STATE OF LIFE

Church and community transformation (CCT) impact study series: phase one and two

Local church, lasting transformation

2024 Technical Report

Rwanda, Sierra Leone, Tanzania, Zimbabwe, Bangladesh, Burundi, Malawi and Nigeria

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Foreword

Tearfund partners with local churches to inspire, mobilise and enable people to lift themselves out of poverty and fulfil their God-given potential.

Over the last 30 years, Tearfund has partnered with more than 40,000 local churches across the world, leading to church and community transformation. Working with State of Life, in 2022 we undertook a pioneering study in four countries to explore the impact of this work on the holistic wellbeing of church and community members. We found remarkable evidence of transformation.

We are pleased to continue this partnership with State of Life to expand our study into a further four countries, broadening its scope to understand not only how these processes bring change to communities in different contexts and across an even wider range of wellbeing measures, but also exploring the impact of this journey on churches themselves. The results remain strikingly positive and consistent across eight countries, from small house churches in Bangladesh to megachurches in Nigeria: evidence of faith in action.

We have already seen partners, denominations and church networks energised by these findings. As a result, we feel compelled and excited to set a bold and ambitious, faith-filled goal to see whole-life transformation in 250,000 churches and communities around the world by 2030, so that they are free from poverty through the vision, leadership and work of churches at the heart of this movement.

Veena O'Sullivan

Director of Global Influencing and Programmes, Tearfund

Executive summary

Church and community transformation (CCT) processes aim to inspire local churches that their 'mission' involves looking outwards and meeting the needs of their communities. Meanwhile, they also equip people in churches and communities to realise their potential and then take actions to address these needs using locally available resources. The hypothesis we test is:

'Church and community transformation (CCT) processes lead to improved wellbeing for individuals involved and the wider community, and positive change for participating churches, that is sustained over time.'

This is done by comparing the wellbeing of individuals in communities involved in a CCT process to those in communities that have not yet started a CCT process, while crucially accounting for other factors known to influence wellbeing, such as age or employment. Overall wellbeing is measured using life satisfaction and equivalent WELLBYs.[1] We apply this wellbeing valuation methodology – well established in many high-income countries – to low- and middle-income countries.

Phase one of the study included four countries: Rwanda; Sierra Leone; Tanzania; and Zimbabwe. In phase two we include data from four new countries (Bangladesh, Burundi, Malawi and Nigeria), revisit the research questions, and build on and develop the quasi-experimental study design.

Phase two of our pioneering study includes a more robust comparison sample, improved control variables, and explores additional measures of wellbeing.

- We combine data from phase one and two, giving us over 15,000 observations.
- Our improved comparison sample comes from a greater proportion of non-CCT communities (97 out of 486 across the eight countries). Our 389 CCT communities are selected through random sampling, with stratified sampling used within communities.
- Our control variables now include a detailed geographical classification for communities in all eight countries.
- Measures of wellbeing beyond life satisfaction (28 in total, capturing economic, environmental, personal, social and spiritual wellbeing) now reflect all nine spokes of Tearfund's wellbeing framework, the Light Wheel.

Positive results across eight countries that are compelling, consistent and credible

We find evidence of higher wellbeing, consistent across most of our wellbeing measures, for individuals from communities taking part in a CCT process (with statistical significance, and after controlling for other observable factors). These are backed up by qualitative evidence in Tearfund's theory of change for CCT.

In CCT communities, people report higher life satisfaction (+0.857 points, scale 0–10) compared to non-CCT communities. Beyond life satisfaction, CCT is associated with improvements in most (26 out of 28) additional measures of wellbeing, except avoiding illness and women's participation in financial

[1] Wellbeing-adjusted Life Year; one person moving one point on the 0–10 life satisfaction scale, for one year.

decisions. Across all measures, this difference averages at +10 percentage points (pp). More specifically in CCT communities (compared with non-CCT communities):

- **Economic and environmental:** investing in assets is 15pp higher, earning more or the same as last year is 12pp higher, rarely/never going without food is 10pp higher, taking care of the environment is 7pp higher
- **Personal:** confidence to cope with unexpected events is 12pp higher, trusting people in their community is 8pp higher, reporting good health is 7pp higher
- **Social:** working on shared projects is 25pp higher, influencing decisions in the community is 15pp higher, feeling a sense of belonging in the community is 10pp higher
- **Spiritual:** practising faith regularly is 13pp higher, regularly helping others in need is 12pp higher.

Increased wellbeing is observed both for CCT participants and for non-participants in CCT communities (and participants benefit more than non-participants). It is observed in communities that have been engaged with CCT for different amounts of time (up to 5+ years), for CCT processes of different intended lengths, and in all sub-samples for which it was specifically tested; ie not only in Africa, rural areas or majority Christian contexts.

After considering potential threats to validity and our related adjustments for phase two, we can conclude that observable impacts are, as far as possible, attributable to CCT processes and not to other factors controlled for in our models.

The social value of CCT processes

- Social value measurement aims to assign a monetary value to costs and benefits to society, including those that are not traded and therefore do not have a market price. We converted the WELLBY valuation rate proportionally to median earnings into an appropriate value in our countries of £788 or US$1,083 per WELLBY.
- With a thorough accounting for costs, including volunteering time and the value of resources mobilised by communities (when communities secure additional resources themselves to build specific community assets, eg a school, clinic or road), we find that for every **$1 invested in a CCT process, between $13 and $29 (midpoint of $21)** may be created in social value.
- Sensitivity testing considers the various perspectives of direct and indirect benefits and costs, revealing consistently high social value, regardless of the components included in the Social Cost-Benefit Analysis.

The impact of CCT processes, supporting communities to help themselves, has long been evidenced qualitatively. Now, through a quasi-experimental approach, this is robustly evidenced quantitatively, at scale. CCT processes are an effective tool for improving lives and livelihoods in some of the world's poorest communities.

Contents

1. Introduction

Between 2022 and 2025 Tearfund partnered with State of Life to conduct a study evaluating the impact and social value of Tearfund's church and community transformation (CCT) processes. While building on phase one[2] of the study, this report uses an appended dataset of eight countries and answers a revised set of research questions.

1.1 Tearfund and church and community transformation (CCT) processes

Tearfund is a Christian charity which partners with churches in more than 50 of the world's poorest countries.[3] Over the last 30 years, Tearfund has helped to develop facilitated processes that take local churches on a journey to achieving holistic transformation within the church and in their wider community, known as church and community transformation (CCT). CCT processes aim to inspire local churches that their 'mission' involves looking outwards and meeting the needs of their communities.[4] Meanwhile, they also equip people in churches and communities to realise their potential, and then take actions to address their needs using locally available resources, thus breaking dependency on external interventions.

Tearfund supports CCT processes by training and investing in facilitators, who are members – or, in many cases, the leader – of the local church. Tearfund, working with local partner organisations, equips them with the knowledge of the CCT process and skills to adapt it to their own context, and they commit to implementing it in their local church and community.

1.1.1 Different CCT processes in different countries

There is not just one CCT process, used everywhere in the world. Instead, as country teams, partners and local communities take ownership of a CCT process, they adapt and often rename it to serve their local context, based on the same core principles. For example, the most widely used CCT process in Africa is the 'church and community mobilisation process' (CCMP). This five-stage process is very detailed, implemented over a period of years, and the time it takes can vary.[5] Some communities might spend one or two years in stage 1, and reach stage 5 after five years or more.

