Sen 1999, 2010).

Informed by the insights of the CA described above, we determined to reflect on and describe the states of the 'poor' small-scale fishers of Ukerewe District in terms of their functionings, capabilities and entitlements; and to evaluate possible pro-poor interventions in terms of their potential to enable 'poor' small-scale fishers to function responsibly and gainfully.

We also used the insights of the CA to inform and guide our determination of the unit(s) of our empirical analysis. In principal, the CA is designed to assess and measure people's capabilities and the support they do or do not receive from social institutions to boost their capability sets. In fact, Sen (1999:297) asserts that individual capabilities are affected positively or negatively by the actions or inactions of "a variety of social institutions – related to the operations of markets, administrations, legislatures, political parties, nongovernmental organizations, the judiciary, the media and the community in general". Noting the roles that social institutions play in enhancing or depriving people of their capabilities, we determined to focus our empirical analysis not only on small-scale fishers (individually and collectively), but also on the public and private institutions established to provide various goods and services in the district.

Thereafter, we employed the insights of the CA to clarify the nature and goal of conducting ethical reflection in concrete contexts. We noted that the CA places individuals, their values, their real opportunities to pursue and achieve a good life, as well as their freedom of choice, in the spotlight (Chiappero-Martinetti and Venkatapuram 2014:709). We also noted that, in the CA, states of capability deprivation and entitlement failures experienced by some members of society are associated with the failure of public and private institutions to fulfil their duties of justice. In fact, Sen (1999, 2010) holds that, with the presence of many active social institutions that promote and advance justice in societies, it would be possible to avoid or remove the different forms of injustice that breed capability deprivation and entitlements failure situations.

The CA's position on institutions fulfilling duties of justice, as described above, clarified for us that meaningful ethical reflection ought to focus on the roles of different capabilities in facilitating people's pursuit of valued socio-economic activities and the realisation of their valued life outcomes. Ethical reflection should also address the extent to which social institutions succeed or fail in fulfilling their duties of justice in matters of enhancing people's capabilities and redressing conditions that contribute to their capability deprivation and entitlements failures. Accordingly, we decided to focus on understanding and unveiling the roles of public and private institutions in contributing to the capability deprivation and entitlements failures experienced by the small-scale fishers, as well as the moral

ideas, values and principles that could inspire them to help overcome these conditions.

Overall, the insights of the CA described above eventually enabled us to better comprehend our research issue and guided us in framing themes and questions for ethical reflection and deliberation by distinct participants in the three stages of the empirical research. We provide details on the main issues, themes and questions for specific stakeholder groups that we identified and framed in the fifth section of this paper.

Furthermore, the insights from the CA informed our plans for executing specified research tasks in selected sites. Sen's CA is a framework with the potential to facilitate an assessment of the actual opportunities and freedoms of people to live, and the extent to which social arrangements serve the demands of social justice in matters of protecting and guaranteeing people's capabilities to live their lives. Besides, Sen (1999) holds that the basic capabilities that people need to lead a minimally decent life, and which just societies need to guarantee for their members, must be identified through public reasoning and democratic deliberation.

Sen proposes that the process of reflective and reasoned evaluation of capabilities that people lack or need to live and function better must pay attention to real-life contexts. This process needs to engage the people concerned in public dialogue and democratic deliberation on the ends and means of the development processes that they want to pursue. Regarding the actual practice of the "public discussion", Sen (1984:310) proposes that we start by "digging" from within human experiences and discourses about what things to do, and what should count as intrinsically worthwhile in human life. The discussion should only stop when we find the ethical concepts that best interpret these objects of intrinsic value (Crocker 2008).

In support of Sen's position delineated above, Alkire (2005, 2008), Crocker (2008) and Robeyns (2006) argue for employing participatory methods when operationalising Sen's CA. They argue that such methods enable facilitators to effectively engage the people concerned in critical reflection on their real-life experiences, what they value doing and being, what their actual capabilities are, and what products and services of other stakeholders would enable them to acquire the set of capabilities they need to function and live better.

The methodological guidelines provided by Sen and the capability scholars sketched above guided us to carry out our empirical research in three progressive stages of critical self-reflection and dialogue within and between stakeholder groups. We aimed for a step-by-step engagement with key stakeholders to critically reflect and deliberate on what they value about the fisheries sector, fisheries activities and small-scale fishers. Stakeholders would be asked to consider what their actual capabilities are for engaging in fisheries activities or for providing small-scale fishers with the products and services they need to function better; what concrete actions they think would contribute to enabling small-scale fishers to raise their capability sets; and what inspires them to want to support small-scale fishers in overcoming their most pressing challenges. We present the specific issues and questions that participants in each stage and group reflected and deliberated on in the fifth section.

Execution of empirical development ethics research in the fisheries sector of Ukerewe District

We purposefully selected local men and women who were involved in (i) catching, processing, trading and transporting fish and fish products, (ii) the co-management of fisheries resources through the Beach Management Units (BMUs), and (iii) the making, repairing, supplying and selling of fishing inputs. In total, we engaged with 95 fish catchers, 43 fish processors, 42 fish traders, four fish transporters, and 11 makers and sellers of fishing vessels and inputs. We call them “small-scale fishers” because they operated their fisheries activities on a small scale.

We also selected and engaged with 28 administrators and elected political leaders serving at different administrative levels of the district government, 37 experts employed by the Ukerewe District Council, 15 officers in the private enterprises, and 35 heads of non-governmental organisations operating in the district. We noted that these experts and leaders of public and private institutions were potential supporters or brokers of the envisioned reforms in the fisheries sector.

We engaged with these 310 participants in progressive stages of dialogue, first in homogeneous stakeholder groups, then in heterogeneous stakeholder groups, and finally in a stakeholders’ workshop where we brought all stakeholder groups together in one venue to critically reflect on and assess their current and alternative practices and relationships in their fisheries sector. We successfully executed the research at field sites in Ukerewe District from October 2012 to March 2013.

Dialogue in homogeneous stakeholder groups

The first stage comprised dialoguing in 33 homogeneous stakeholder groups (16 for small-scale fishers and 17 for other stakeholders). We call them “homogeneous” because each group consisted of members who do the same fisheries activities or provide the same services. Each of these groups included three to ten people, and meetings lasted for about two hours.

We guided participants in the 33 groups to reflect on (i) the roles and interests of different actors, and the forms of social, production and exchange relationships and practices in their fisheries sector, (ii) the states of poverty and well-being in their communities, (iii) the positive contributions of fisheries activities to the well-being of those doing them and the welfare of their communities, (iv) what they do or do not like about being fishers and doing fisheries activities, and (v) what actions to undertake to unlock the potential of the fisheries sector to help move the people involved from poverty to prosperity.

When facilitating dialogues in these groups, we encouraged all participants to draw on their personal and real-life experiences to explore and highlight (i) the expectations they had when they chose to invest or work in the fisheries sector, (ii) the knowledge, skills and resources they have or lack to successfully undertake the fisheries activities they have chosen, (iii) the expectations they have and have not managed to realise, (iv) the services and facilities they do or do not receive from the public and private institutions in the district, and (v) the difficulties they experience when pursuing their fisheries activities and their proposals to solve them.

Small-scale fishers who participated in these 16 groups discussed their experiences in the fisheries sector openly and confidently, highlighted their hopes and worries, successes and failures, and offered proposals to improve undesirable

social, production and exchange relations and practices. Importantly, these participants underlined the fact that they had invested in and/or undertaken fisheries activities to earn an income and become prosperous. Consequently, they wanted to be able to (i) get fair prices for their fish catches, fish products and labour, (ii) enhance their social and economic status, and (iii) enjoy the fruits of their hard work and to flourish.

These participants revealed that the fisheries activities they were undertaking provided them with income and other socio-economic resources that they used to improve their lives. Regarding the fisheries activities becoming their important income source, for instance, they revealed that investors in *dagaa* catching earned an average net monthly income of TZS 700 000 for each *dagaa*-catching boat, the *dagaa*-fishing crew members each earned an average monthly income of TZS 200 000, and that the average monthly income for each of the female *dagaa* processors was TZS 80 000. They also reported that the average monthly income for a petty trader of Nile perch was TZS 60 000, and TZS 100000 for a fish-transporting crew member.

Furthermore, all 195 participants revealed that securing jobs in the fisheries sector had contributed to improving their social status, and that they used their hard-earned income to pay for their children's education, to buy food and clothes and pay for health services for themselves and their families. Nevertheless, 99 (51%) of the 195 small-scale fishers revealed that they earned so little income that they were unable to (i) meet all the basic costs of their children's education, (ii) provide all family members with quality basic health services and clothing, and (iii) supply their households with sufficient food.