In contrast, other countries including Rwanda and Burundi have adapted CCMP and simply refer to it as CCT. Churches in Rwanda and Burundi tend to progress through the stages of CCT more quickly than their CCMP counterparts do in other countries. However, the nature of all CCT processes is that they should not come to an end. Facilitators effectively 'graduate' from CCT training and become independent of Tearfund's support, but they and their churches continue on a journey of embracing an 'outward-looking' mission, and making CCT principles and practices part of their church life.

[2] Fawcett (2023).
[3] Tearfund (2025).
[4] Blackham, Kariuki and Lindop (2021).
[5] CCMP Facilitator's Manual Tearfund (2019), pp. 5–6.

Finally, Tearfund teams and partners in Asia have taken CCT processes that were developed in Africa and adapted them to their specific contexts. In Bangladesh, for example, the CCT process is called 'Akota'[6] or Akota Bible studies. Since the church in Bangladesh is small and marginalised, Akota starts by encouraging church members to focus on transforming their families before turning their attention to the wider, multi-faith community.

1.1.2 CCT activities

Notwithstanding the differences between CCT processes in different parts of the world, they all begin with Bible studies that are facilitated in a participatory way, not taught. This enables those taking part to identify the resources available to them and recognise the mandate of the church in relation to addressing holistic needs in their communities.[7]

Tearfund's wellbeing framework, known as the Light Wheel, is integrated within the CCT process to help participants to gather information, identify the resources and needs of their community, and think in a more diverse and practical way about the various types of initiatives they may want to carry out.

Depending on how the process has been contextualised, there may be other regular, small-scale activities implemented alongside CCT Bible studies. These may involve self-help groups (SHGs) or savings groups (for example, in Rwanda and Tanzania). Church members are usually the first to be engaged, reaching out to involve the wider community in the process.

1.1.3 CCT initiatives

CCT Bible studies always end with a call to action. These actions often start small – for example, committing to a change in perspective or initiating a small project – but can quickly grow in scale – for example, improving or building new community assets such as schools, clinics and roads. Whole churches and communities can find themselves working together to initiate change, and these initiatives can continue beyond the end of a formalised CCT process. Tearfund does not fund CCT initiatives – communities mobilise required resources themselves – but Tearfund may provide relevant thematic training (in peacebuilding, advocacy, or disaster risk reduction, for example).

1.1.4 Relationship between CCT processes and other Tearfund programming

In some of the countries in which Tearfund works, and in some communities within those countries, CCT processes are integrated with other types of programming. For example, a livelihood intervention in Malawi might be accompanied by CCT: churches in the project area are introduced to the CCT process (in this case, CCMP) and facilitators are trained, during the project period. This enhances the livelihood intervention because it encourages active engagement by church and community members. It also promotes sustainability, since the local church continues to reach out to its community and seek transformative change, building on the foundation set for them by the livelihood project. Alternatively, some programmes

[6] Meaning 'togetherness' in Bengali.

[7] See Blackham, Kariuki and Lindop (2021) for more detail on the characteristics and principles that all CCT processes have in common.

might involve churches already engaged in a CCT process, providing training or inputs that complement the CCT process.

1.2 About State of Life

State of Life (SoL) helps organisations (large and small) to evaluate and measure the social impact and economic value of their activity or project. State of Life's expertise lies in quantitative analysis, particularly in measurement and evaluation of wellbeing outcomes, in line with the 2021 HM Treasury Green Book.[8] State of Life are named advisors in the Green Book Supplementary Guidance[9] on wellbeing and since publication, Dr. Allan Little, co-author of the guidance, has joined SoL as Chief Economist.

1.3 The research

SoL was appointed to evaluate the impact of CCT processes, and to explore the social value created. Previous to this, Tearfund's existing evidence of the impact of CCT was mainly qualitative, and included a series of robust studies conducted using the Qualitative Impact Assessment Protocol (QuIP).[10] These constitute 'deep-dives' into the impact of CCT in a small sample of communities, and contain numerous case studies of lives transformed, where participants are upskilling themselves and their communities.[11] The emphasis of this research, therefore, was a large-sample, quantitative study to understand the impact of CCT processes at scale.

The research design was such that it could be repeated in the same countries in subsequent years to build a picture of the impact of CCT processes over time, or be repeated in other countries and regions. Hence we have been able to append the data collected from two rounds of data collection. Countries (shown in Table 1) were identified to take part in the research based on a number of criteria.[12]

Table 1: Countries taking part in the research

Phase of study	Countries	Timing of data collection
Phase one	Rwanda, Sierra Leone, Tanzania and Zimbabwe	July 2022 – October 2022
Phase two	Bangladesh, Burundi, Malawi and Nigeria[13]	October 2023 – July 2024

[8] HM Treasury is the UK government's economic and finance ministry. The Green Book is technical guidance issued by HM Treasury on how to appraise and evaluate policies, projects and programmes.

[9] HM Treasury (2021).

[10] Tearfund (2021a).

[11] Such as Osman in Sierra Leone, who became involved in a large agricultural project and no longer has to beg (Tearfund (2021b), p 15), or Angopet in Uganda who was trained in how to make energy-saving stoves and now trains others to use them (Tearfund (2018), p 13).

[12] For example: a) a CCT process is being implemented at scale in the country, and b) there are sufficient churches that have been through the full cycle. See Appendix A1 for full criteria.

[13] Within Nigeria, only the South West and North Central geopolitical zones were included.

The research uses a wellbeing valuation methodology that is relatively well established in high- income countries, and applies this to low- and middle-income countries, where we acknowledge it is less well established, bringing some challenges and limitations to its application. We acknowledge these, but nonetheless we believe it is a pioneering approach; using it in this study is appropriate, and a great opportunity to build the evidence of applying this methodology in new and different contexts.

2. Research aims

2.1 Hypothesis

We test the main hypothesis that:

'Church and community transformation (CCT) processes lead to improved wellbeing for individuals involved and the wider community, and positive change for participating churches, that is sustained over time.'

In the above hypothesis, 'individuals involved' refers to those who participate in CCT activities themselves, and 'wider community' refers to all other individuals who live in the vicinity of a church that is engaged in CCT. In order to investigate the impact of CCT processes, we also surveyed non-CCT communities (see Section 3.2.1).

To investigate whether improvements are 'sustained over time', our sample includes communities at different stages of the CCT process, which have been engaged in CCT for varying amounts of time. Impacts can be explored for communities who have been involved for a shorter time (0–2 years) and those who have been involved for a longer time (5+ years).

Tearfund has developed a holistic approach to wellbeing, including its own framework, the Light Wheel,[14] which is composed of nine interconnected aspects of wellbeing. For the purposes of this study, the Light Wheel was taken as the basis for our understanding of wellbeing, and we selected 29 measures of wellbeing related to these nine aspects. Therefore, 'improved wellbeing' is considered first in terms of life satisfaction (our key measure), as well as the 28 additional measures of wellbeing (for ease of interpretation these are grouped into four domains: economic and environmental, personal, social and spiritual). Section 3.1.1 explains why life satisfaction is this key measure.