On achieving the other social and economic goals they value, only 80 (41%) respondents reported having earned enough income to improve or build better houses; only 77 (39%) respondents reported having earned enough income to buy valuable assets such as land, livestock, cars and motorbikes; only 59 (30%) respondents reported having generated adequate income to expand their current fisheries businesses; and only 42 (22%) respondents were able to start their own businesses. Most small-scale fishers reported that they failed to realise their valued social and economic goals because they had not yet managed to earn enough return from their investment in the fisheries sector.

When we probed how small-scale fishers would compare the performance of their fisheries sector to that of other socio-economic sectors in contributing to the welfare of the people involved in them, the respondents claimed that the fisheries sector was doing better and that they were better off than participants in other socio-economic sectors in the district. Given their belief in the prosperity potential of their fisheries activities, these small-scale fishers vowed to continue working hard and diligently to attain prosperity.

In fact, in all 16 groups, these small-scale fishers expressed their strong determination to generate wealth through their fisheries activities and identified the many challenges that negatively impacted their chances for creating wealth. Most of the participants reasoned that they were not managing to accumulate adequate wealth or to realise some important social and economic goals because they had limited resources and capacities to (i) compete with fellow actors, (ii) influence biased fisheries management decisions, (iii) negotiate confidently and aggressively for their own interests, rights and freedoms in the fisheries sector, (iv)

determine and get fair prices for their fish catches, fish products and labour, (v) run successful and profitable fisheries activities, and (vi) access financing and social opportunities to improve their performance and productivity.

In addition, small-scale fishers noted that they remained incapacitated in their pursuit of wealth because they were not receiving adequate support from capable public and private institutions operating in the district. For instance, small-scale fishers reported receiving (i) inadequate extension services because the competent and responsible personnel in the departments of the Ukerewe District Council rarely visited them; (ii) limited access to personal and business loans from formal financial institutions because these institutions considered their fisheries businesses to be too risky; and (iii) limited insurance services to cover life, medical and business-related risks because insurance providers were not covering risks in the fisheries sector.

When moderating the 17 groups of other stakeholders, we encouraged the participants to reflect on (i) the roles and interests of the different actors, and the forms of social, production and exchange relations and practices in the fisheries sector, (ii) the state of poverty and well-being in the fishing communities, (iii) the positive contributions of the fisheries activities to the well-being of those doing them and the welfare of local communities, and (iv) what actions to undertake to unlock the potential of the fisheries sector to help move the people involved from poverty to prosperity. We also engaged with them in a self-assessment of (i) the services and facilities that their departments or organisations were providing to small-scale fishers, (ii) the services and facilities that their departments or organisations were able to provide but were not providing, and (iii) the services and facilities that their departments or organisations should provide to small-scale fishers to help them solve some of the difficulties they experience.

Conversations in these 17 groups revealed a great awareness among stakeholders of the huge contribution of the fisheries sector to the Ukerewe District Council's revenue and the welfare of fishers and communities. They convincingly argued and illustrated how the fisheries sector is the "backbone of the Ukerewe District Council's own financial well-being and sustainability", and "one without which the Ukerewe District Council becomes financially incapacitated". They also noted that people who have invested or worked in fisheries activities were accruing income that they used to improve their welfare and carry out other profitable investments. For instance, these respondents reported that people who generated wealth from fisheries activities had reinvested that wealth in rental houses, guesthouses and hotel businesses. In general, these respondents showed a high regard for people who had invested in or undertaken fisheries activities because of their contributions to making fish available, creating jobs, and paying taxes and levies to the government.

When reflecting on the extent to which the fisheries activities contributed to providing people with resources to combat and overcome their poverty, these participants revealed diverging opinions. Drawing on the concrete evidence of the several investors and workers in the fisheries sector who have managed to accrue income and used it to improve their lives, 93(81%) participants argued for the prosperity potential of the fisheries activities. In contrast, 22 (19%) participants highlighted the numerous challenges that small-scale fishers face and that negatively impact their ability to generate wealth, and so they remained sceptical of the contribution of fisheries activities to move them from poverty to prosperity.

These 22 participants noted that the rich and powerful investors in the fisheries sector benefitted the most, at the expense of the small-scale fishers. Accordingly, they called for giving more support to small-scale fishers and for technological and governance reforms in the fisheries sector to unlock its prosperity potential and enable those participating in it to accrue wealth.

Evidence of the limited support that stakeholders gave to small-scale fishers became apparent during the stakeholders' self-assessment exercises. Following the strong rapport and trust we had carefully built up in the dialogue groups, the stakeholders were willing to participate in the self-assessment exercises. Eventually, the participants associated with the Ukerewe District Council and its departments revealed that they provided inadequate extension services and infrastructure for storing and processing raw fish; and the representatives of non-governmental organisations conceded that they were not doing enough to support small-scale fishers so they could improve their knowledge and skills to engage in fisheries co-management plans and conduct profitable businesses. Participants from the micro-finance banks and insurance companies revealed that they were indeed not financing and insuring the businesses of small-scale fishers.

In general, the critical reflection and self-assessment exercises in the 33 homogeneous stakeholder groups shed light on the roles, interests, values, competences and resources, successes and failures, hopes and worries of the individual small-scale fishers and the stakeholders. The exercises also provided a possible course of action for tackling the main challenges of small-scale fishers and for unleashing the prosperity potential of their fisheries activities. However, we opted to move from reflecting on and assessing the 'individual' experiences to reflecting on and assessing the 'collective' experiences of small-scale fishers and stakeholders in order to better understand and assess what was really happening in the fisheries sector. Therefore, we opted for dialoguing in heterogeneous groups and strove to understand the conditions responsible for the increasing and enduring challenges that small-scale fishers experienced. The groups explored how the challenges were negatively impacting the capacities of small-scale fishers to generate wealth, and the conditions that led to public and private organisations failing to provide the services that small-scale fishers need to better perform their fisheries activities.

Dialogue in heterogeneous stakeholder groups

At this stage, we selected representatives from the main categories of small-scale fishers to participate in two heterogeneous groups. The groups' task was to reflect on and assess the factors that limited the fishers' real opportunities and freedoms to pursue their valued fisheries activities and accrue adequate resources for improving their personal and household well-being. Heterogeneous group HET-WAV/A consisted of two fishing vessel owners, two fishing crew members, two fish traders, one fish processor, one fish transporter, one seller of fishing inputs and one BMU leader. The participants in heterogeneous group HET-WAV/B were two fishing vessel owners, one fishing crew member, one traditional fish catcher, two fish traders, one fish processor, one fish transporter, one seller of fishing inputs, one former BMU leader, and one current BMU leader. These 22 participants had participated in the previous homogeneous groups of their respective categories.

We also invited representatives from public and private organisations to participate in heterogeneous groups to reflect on and assess the circumstances that contributed to their failure to provide adequate support to small-scale fishers. This context involved six heterogeneous groups: (i) HET-STC, comprised of eight members of the three Standing Committees of the Ukerewe District Council, (ii) HET-CMT, comprised of nine members of the Ukerewe District Council Management Team, and (iii) HET-WDC, comprising eight members of the sampled Ward Development Committees. Others were (iv) HET-FIN, comprised of six officers from formal micro-finance institutions, (v) HET-BSC, consisting of six officers of state- and private-owned enterprises, and (vi) HET-CSO, comprised of three leaders of political parties and five officers of civil society organisations.

When moderating the dialogues in these eight heterogeneous groups, we drew on specific data from the previous dialogues and creatively engaged participants in reflecting on what prevents small-scale fishers from pursuing and accruing adequate wealth, and the stakeholders from providing adequate services and facilities to small-scale fishers. In their respective groups, these participants shared and reflected on their individual and collective experiences of limitations or failures and debated the circumstances responsible for them, along with ways to combat them. We present below the respondents' perspectives on how those challenges manifested and their negative impacts on the capacities of small-scale fishers to function and to accumulate wealth.