2.2 Research questions

The main hypothesis is split into five research questions:

- *Question 1 (i):* Is living in a CCT community associated with increased wellbeing (across four domains: economic and environmental, personal, social and spiritual)?
    - both for participants (ii) and for non-participants (iii) of CCT activities?
- *Question 2:* Is this increased wellbeing sustained throughout and beyond the formal CCT process?
- *Question 3:* Is this increased wellbeing found only in specific contexts, eg:
    - (i) only within Africa?
    - (ii) only in rural contexts?

[14] Tearfund (2024).

    - (iii) only in majority Christian contexts?
    - (iv) regardless of the intended length of the CCT process?
    - (v) at different points in time?

- *Question 4:* What is the overall social value of CCT processes?

- *Question 5:* Does involvement in CCT have a positive impact on the 'health' of the local church? (eg giving, attendance, volunteering, prayer life etc)

Questions one to three are answered first with regards to our key measure: life satisfaction. Then, they are considered in the context of the eight countries separately (using life satisfaction), and are answered with regards to our other wellbeing measures, grouped into domains: economic and environmental, personal, social and spiritual (Section 5). Question four is answered using an account of costs and benefits (Section 6). Question five addresses the element *'positive change for participating churches'*; this focuses on the survey of church leaders and, due to considerations of report length, is not covered here. The methodology used to answer this question, and an analysis of the results, is available in a separate report.

2.3 Main improvements to research design (compared to phase one)

For those familiar with the phase-one study, the main improvements for phase two are:

- New measures of wellbeing to capture 'care of the environment' and 'physical health' (Box 1, Section 3.1.2)
- Revised and improved measures to capture 'living faith' (Box 1, Section 3.1.2)
- Increased number of non-CCT communities in each country (Box 2, Section 3.2.3)
- More detail in our proxies for socio-economic status (Box 3, Section 3.4.3)
- Exploration of the impact of CCT processes on the 'health' of the local church (not covered here).

3. Research methodology

3.1 Wellbeing measures

Wellbeing refers to 'how we're doing as individuals, communities and as a nation, and how sustainable that is for the future'.[15] It encompasses quality of life, the various interconnected aspects of our lives that matter most to us, and the ability of people and societies to contribute to the world with a sense of meaning and purpose.[16]

3.1.1 Life satisfaction as a key measure of wellbeing

Measuring wellbeing can be highly subjective, but self-reported measures are a useful complement to more objective data when evaluating quality of life and the things that matter most to individuals.[17] Life satisfaction – a subjective wellbeing measure now globally endorsed by organisations like the Organisation for Economic Co-operation and Development (OECD) – is often preferred in research as it 'incorporates positive and negative emotions together with a cognitive assessment of how well one's life measures up to aspirations, goals and the achievements of others.'[18] This offers a more comprehensive view of wellbeing, complementing objective and/or momentary measures.

While well established as a validated measure of quality of life in high-income countries, it is important to acknowledge the sensitivity of applying this concept in low- and middle-income countries, where day-to-day priorities may be very different and focus on more fundamental elements like security and food poverty for much of the population. While application of this measure in these contexts is relatively new and untested, life satisfaction is increasingly becoming a universal measure, included in the World Gallup Poll, which routinely asks 160+ countries to report their life satisfaction using the 0–10 Cantril Ladder scale, as well as the World Values Survey, European Social Survey and the Global Flourishing Study.[19]

In this study, we measure life satisfaction using the well-established UK Office for National Statistics (ONS) life satisfaction question:

> *Overall, how satisfied are you with your life nowadays? [on a scale of 0 (not at all) to 10 (completely)]*[20] [21]

In summary, life satisfaction is considered an appropriate summary measure of wellbeing for this study and is used as our key measure in the analysis. This allows us to answer each research question in reference to this one measure first, before looking at wider aspects of wellbeing and holistic change. It is also the measure

[15] What Works Centre for Wellbeing.
[16] World Health Organisation (WHO).
[17] OECD Better Life Index.
[18] HM Treasury (2021), p 23.
[19] World Happiness Report (Helliwell et al (2024)); World Values Survey Association (2020); European Social Survey; Global Flourishing Survey.
[20] ONS Personal well-being user guidance.
[21] For ease of understanding and translation, the word 'nowadays' was removed from this question for our study. After feedback during enumerator training and practice data collection in Bangladesh, this question was accompanied with a visual aid, depicting 11 glasses becoming more full (more in-line with the Cantril Ladder scale, see Section D in Appendix A12).

recommended to represent wellbeing in the UK government's WELLBY[22] methodology; the method used in this study to convert wellbeing into a monetary value[23] (Section 6.2).

3.1.2 Measuring economic and environmental, personal, social and spiritual wellbeing

Other wellbeing measures were informed by Tearfund's own framework of wellbeing – the Light Wheel.[24] Developed from internal evaluations, evidence and published research, including work by the University of Bath, the Light Wheel visualises how nine different components (or 'spokes') 'add up to' holistic wellbeing (Image 1). A number of suitable questions were chosen to best capture each spoke, resulting in a total of 28 measures of wellbeing, plus life satisfaction (see Table 2). For ease of summarising the findings, these measures are categorised into the four domains referred to in our research questions: economic and environmental, personal, social and spiritual.

[22] Wellbeing-adjusted Life Year.

[23] HM Treasury (2021).

[24] Tearfund (2024).

Image 1: Tearfund's Light Wheel

Table 2: Wellbeing domains and measures matched to Light Wheel 'spokes'

Wellbeing domain	Tearfund Light Wheel 'spokes', and sections of the survey	Wellbeing measures in survey[25]	No. of measures
Economic and Environmental	Material assets and resources	Going without food, medicine or school, **female participation in household financial decisions^**, investing in assets, earnings compared to last year (6)	9
	Care of the environment	**Respecting nature*, appreciating the natural world*, taking action to care for the environment* (3)**	
Personal	Emotional and mental wellbeing	Life satisfaction, general outlook one year from now (2)	10
	Capabilities	Creating change in own life, ability to cope with unexpected events (2)	
	Personal relationships	Levels of trust, feeling valued by family, satisfaction with close relationships (3)	
	Physical health	**General health*, illness*, access to healthcare* (3)**	
Social	Social connections	Working on shared projects, feeling supported by others, feeling like you belong to the community (3)	6
	Participation and influence	Participating in decisions for the household, raising issues to decision-makers, influencing decisions in the community (3)	
Spiritual	Living faith[26]	**Experience of peace despite circumstances*, importance of faith in life*, practising faith*,** helping others (4)	4

Notes: Measures related to 'care of environment' and 'physical health' were added in phase two. Measures related to 'living faith' were revised for phase two. These are shown in **blue** above, and subsequently indicated by the symbol *. In phase two of the study, it was decided that the measure of participation in household financial decisions should focus on females. This is shown in **purple** above, and subsequently indicated by the symbol ^.

As far as possible, the questions used have come from validated question sources including the World Values Survey[27] and the International Social Survey Programme[28] to maximise the validity of the data and the possibility of comparisons to other data sources. The number of questions chosen for each Light Wheel spoke and each domain was dependent on the complexity of the topic.[29] The survey was translated into 11 local

[25] More detail behind the outcome measures can be seen in descriptive statistics in Table 10, Section 4.4.

[26] Questions regarding faith did not specify Christian faith; they were designed such that people of all faiths could give positive responses.

[27] World Values Survey Association (2020).