First, participants in the eight heterogeneous groups identified *inadequate fisheries infrastructure and facilities* as one of the biggest challenges facing small-scale fishers. It was established that, amongst the 78 official fish-landing sites in the district in the year 2012, 74 (95%) had no fish sheds, 73 (94%) had no fish stores, 78 (100%) lacked cold storage, 67 (86%) had no fish-drying racks, and 62 (79%) had no smoking kilns, thus making it difficult for fishers to preserve and process quality fish and fish products to attract good prices. These participants argued that the inadequacy of fish-processing and preserving facilities contributed to their limited capacity to deal with the problem of post-harvest losses of captured fish, which in turn led to income losses.⁴

The participants argued that the inadequacy of fisheries infrastructure and facilities resulted from the government's failure to reinvest in the fisheries sector. They claimed that the government collected revenue, but did little to invest in important fisheries facilities at fishing camps, landing sites and fish markets. Government officials who participated in the HET-STC and HET-CMT groups conceded that the focus of the district government was more on collecting revenue than on investing in providing services to improve the performance of the sector and the citizens engaged in it. In the spirit of self-criticism, these government officials admitted that it was not smart or fair to focus on revenue collection only.

Second, participants noted that most small-scale fishers exhibited *low levels of the knowledge and skills* they needed to function efficiently and profitably in the complex socio-economic contexts in which they worked. Participants in HET-WAV/A and HET-WAV/B admitted that most small-scale fishers in the district had limited entrepreneurial and business management skills; limited knowledge of national fisheries policy and regulations; limited knowledge of investment and banking; and limited skills for conducting business and labour negotiations. With such limited competence, some small-scale fishers were losing their hard-earned

income and assets for failing to make the right investment decisions, for unwittingly breaking fisheries regulations, for using banned fishing gear, for failing to determine and negotiate reasonable prices for their own products and services, and for failing to comprehend the contents of tricky business or employment contracts.

Small-scale fishers reported that the government personnel and departments responsible for carrying out extension services were mostly unavailable to share relevant knowledge, skills and information for conducting legal and profitable fisheries activities, or they were inaccessible. These respondents claimed to have access to only limited opportunities to learn and gain the competences they needed to conduct their fisheries activities in a responsible, legal and profitable manner. Participants in the heterogeneous groups of other stakeholders argued that the lack of or limited competence of small-scale fishers resulted partly from the failure of responsible and competent personnel and agencies in the public and private spheres to establish opportunities for transferring knowledge, skills and technologies to their customers, and partly from the tendency of small-scale fishers to shy away from contacting the relevant government departments for up-to-date knowledge, authoritative information and expert guidance.

Third, participants identified *inadequate financing and lending opportunities* as another big challenge experienced by small-scale fishers. Participants in the HET-WAV/A and HET-WAV/B groups reported that small-scale fishers experienced difficulties in borrowing money from formal financial institutions to invest or reinvest in their fisheries activities. This was because the formal micro-finance and commercial banks considered their businesses risky and therefore not lendable. These participants claimed that the riskiness of fisheries activities is usually exaggerated, and that loan officers in the formal micro-finance and commercial banks invoke an important guideline in their business loans policy, namely *the business must be in owned or rented premises within the area serviced by the financial institution to be eligible*, so as to exclude fisheries activities operating in the lake waters.

In their conversations, these participants highlighted the bias of most of the micro-finance banks, which do not lend money to small-scale fishers but do lend to small-scale entrepreneurs undertaking equally risky rain-dependent farming activities. Small-scale fishers reported that laws and policies that prevent them from accessing and using formal financing and lending services contribute to their failure to raise capital to improve or start income-generating fisheries activities. The fishers then turn to informal financing and lending opportunities, some of which have stringent terms and conditions that rob them of a large amount of their income, and therefore of their freedom and dignity. Participants in HET-FIN revealed that they were not lending money to small-scale fishers because the micro-finance and credit policies that guided the financing of promising income-generating activities of local people excluded fisheries activities.

Fourth, participants reported that small-scale fishers experienced *inadequate formal social security and insurance services* to mitigate their life-, medical-, property-, work- and business-related risks. Small-scale fishers reported experiencing regular losses of their hard-earned income and assets through (i) thefts and robberies that regularly happened in the lake waters and at their camps, (ii) paying high costs for medical services, (iii) replacing lost property and (iv) paying high fees to settle work- and business-related disputes. They noted that

state- and privately owned enterprises were increasingly providing insurance services to cover various risks, including life, medical, property, work and business risks in other socio-economic sectors but not in the fisheries sector. The fishers attributed this unfair practice to the tendency of public and private institutions to unfairly marginalise small-scale fishers.

The small-scale fishers argued that, without medical insurance coverage, they ended up paying high costs for health services; without membership in social security and pension schemes, they remained insecure when they retired or lost their jobs and income; and, without business and property insurance coverage, they were unable to replace costly assets lost through theft and robbery. Participants in HET-BSC admitted that only limited social protection and insurance services were offered to people investing and working in the fisheries sector, and that small-scale fishers were also entitled to insurance to cover themselves and their businesses from unforeseeable risks.

Lastly, participants noted *the increasing decline in fish stocks and fish catches* and reported it as another big challenge for small-scale fishers. Specifically, the fish catchers reported experiencing a sharp decline in the number and size of fish they caught and revealed that they had to travel long distances, use more fuel and spend many hours in the deep waters to catch three or four times less fish than they had caught in past years. Participants in the heterogeneous groups of other stakeholders also noticed a decline in fish catches⁵ in terms of weight, size and species, and maintained that fishers were increasingly catching fewer and undersized fish, which did not fetch them good prices.

Participants in the eight heterogeneous groups further reported increased use of destructive fishing methods (such as water beating, trawling and beach seining), the use of destructive fishing gear (such as beach seine and trawl nets, monofilaments, undersized gillnets, small seine nets), and the use of poisonous chemicals in fish catching. They maintained that the increasing use of these destructive fishing methods and gear disrupted, and sometimes destroyed, the breeding and feeding patterns of fish. In addition, these participants noted numerous factors that contributed to the increased use of illegal and destructive fishing methods and gear. These factors included the high costs involved in buying the right fishing gear; the presence of irresponsible, uncaring and greedy investors and fishers; the lack of political will from administrators and elected political leaders; the poor governance and management of the fisheries resources, as well as limited monitoring and surveillance measures by the responsible administrative departments and staff. Both the small-scale fishers and the administrators, elected political leaders and employees accepted some responsibility for failing to combat and overcome illegal and destructive fishing practices.

Generally, the dialogues in the heterogeneous groups revealed the numerous challenges faced by small-scale fishers that prevented them from successfully pursuing their chosen and valued fisheries activities. The dialogues also brought to light that some practical policies, regulations, actions and inactions of individual and collective agents in the public and private institutions contributed to putting the small-scale fishers at a disadvantage in regard to real opportunities and freedoms to function actively and gainfully in their fisheries sector (Sen 1999). Moreover, the dialogues revealed the troubling fact that small-scale fishers were experiencing these many challenges despite the existence of several public and

private organisations that were capable of providing them with services and goods to alleviate their situations.

Next, we brought together representatives of both the small-scale fishers and the stakeholders to better understand what these public and private organisations could do and what would motivate them to help small-scale fishers overcome their challenges and enhance their capability to successfully pursue their chosen and valued fisheries activities. The group visualised, reflected and deliberated on the fisheries sector they wanted in the future and what they could do to realise it.

Dialogue in the stakeholders' workshop

The final stakeholders' workshop comprised 83 participants that fairly represented the categories of (i) small-scale fishers, (ii) administrators, elected political leaders and employed experts, (iii) state- and privately owned enterprises, and (iv) civil society organisations. By bringing these participants together in one room to engage in dialogue, we sought to explicate and discuss the deep-seated assumptions underlying their choices for certain pro-poor interventions and the moral basis for their proposed course of action for facilitating small-scale fishers' successful pursuit and realisation of wealth through fisheries activities.

We started by viewing the Swahili version of a 26-minute-long film, *Invisible Possibilities*,⁶ which documents the experience of poverty in one fishing community along Lake Victoria and the struggles they experience to overcome their poverty through fisheries activities. The viewing of this film and the facts it depicts about the poverty of small-scale fishers and the involvement of public and private institutions to combat it sparked the participants' thoughts and set a good tone for the conversations.

We then moved strategically to provide participants with adequate space to collectively visualise the fisheries sector they want in the future, to debate the social, production and exchange relations they value and want to realise in the future, and to reflect on and deliberate about the concrete strategies to implement in order to realise their shared vision. This lively and informative workshop lasted for eight hours; the participants debated freely but respectfully and made several resolutions about their future fisheries sector. We briefly present below the main resolutions made by the participants.

First, the participants agreed that the fisheries sector was the backbone of the socio-economic development of the Ukerewe District and its citizens. Being the main source of food and nutrition, employment and revenue, the fisheries sector has the potential to contribute significantly to the advancement of personal, household and community prosperity. Given this position, the participants resolved never to marginalise it again but to place it at the centre of the development agenda of every citizen, government department, political party, civil society organisation and private enterprise in order to unlock and augment its prosperity-enhancing and poverty-reducing potential.