[28] Leibniz Institute for the Social Sciences (2023).

[29] In our analysis these are averaged by domain, and then overall, so each domain has equal weight and overall findings are not skewed by the number of questions within a domain.

languages (Section 3.3.5).[30] The full survey in English (used in phase two of the study) is in Appendix A12.

Box 1 | Improvement on phase one: improved and expanded range of wellbeing measures

New measures of wellbeing

In the phase-one study, 23 measures of wellbeing were explored, related to seven of the nine Light Wheel spokes, as these were considered most closely aligned with the outcomes of CCT observed in existing evidence. In the phase-two study, we decided to capture measures of wellbeing related to all nine of the Light Wheel spokes. Therefore, a number of additional measures, for '*care of the environment*' and '*physical health*', are included in this study (Table 2 above).

Revised and improved measures

In the phase-one study, 'ceiling effects' were observed in one of the two measures related to the spoke '*living faith*'. This is where the independent variable no longer has an effect on the dependent variable, or the level above which variance in an independent variable is no longer measurable, ie there is no scope for the independent variable (CCT) to have an effect on the dependent variable (living faith) because of how it is specified. In phase one, 93 per cent[31] of respondents in non-CCT communities agreed with the statement 'I rely on faith for direction in life'; there was not much space for improvements to be made. Hence wellbeing measures capturing more detailed aspects of faith are included in this study (Table 2 above).

Implications of these additions and improvements

The sample therefore is not consistent across all measures of wellbeing; some measures have only been explored in four of the eight countries (those in blue in Table 2). This should be acknowledged when comparisons are being made between measures, and hence these measures are indicated by '*' in descriptive statistics and findings.

Notes on minor differences:

Some wellbeing measures were removed since their distinction from other measures became less clear than intended after translation; eg 'general trust' was removed as it was considered to be sufficiently captured by 'local trust'. Others were removed to reduce survey length, while still capturing important elements; eg 'financial optimism about future' was removed as it was considered to be sufficiently captured by 'earnings compared to last year' and 'general outlook one year from now'. The question about who in the household takes part in financial decisions was included in phase one of the study but not used in the analysis (considered similar to general decision-making in the household). In phase two, this measure was restricted to the sample of females to capture female participation in financial decision-making, and included as a measure related to the *'material assets and resources'* spoke, in the 'economic and environmental' domain.

[30] Some simplifications were made, for example the removal of the word 'nowadays' in the life satisfaction question.

[31] Table 10, Fawcett (2023).

3.2 Research design

Most of the sample came from 'CCT communities'; communities in which the local church is engaging in a CCT process. One church implementing CCT processes equates to one 'CCT community'.

3.2.1 Establishing comparison groups

For this type of quantitative analysis it is vital to have a comparison group who have not received the intervention. We have two comparison groups in our quasi-experimental research design.

- **Non-CCT communities:** people who live in communities where the church is not taking part in a CCT process. As with CCT communities, one church not yet taking part equates to one 'non-CCT community'. This group allows us to compare with those whose churches/communities have not been exposed to CCT at all, but have been identified by Tearfund to begin a CCT process in the near future.
- **Non-participants:** people who live in 'CCT communities' but who do not participate in CCT activities or initiatives themselves. Comparisons with this group are key to exploring the impact of direct, individual participation. This group can also be used to explore indirect benefits; people who do not participate in CCT directly but benefit from being a part of a CCT community.

3.2.2 Sample aim

The aim was to achieve a sample large enough to potentially provide conclusions with high statistical power, while remaining practically achievable in a reasonable timeframe. The sample also needed to be robust enough to withstand external factors affecting survey collection, such as inability to conduct data collection in a given community as planned.

The specifics of the sample aim differed slightly between phase one and two (more detail in Box 2 below, and Appendix A2). In summary, the team aimed to conduct surveys in 50 CCT communities per country and between 5 and 17 non-CCT communities per country. Within CCT communities, the teams aimed to survey 25 individuals who participate in CCT activities and up to five who do not. Within non-CCT communities, the teams aimed to survey between 30 and 100 individuals. This gave a sample aim of approximately 10,000 responses from participants in CCT communities, 2,000 responses from non-participants in CCT communities and 4,000 responses from individuals in non-CCT communities. This aim was achieved (see Table 5, Section 4.1).

3.2.3 Sampling techniques

Random sampling of CCT communities

The initial sampling frame consisted of the full list of churches engaged in CCT in each country.[32] Firstly, some geographical and practical restrictions had to be considered,[33] which meant some CCT communities on the full list could not take part. Secondly, a *random sampling* technique was used to identify 50 CCT communities in each country of those practically accessible. The random sample was checked against two criteria: a) whether it was representative of CCT in each country, in terms of CCT maturity profile (top priority) and coverage of local partners and districts, and b) whether there was a sufficient spread of CCT maturity levels to enable comparisons to be made between them, in order to address research question 2. This sampling method was done on separate occasions for each country, but followed the same method.

Sampling of non-CCT communities

As far as possible, non-CCT communities should be similar to the communities who have experienced the intervention. For ethical and practical reasons it would have been inappropriate to enter communities where Tearfund had no connection. Therefore, non-CCT communities are those where the local church has not yet begun a CCT process but it is planned they will do so in the future. This ensures they are relatively similar (they have been identified using the same approach to selection) and there are existing connections with the local churches who can assist with mobilising respondents (more in Section 3.3.6). The biggest threat to validity here is selection bias; that communities that accept an invitation to take part in the CCT process are better off and more satisfied for reasons unrelated to participation. We discuss this further in Section 8, where we conclude that while this bias may exist, the threat is small because of how communities are selected to do CCT, and is too small to justify a discount or adjustment.

Stratified sampling within communities

Within each community a rough stratified sampling technique was used. In all communities the stratification was based on age and gender. Additionally, in CCT communities we aimed to avoid over-sampling a specific group or CCT activity (eg avoid sampling only women involved in savings groups on Tuesday mornings). Therefore, in CCT communities it was also based on whether the individuals were church members or not, their level of involvement in CCT and, for those involved, the CCT activities they take part in (aiming for a mix from each of the categories). This was achieved through in-depth planning with country partners responsible for mobilisation, and covered in training for enumerators.

Again the biggest threat to validity here is selection bias, from two potential sources: a) the CCT facilitator could specifically select survey respondents they expect will respond positively, and b) as those who participate in CCT (or participate more frequently) are making a conscious choice to do so, there may be unobservable characteristics (eg personality traits) that influence a person's propensity to 'select into' the

[32] Collected through Tearfund's partners.

[33] For example, in Burundi, we removed a small number of churches that would be very difficult for enumerators to reach (eg the last >30 minutes of their journey would be on foot). In Nigeria we only sampled from the list of CCT and non-CCT churches in the South West and North Central geopolitical zones, due to security considerations in other parts of the country. The majority of CCT is happening in those two zones anyway.

process and that also influence levels of wellbeing (directly or indirectly). We discuss this further in Section 8, where we conclude the first potential source of selection bias is mitigated as far as possible through our focus on effective mobilisation (Section 3.3.6), while the second source (much more difficult to mitigate in such studies) may still exist.