Second, the participants agreed that small-scale fishers are important players in making and enabling the fisheries sector to unleash its abundant socio-economic benefits to citizens and communities. By investing in and skilfully undertaking their valued fisheries activities, small-scale fishers generate wealth and provide citizens and communities with fish, fish products, job opportunities and other resources to improve the general welfare of their communities. Therefore, small-scale fishers are

important wealth creators who should be supported to combat and overcome those conditions that constrain them from generating adequate wealth.

In line with the resolution to help small-scale fishers overcome their constraining conditions, for instance, participants representing government departments and civil society organisations resolved to initiate joint educational and capacity-building programmes to train small-scale fishers on (i) costing and pricing products and services, (ii) record keeping, (iii) marketing and business ethics, (iii) applicable fisheries laws and regulations, (iv) access to and use of insurance and banking services, and (v) use of improved and affordable modern technologies to catch, process and pack fish and fish products. Representatives of financial institutions, pension schemes and insurance companies resolved to change some of their policies and regulations to enable entrepreneurs in the fisheries sector to access and use their services.

We gathered that the motivations for these participants to undertake those actions sprang from their renewed commitment to (i) fulfil institutional and professional obligations, (ii) contribute to possible positive outcomes in the lives of small-scale fishers and the general community, (iii) contribute to prevent possible negative consequences for the agency and well-being of small-scale fishers and the welfare of the general community, and (iv) practise fairness and show solidarity with and respect for small-scale fishers.

Third, participants agreed on the roles of small-scale fishers in causing and solving the problem of the decline in fisheries resources. Some small-scale fishers contribute to the decline of fish stocks when they use or support fishing methods and gear that destroy the breeding and feeding patterns of fish. They contribute to solving the problem when they participate in fisheries resources conservation programmes and in combating illegal and unsustainable fish-catching practices. Consequently, small-scale fishers ought to be involved in the district's programmes to co-manage fisheries resources. In line with this resolution, the government agencies responsible for fisheries governance pledged to effectively engage small-scale fisheries in the fisheries co-management plans, and the small-scale fishers committed to actively and responsibly participate in protecting and conserving fisheries resources through the legally established Beach Management Units (BMUs) in their communities.

Lastly, participants expressed their resolve to pursue justice and to promote fairness in social, production and exchange relations in the different sections of the fisheries sector to guarantee fair returns on people's investments and services offered. In line with this resolution, the responsible government agencies and officials pledged to closely supervise the conduct of business and the enforcement of contractual obligations of parties conducting fisheries activities so that each party receives its rightful share of the accumulated benefits.

In addition, we wish to highlight the other positive outcomes of the stakeholders' workshop. First, in contrast to their usual feeling of being marginalised and neglected, by the end of the workshop most small-scale fishers reported feeling respected and empowered. They felt that their roles and contributions were valued, their concerns were taken seriously by the public and private institutions, and they pledged to work closely with government agencies. Second, after previous experiences of antagonism between district government staff and small-scale fisheries, the participants claimed to see signs of the staff wanting to reconcile with

the small-scale fishers. In fact, many of the workshop participants praised the attitudes of remorse, reconciliation and recommitment expressed by most of the government staff when contributing to the discussions. Third, the envisioned 'new' behaviours and roles in the future fisheries sector and the resolutions made during the stakeholders' workshop became inputs for ongoing social dialogue in and beyond Ukerewe District, thereby sparking stakeholders to undertake further self-reflection, self-assessment and commitment to support small-scale fishers.⁷

Concluding remarks

We have sought to highlight how the theoretical insights and methodological guidelines in Sen's CA informed the designing and conducting of the empirical development ethics research we undertook in the fisheries sector of Ukerewe District in Tanzania. We used the CA's unique conceptual elements (i.e. functionings, capabilities and entitlements) and framework to describe and assess the life and activities of small-scale fishers, as well as the support they do or do not get from public and private institutions. We also used the CA's methodological guidelines when selecting and engaging with the relevant study participants. Eventually, we carried out the empirical research and gathered the empirical data we needed for further ethical theorising. The collected empirical data are presented and discussed in Mazigo (2015: Chapter 5).

By using the insightful conceptual elements of the CA identified above, we explored and assessed the poverty conditions of small-scale fishers, determined ways to overcome them and enable the fishers to pursue and manifest well-being and prosperity. The empirical data we generated through these exercises were useful for theorising about small-scale fishers' ability to move from poverty to prosperity and the concrete actions for facilitating and realising this. The theorisation about moving from poverty to prosperity is done and reported in Mazigo (2015: Chapter 7).

We employed the social justice lens of the CA to explore the roots of the moral failure of individual and collective agents in the fisheries sector, and of the prevalence of institutional and professional apathy. We then posed questions that could awaken and inspire them to do justice to the people they are duty-bound to serve. Evidence of the stakeholders' preferred 'new' behaviours and roles in the fisheries sector, as well as their motivations to support the redress of the challenges facing small-scale fishers, hinted at their deep-seated moral ideas, values and principles. We determined that these moral ideas, values and principles could serve as a moral basis for pro-poor interventions in the fisheries sector.

By following the moral arguments of the CA on equality in basic capabilities for every person to lead a minimally decent life, and on the need for just societies to provide and guarantee basic capabilities for their members, we moved to explore and gather evidence of concrete actions that public and private institutions could undertake to raise the capability sets of small-scale fishers, and concrete measures for promoting justice and fairness in social, production and exchange relations. The empirical data on the stakeholders' renewed commitment to promote social justice and realise prosperity were useful for theorising about the content of an alternative and context-specific development ethic to guide their future initiatives to combat

poverty and generate wealth through fisheries activities. Such theorisation and the developed alternative development ethic are reported in Mazigo (2015: Chapter 7).

Considering the evidence in the empirical research we have presented in this paper using the theoretical insights and methodological guidelines of Sen's capability approach, we strongly hold that such insights can indeed facilitate the designing and execution of empirical development ethics research to effectively engage the people and institutions concerned in extensive dialogues about ethical issues in their development practices and, in turn, the gathering of empirical data useful for ethical reflection.

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Notes

¹'Empirical' because it is focused on generating empirical data to be integrated into its ethical reasoning and deliberation.

² This project resulted in a doctoral dissertation entitled "Towards an alternative development ethic for the fishing sector of Ukerewe District, Tanzania", which was defended and accepted at Stellenbosch University in South Africa in 2015.

³ This 107-minute film was directed by Hubert Sauper and released in 2004. Refer to *A World to Win News Service* (2005), at <http://revcom.us/a/048/darwins-nightmare-review.html>, and Molony, Ponte and Richey (2007), for insightful reviews.

⁴Post-harvest fish losses contribute significantly to income losses. Mgawe and Mondoka (2008) studied post-harvest losses in the Lake Victoria fisheries and estimated losses in *Dagaa* fishery to be about 32 million USD per annum.

⁵The decline in Nile perch stock and catches was the most reported case. Likewise, the Lake Victoria Fisheries Organization (LVFO) reports that the mean standing stock of Nile perch had declined from 1.29 million tons in 1999/2001 to 0.82 million tons in 2005/2006, and its contribution from 59% to 39% of the total standing stock (cf. <http://www.lvfo.org/index.php/lvfo/lvfo-secretariat/6-state-of-fish-stocks>)

⁶The English version is available at <http://www.cultureunplugged.com/play/5788/Invisible-Possibilities>

⁷Since 2013, several steps have been taken in the district and throughout the country to support small-scale fishers. The district fishers' association was formed in 2014 and BMUs were strengthened throughout the district. In its 2013/2014 budget, the Ministry of Livestock and Fisheries Development set aside TZS1.9 billion as a revolving fund to support small-scale fishers to acquire modern fishing vessels, outboard engines, *dagaa* seines and long lines. With this arrangement underway since the beginning of 2014, the government covers 60% of the total costs of eligible and approved proposals by registered associations of small-scale fishers, while the other 40% is paid by members of the qualifying association

(<http://habarimifugouvuvi.blogspot.com/p/blog-page.html>). In 2014, The National Social Security Fund (NSSF) introduced the WAVUVI scheme to cover and protect fishermen and fisherwomen from calamities. The monthly membership fee for the UVUVI scheme is TZS 20 000. The voluntarily registered small-scale fishers enjoy free medical services, cover for injury and disability, and soft loans for fishing inputs (www.nssf.or.tz/index.php/publications/93-nssf-50th-years-anniversary-publication/file).

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