Box 2 | Improvement on phase one: better comparison in the sample

More non-CCT communities
In order to improve the validity of our comparison group of people from non-CCT communities, in phase two of the study this data was collected from a greater number of *different non-CCT communities*. The overall number of responses was similar, but instead of collecting 100 responses per community from five non-CCT communities in each country (phase one aim), in year two the aim was to collect 30 responses per community from 17 non-CCT communities in each country.

Requirement to survey non-participants
In phase one of the study, surveying non-participants in CCT communities was optional and decided by the mobilisation team. This meant there was a very small sample of non-participants in Rwanda. In phase two of the study, this element was made mandatory.

Implications
This means that our findings when comparing to both our 'non-treatment' groups (non-CCT communities and non-participants in CCT communities) are more robust.

Notes on minor differences:
The phase-one study explored the role of CCT facilitators, and found they experience greater wellbeing benefits than regular participants. In phase two of the study, this group was not a focus of research questions but they still completed the wellbeing survey (one CCT facilitator per community) in order not to exclude a substantial beneficiary group.

3.2.4 Establishing level of involvement

The research questions require comparisons between those who participate in CCT activities or initiatives and those who do not. Information about how long they have been involved and how frequently they take part are captured to understand the depth of engagement.[34] See how these were asked in the survey in Appendix A12.

[34] This information, and whether the respondent was a church member, were elements explored in the research questions in phase one. While these are not a focus of the year-two study, for consistency these questions were asked in the same format.

3.2.5 Demographics

Demographics are statistics that describe a population or sample; they describe the observable characteristics of people.[35] In any statistical study, it is important to collect this information from participants.

- First, to understand the makeup of our sample, ensure it appropriately represents the target population, and also to ensure there is not a systematic difference between our intervention and comparison population (which could bias any results).
- Second, these characteristics can be accounted for when we analyse the impact of the intervention on wellbeing. For example, being employed might influence someone's wellbeing compared to someone who has no employment. Our analysis, which uses multiple linear regression (more in Section 3.4), controls for the influence of these demographic characteristics.

A summary of demographics captured is in Section 4.2, and the full survey is in Appendix A12.

3.3 Data collection

Data was collected during a two- to three-week period in each country, using computer-assisted personal interviews (CAPI) conducted by small teams of independent enumerators who visited communities. The staggered collection periods (see Table 1) enabled the research team to focus on one country at a time. The surveys were conducted through interviews, between one enumerator and one participant, away from other participants. Individual interviews took approximately 15 minutes.

3.3.1 Our three surveys: wellbeing, facilitator and church health

Data for this report was collected through three surveys. The main wellbeing survey (detailed in Appendix A12) collected information on wellbeing measures, demographics and involvement in CCT and formed the dataset behind our main findings (Section 5). Secondly, a facilitator survey (detailed in Appendix A13) was filled out by CCT facilitators in each CCT community.[36] This captured estimates of the breadth of the CCT process in each community, inputs the community has put towards the CCT process, and resulting assets (Section 4.3). This data also informs the Social Cost-Benefit Analysis in Section 6. Lastly, in phase two, church-level data was collected through a church health survey, to better understand the impact of CCT on the church itself.[37] Results of the church health survey are reported separately.[38]

[35] Observable in terms of being able to ask survey questions about them.
[36] In phase-one countries, this was sometimes completed by more than one facilitator per community. In phase two, it was completed by one per community.
[37] Key data points from the church health survey (on external shocks and presence of other development agencies) was appended with the main wellbeing data for phase-two countries to explore if our findings are robust to accounting for these external influences (see Section 8).
[38] The report can be found on Tearfund Learn: https://learn.tearfund.org/en/resources/series/cct-impact-study-series

3.3.2 Recruiting and training enumerators

In each country approximately 20 enumerators were recruited and trained over four to five days,[39] including two days of practice data collection.[40]

Enumerators survey participants in (clockwise from top left) Malawi, Burundi, Bangladesh and Nigeria.
Photos: Harrison Manyumwa/Tearfund, Rachel Paton/Tearfund, Rachel Paton/Tearfund, Rebecca Middleton/Tearfund

[39] In phase one, enumerator training was four days and focused on the wellbeing survey. The information on community inputs (the facilitator survey) was collected separately through partners. In phase two, the enumerator training was extended to five days, in order to allow time for training on all surveys (wellbeing survey, facilitator survey and church health survey) so that all could be implemented during the visit to a community.
[40] In addition to the randomly sampled CCT communities, two additional CCT communities were purposefully selected by each country team for their proximity to the training venue. Enumerators visited these two communities for practice data collection as part of their training. The research team was confident in the quality of data from practice communities. Some data cleaning was required, but there was no concern over the quality so this data was included in the full sample.

3.3.3 Technology

In phase one, data was collected using the Progressive Web App 'Impact'[41] and in phase two, data was collected using the data-collection tool KoboToolbox.[42] Despite different platforms, consistency was ensured between the two methods. Both platforms are able to collect data offline, store multiple responses locally on a device and then upload all responses once a stable internet connection is established. A hand–held tablet was distributed to each enumerator for data collection.

3.3.4 Ethics and safeguarding

The study was informed by Tearfund's guidance on research ethics.[43] Surveys were completed anonymously. Enumerator teams in each country received training on safeguarding, basic principles of inclusion, and how to ask for and record informed consent. The informed consent procedure was based on a participant information sheet that provided details about the purpose of the study, how the data would be stored and used, and the participants' rights. Enumerators read this sheet to participants as a group, and then asked each participant individually for their consent to proceed. Copies of the participant information sheet (Appendix A3), which had been translated into relevant local languages, were given to the church leader in each community for them to display in the church building. The sheet included contact details of Tearfund and the partner in case of any feedback from participants.

Particular care was taken to work with non-CCT communities in an ethical manner. Tearfund's intention is for all non-CCT communities in the sample to be offered the opportunity to start a CCT process within two years of taking part in the study.

3.3.5 Translation

In order to not exclude potential participants, the survey and participation information sheet were translated into 11 local languages: Kinyarwanda (Rwanda), Swahili (Tanzania), Krio (Sierra Leone), Ndebele and Shona (Zimbabwe), Bengali (Bangladesh), Kirundi (Burundi), Chichewa and Tumbuka (Malawi), Hausa and Yoruba (Nigeria). This was first done by professional translators in each country and refined by Tearfund staff, partner staff and enumerators during training. Krio is not widely used in written form, so this translation was agreed and recorded on audio to ensure consistency between enumerators.

3.3.6 Mobilisation

It was vital to work through local partners when mobilising, or bringing together, respondents to take part in the survey. Prior to data collection, Tearfund's partners worked with each CCT facilitator (in the case of CCT communities) or church leader (in the case of non-CCT communities) in sampled churches to invite a specified number and mix of people to participate, and arrange for them to gather on the day of the enumerators' visit. Guidance for this mobilisation can be seen in Appendix A4. Local teams were instructed that mobilised respondents should follow the stratified sampling requirements (Section 3.2.3). Financial

[41] https://app.impactreporting.co.uk/
[42] www.kobotoolbox.org
[43] Daehnhardt and Bollaert (2021).

incentives were not offered to those who took part[44] but this did not prove to be a barrier to participation in the survey, even in non-CCT communities where Tearfund is not yet working.

3.3.7 Validation of findings by country

The data was also analysed at an individual country level. This was so that each Tearfund country team could see their own data separately and maximise the benefits and learning. They were given the opportunity to reflect on their findings, ask questions and make comments. In phase two, each country team also facilitated one or more validation workshops. These workshops in October and November 2024 were attended by some of the community members, partner staff and other key stakeholders who were involved in the research, with the purpose of sharing and making sense of the country-specific findings together. Feedback and experiences shared during these meetings, and in discussions with country teams, added to a deeper understanding of the findings, particularly at country-level.[45]

Validation workshop in a church in Malawi. Photo: Louis Suwedi/Tearfund

[44] In the two practice communities and on the first day of data collection in Burundi, monetary reimbursement for travel costs was provided to respondents (BIF 5,000, less than $1 at the black market rate of exchange). For the remainder of the data collection, respondents were instead offered. light refreshments while they waited to participate in the research, in line with the approach taken in other countries.
[45] These are not triangulated here, as the emphasis of this report is a large-sample, quantitative study.

3.4 Analysis methodology – multiple linear regression analysis

Comparisons between groups using descriptive statistics[46] (in Section 4) can show how wellbeing measures vary for different groups, but does not account for the multiple other factors that might influence the lives of people and their wellbeing – factors that have nothing to do with CCT. In order to better understand the impact of CCT processes, we use a statistical technique called multiple linear regression analysis (Section 5).

Multiple linear regression analysis identifies how a difference in one factor or 'variable' (eg participation in a CCT process) influences another 'variable' or outcome (eg life satisfaction or another measure of wellbeing), while taking into account influences from elsewhere. A regression model can simultaneously estimate the relationship between different variables. The 'explanatory variables' include the treatment we are interested in, in this case participating in a CCT process, and a set of 'control variables' or factors that are likely to influence the outcomes we are interested in but have nothing to do with CCT, for example age, marital status or employment. **A regression model therefore isolates and estimates the relationship between involvement with a CCT process and an outcome of interest. This relationship is expressed as a 'coefficient'.**

3.4.1 Interpreting linear regression coefficients

Throughout this analysis we use linear regression, or Ordinary Least Squares (OLS).[47] Linear regression coefficients indicate how much the 'outcome' variable[48] increases or decreases with a one-unit change in the 'explanatory' variable.[49] Questions answered on a numeric scale (eg 0 to 10) are treated as continuous,[50] so our regression coefficients when the outcome variable is life satisfaction are interpreted in this way. When life satisfaction is the outcome variable, a coefficient of 0.5 on a categorical explanatory variable[51] for being employed would indicate that being in employment is associated with 0.5 higher life satisfaction.

When the outcome variable is binary,[52] such as 'working on a shared project', (eg yes/no), it is appropriate to re-consider the regression technique. The most pertinent alternatives to consider are logistic regressions, such as logit or probit techniques.[53] The advantages of these techniques are that they specify the predicted likelihood to have a positive value will always lie between 0 and 1.[54] However, the coefficients are more complicated to interpret.[55] In our analysis using OLS, very few individuals have predicted values lying outside

[46] Statistics that quantitatively describe or summarise a dataset, or sub-sample within a dataset.

[47] OLS explained.

[48] Technically termed 'dependent' variable, but for ease of understanding we use 'outcome' variable throughout.

[49] Technically termed 'independent' variables, but for ease of understanding we use 'explanatory' variables throughout.

[50] A question answered on a scale of 0 to 10 or 0 to 5 is not strictly-speaking continuous, as the answers take a limited number of values. However, studies have shown that it is 'reasonable in most research contexts' to assume cardinality of subjective wellbeing measures, and treat them as continuous. See Kristoffersen (2017).

[51] A categorical variable is one that can take a fixed and limited number of predetermined values (also called categories). These categories may or may not have any quantitative/numeric meaning.

[52] A binary variable is one that can only take two possible values.

[53] These are modifications to the linear regression model that are specifically tailored to model binary outcome variables and can do so more precisely. Logistic regression explained.

[54] Where 0 = no and 1 = yes, whereas in a standard linear regression predicted values might fall outside of these bounds.

[55] Each coefficient needs to be converted to an odds ratio. This is especially cumbersome with the number of different regressions required to answer our research question.

these bounds,[56] so we conclude linear regression techniques are still appropriate and favourable for the ease of directly interpreting coefficients.

The coefficients of a linear regression with a binary outcome variable can be straightforwardly interpreted as higher or lower likelihood to have a positive value of the outcome variable (and one can also multiply the coefficient by 100 to express it in percentage points).[57] Many of our other wellbeing measures (eg belonging to a community) are answered on a four- or five-point scale (eg 'strongly disagree' to 'strongly agree'). These are converted to binary outcomes for ease of interpreting the findings (eg 'strongly agree' or 'agree' are considered a positive response).[58]

3.4.2 Interaction terms

In regression analysis, an interaction term is when two explanatory variables are multiplied together and this 'interaction' is used as an additional explanatory variable. (See Appendix A5 for a mathematical illustration.) These interactions allow us to estimate the relationship between an explanatory variable and our outcome variable for different subgroups in our sample. This is often used, for example, to observe how the impact of an intervention differs for men and women.

In our case, we use this to explore the impact of direct participation. Having explored how living in a CCT community influences an outcome (eg research question 1(i)), we can also look into how this differs for different subgroups separately – for example, for those who participate in CCT activities or initiatives, and those who do not (research question 1(ii–iii)).

3.4.3 Control variables

Control variables are other factors, such as age, gender or employment, that may influence the outcomes we are interested in (eg wellbeing) but have nothing to do with CCT processes. Controlling for various factors in our analysis allows us to get closer to isolating the impact of CCT.

The biggest threat to robust methodology here is omitted variable bias. It is never feasible to include everything that might influence the outcome we are interested in; we need to keep the survey length manageable and some things are less easily observable, like personality type.

While some omitted variable bias may exist (discussed in Section 8), it was deemed sufficient to include the main standard determinants of wellbeing (measured by life satisfaction) as set out in HM Treasury's report on valuation techniques for Social Cost-benefit Analysis (Fujiwara and Campbell 2011).[59] The full list of control

[56] Across 30 binary wellbeing measures, on average only 5% of individuals have predicted values that fell outside 0 and 1. (Thirty measures as this included the elements of 'practising faith' separately). The maximum proportion who fell outside this bound for a measure was 13%. Also, while individuals may have predicted values outside these bounds, Chart 3 (Section 5.1) shows that overall our findings are within these bounds, and at no point are less than zero or more than 100% of the population estimated to report positive outcomes.

[57] For example, a coefficient of 0.2 on a categorical explanatory variable (eg living in a CCT community) indicates the proportion who report positive wellbeing is 20 percentage points higher in CCT communities.

[58] In full this question reads: Do you agree or disagree with the following statement? 'I feel like I belong to this community.' [Strongly disagree, disagree, neither agree or disagree, agree, strongly agree.] This is converted to a binary variable by taking those who answer 'strongly agree' or 'agree' as a positive outcome and all other answers considered 'otherwise'. See Appendix A12 for other questions in full.

[59] See Fujiwara and Campbell (2011), p 41.

variables can be seen in Table 3. The coefficients on these control variables from the first regression in Section 5.1 (Table 12, Model 1) are in Appendix A8.

Table 3: Standard set of control variables used in each regression model

Demographic characteristics:	Household information:
• Age • Gender[60] • Marital status • Religion • Ethnicity • Disability • Highest education qualification • Employment statuses[61] • Food poverty (proxy for socio-economics)	• No. of dependants in household (grouped) • Gender of household head
	Geographic information:
	• Country • Seven urban/rural classifications (see Box 3)
	Timing of survey:
	• Phase of study (one or two)[62]

Box 3 | Improvement on phase one: more detail in proxies for socio-economic status

An important demographic variable known to influence wellbeing measures is socio-economic status, or level of affluence or deprivation. There is not a standard way of measuring this across all our research countries.[63] Our method for accounting for socio-economics has evolved.

Food poverty

Food poverty is considered a potential economic outcome of CCT processes but it can also be a useful proxy for socio-economic status in the contexts of interest. This was discussed in the phase- one report (see Section 4.2.1), which concluded we should include it as a control. By doing so we may have a lower estimate of the impact of CCT, however we reduce the risk of overclaiming the impact which is actually down to socio-economic differences. The same reasoning applies in phase two, and food poverty is again included as a control variable (except when food poverty itself is the outcome variable).[64]

[60] Except where the sample is restricted to females (outcome on female participation in household decisions).

[61] Advised by Tearfund country teams, this was not mutually exclusive owing to the flexible nature of employment in our research context. This enabled respondents to tick multiple options such as 'employed' and 'self-employed' or 'retired' and subsistence farmer' where appropriate. The need for this flexibility outweighed the risk of 'over-selection'; on average, respondents ticked 1.3 of the given options.

[62] More detailed timing cannot be included because it is perfectly correlated with country (and would therefore drop out of any regression model).

[63] In the UK, for example, one could include National Statistics Socio-economic classification (NS-SEC) or Index of Multiple Deprivation (IMD).

[64] A variable cannot be an explanatory variable *and* the dependent variable; as the explanatory variable would perfectly predict the dependent variable (known as perfect multicollinearity) and would therefore drop out of the model.

The detailed urban/rural classification
In phase two, the research team drew upon urban theory: that urbanisation is generally positively related to overall economic development (average urban incomes are consistently higher than average rural incomes), and this is also found in low-income countries.[65] We therefore include a more detailed urban/rural classification at community level to improve our proxies for socio-economic status, and the extent to which we account for general wealth.

In place of 'rural', 'urban' and 'semi-urban' categories used in phase one, the research team worked with geographer and urban and regional economies expert Paul Hildreth of University College London (UCL) to develop seven categories of urban/rural classification:

1. Downtown / city centre
2. Urban suburbs
3. Informal housing / slum settlements
4. Peri-urban / edge of city
5. Town
6. Expanded village or growing settlement
7. Traditional village

Full descriptions are in Appendix A7. In phase-two countries, communities were categorised by the Lead Enumerator upon visiting the community. For phase-one countries, the information was backfilled with the support of Tearfund partners and country teams, and mapping software.

Implications
This means we can be more confident that our findings are linked to CCT processes, and less driven by socio-economic differences between CCT communities and non-CCT communities related to urbanisation.

3.4.4 Regression coefficients from cross-sectional data

Conclusions can only be drawn from multiple regression analysis if we are confident our coefficient estimates are robust (particularly when attaching a monetary value, as we do in Section 6).[66] Our analysis uses cross-sectional data (observing many individuals at once). Other research methods[67] or estimation techniques[68] would have higher confidence in robust estimates of causation but these were not possible in our research environment, due to practical and ethical considerations.

[65] In the 'Global South', see (Randalph and Storper (2022)).
[66] HM Treasury (2021), see Box 6, pp. 27–28.
[67] Such as (well designed) randomised control trials or naturally occurring randomisation (of an intervention).
[68] Such as Difference-in-Differences, Regression Discontinuity or Instrumental Variable estimation.

Confidence in cross-sectional regression estimates increases when the causal effect is supported by strong theories or evidence from wider social science, where large sample sizes are achieved, and where the sample covers multiple regions, countries, and time periods.[69] Tearfund's theory of change for CCT focuses on how CCT processes improve multiple aspects of people's lives, and is backed up by qualitative studies.[70] Moreover, there is strong causal evidence of the link between these aspects of people's lives and their wellbeing.[71] Our data is a large sample across regions and countries, collected between 2022 and 2024. Overall, we can be relatively confident in our coefficient estimates but we report them as differences in wellbeing *associated with CCT participation* and avoid direct statements of causation. More details of multiple linear regression, including necessary assumptions about the data, are explained in Appendix A5.

Next we present descriptive statistics, followed by our research findings. Potential limitations of the methodology are discussed in Section 8.

[69] HM Treasury (2021), see Box 6, pp. 27–28.
[70] Tearfund (2022).
[71] Tearfund (2021).

4. Descriptive statistics

4.1 The sample of communities and individuals

Overall, the achieved sample (Table 4 below) is in line with the sample aim;[72] we aimed for 18 per cent[73] of communities to be non-CCT communities and 25 per cent[74] of individual responses to come from non-CCT communities. Within CCT communities the research team aimed for 17 per cent[75] of respondents to be people not involved in CCT. Table 4 shows that this aim was exceeded, with 27 per cent of respondents being those who do not participate in CCT activities or initiatives.

Some planned visits were not able to take place (for example, due to a funeral) and were replaced by visits to other similar communities. This happened only a few times, and because of our intentionally large sample size, any replacement sites were only a small proportion of the overall sample.

Table 4: The achieved sample of communities and individuals, compared to the sample aim

	Communities			Individuals		
	Sample aim	Achieved sample		Sample aim	Achieved sample	
	N	N	%	N	N	%
Type of Community						
CCT communities	400	389	80.0%	12,000	11,779	75.3%
Non-CCT communities	88	97	20.0%	4,040	3,861	24.7%
Total	488	**486**	-	16,040	**15,640**	-
Individual participation in CCT, within CCT communities						
CCT participants	-	-	-	10,000	8,333	72.8%
Non-participants	-	-	-	2,000	3,120	27.2%
Total[76]	-	-	-	12,000	**11,453**	-

Notes: Detail of the sample aim can be seen in Appendix A2.

[72] Outlined in Section 3.2.2 and Appendix A2.
[73] 88 out of 488 communities, Appendix A2.
[74] 4,040 out of 16,040 individuals, Appendix A2.
[75] 2,000 out of 12,000 individuals, Appendix A2.
[76] For 326 individuals, participation was missing (ie the question was skipped). Hence the difference between 11,779 and 11,453.

Table 5: The achieved sample by country

	Rwanda	Sierra Leone	Tanzania	Zimbabwe	Bangladesh	Burundi	Malawi	Nigeria
486 communities	57	55	65	53	72	69	69	46
15,640 respondents	2,017	2,371	1,940	1,485	2,170	2,066	2,181	1,410

Notes: More detail of the sample by country can be seen in Appendix A6.

Table 5 shows that the sample across countries was relatively similar, while comprising slightly fewer communities in Nigeria[77] and slightly fewer individuals in Zimbabwe.[78] Overall, there is little concern of any country being overrepresented or underrepresented. In the pooled sample, 'country' is included as a control variable.

4.1.1 Community-level involvement

Table 6 shows the final sample of CCT communities, broken down by the length of time communities had been engaged in a CCT process (CCT maturity). There is a sufficient spread between the three categories of maturity (minimum in one category is 27 per cent, maximum is 41 per cent).[79]

Table 6: The sample of CCT communities, by CCT maturity

	Communities		Individuals	
CCT maturity	**N**	**%**	**N**	**%**
0–2 years[80]	128	32.9%	3,804	32.3%
3–5 years	156	40.1%	4,796	40.7%
More than 5 years	105	27.0%	3,179	27.0%
Total	**389**	**-**	**11,779**	**-**

Notes: Detail by country can be seen in Appendix A6.

[77] Data from 20 communities (573 individuals) in Nigeria has been excluded. During and after data collection, it became clearer these communities were using an approach broadly inspired by CCT, but not engaging with the core elements of a CCT process. These were considered 'influenced or envisioned communities' and explored within the Nigeria-only dataset and report, but excluded from the main report as they do not fit appropriately in CCT communities or non-CCT communities.

[78] The sample was lower than expected in Zimbabwe, largely because it was the first country in which data collection took place. Some CCT sites had to be replaced by those of lower CCT maturity or urban/peri-urban sites, both of which resulted in lower turnout. In addition, 29 responses in Zimbabwe could not be matched to a community and were therefore excluded. (Subsequent improvements were made to the survey design to prevent this in other countries.)

[79] Although when cutting the sample to just one country this does vary. See Appendix A4.

[80] This category is distinct from those that have not yet started a CCT process (non-CCT communities).

4.1.2 Participant depth of involvement

There were two detailed measures of individual involvement: how long someone has been involved and how frequently they participate (Table 7).

Table 7: The sample of individuals in CCT communities, by intensity of involvement (participants only)

	N	%
Time involved in CCT activities		
Up to 1 year[81]	3,104	39.8%
From 1 to 3 years	2,967	38.1%
More than 3 years	1,725	22.1%
(missing)	537	-
Total	**8,333**	
Frequency of participation		
Less often than every month	848	11%
Once or twice a month	2,464	31.9%
Once a week if not more	4,416	57.1%
(missing)	605	-
Total	**8,333**	

Notes: Missing responses are included here to show how the total matches our total number of CCT participants; 8,333 (Table 4). Answers are missing because the question was skipped by individuals. These are not detailed by country in the appendices as they do not relate to phase two's research questions.

Although this information does not inform our research questions (as in the phase-one report, see Sections 7.2.3 and 7.2.4) it is useful to understand the depth of the intervention. For those who participate in CCT activities or initiatives, most have been participating a year or less (40 per cent) or between one and three years (38 per cent). In terms of frequency, most (57 per cent) participate regularly (once a week or more).

Our sample of individuals who do not participate in CCT activities or initiatives should be drawn from the wider community. A pure 'self-selection' strategy to surveying would be highly likely to result in selection bias. Section 8 on limitations outlines how our stratification strategy aimed to avoid this. Since nearly half of

[81] This category is distinct from those who never participated in CCT.

non-participants (47 per cent, Table 8) have not heard of CCT, we are relatively confident our non-participants were appropriately drawn from the wider community, unconnected to the CCT process.

Table 8: Awareness of CCT, for those in CCT communities who do not participate in CCT activities

	N	%
Awareness of CCT		
Have not heard of it	1,656	53.5%
Have heard of it	1,437	46.5%
(missing)	27	-
Total	**3,120**	

Notes: Missing responses are included here, to show how the total matches our total number of non-participants; 3,120 (Table 4). Answers are missing because the question was skipped by individuals. These are not detailed by country in the appendices as they do not relate to phase two's research questions.

4.2 Demographics

We compare the demographics of our non-CCT communities and CCT communities. Although demographic factors are included as control variables in our regressions, the two groups should be demographically similar to enable an appropriate comparison. This also increases confidence that there are fewer systematic differences between the two groups we cannot easily observe or account for, which may in turn influence wellbeing measures and bias results. Table 9 presents this information, along with significance testing of the differences between the groups.

Table 9: Demographics, CCT communities compared to non-CCT communities

	Non-CCT communities	CCT communities	All
Age (mean, in years)***	38.9	40.0	39.7
Female	64.3%	64.4%	64.4%
Disability, affects day to day	24.5%	24.8%	24.8%
Often goes without food***	20.2%	12.1%	14.1%
Married or living with partner***	64.7%	68.4%	67.5%
Divorced or separated	5.3%	5.3%	5.3%
Widowed	8.9%	8.6%	8.7%
Single***	21.0%	17.7%	18.5%
Christian***	89.8%	95.2%	93.9%
Muslim***	7.5%	2.6%	3.8%
Other religion[82]**	2.3%	1.8%	1.9%
No religion	0.4%	0.4%	0.4%
No formal schooling***	21.4%	18.2%	19.0%
Some primary schooling***	33.0%	38.9%	37.5%
Some secondary schooling	18.8%	18.6%	18.7%
Secondary school completed***	15.3%	13.2%	13.8%
Post-secondary qualifications	11.5%	11.0%	11.2%
In paid work***	23.1%	20.0%	20.7%
Self employed***	23.7%	27.1%	26.3%

[82]Other religions were listed in the survey but have been grouped for the purpose of this table.

	Non-CCT communities	CCT communities	All
Subsistence farmer***	43.4%	54.5%	51.8%
In education	4.9%	5.5%	5.4%
Unemployed***	13.5%	8.6%	9.8%
Retired**	2.5%	1.8%	2.0%
Doing unpaid housework	9.1%	9.2%	9.2%
Female household head	19.4%	19.5%	19.5%
No. of people in household (mean)**	6.03	6.19	6.15
No. of dependants in household (mean)	4.13	4.12	4.13
Downtown / city centre[83]***	3.8%	7.8%	6.8%
Urban suburbs***	12.0%	7.8%	8.8%
Informal housing / slum settlements	1.7%	1.5%	1.6%
Peri-urban / edge of city***	7.1%	3.4%	4.3%
Town***	21.7%	9.4%	12.5%
Expanded village or growing settlement***	14.5%	22.0%	20.2%
Traditional village***	39.2%	48.1%	45.9%
Sample size	**3,861**	**11,779**	**15,640**

Notes: Employment status adds up to more than 100 per cent as this was not a mutually exclusive question; in our context it was deemed more appropriate that respondents could tick more than one option. Other categories may not add up to 100 per cent exactly due to rounding. Statistical difference is tested per row using a standard t-test, with a null hypothesis that the difference is 0. Stars denote whether difference between CCT and non-CCT communities is statistically significant using a standard t-test: *p<0.1, **p<0.05, ***p<0.01.

[83] For consistency with other demographics, these percentages of each urban/rural category refer to all respondents rather than percentage of communities (even though the variable was collected at community level).

The sample of people in non-CCT communities is similar to those in CCT communities (Table 9). With regards to age, gender, experience of disability, household size, and household gender dynamics, the differences are small. We observe some differences in terms of marital status (those in CCT communities are more likely to be married or living with a partner).

We may expect to observe some discrepancies due to the nature of CCT processes, eg our CCT community sample has a higher proportion of Christians. The Light Wheel and Table 2 show the multitude of areas of wellbeing that CCT processes may improve, with their focus on multiple aspects of individual, family and community life. This is likely to partly explain some differences we observe in demographics: that people in CCT communities report a lower rate of food poverty (12 per cent compared to 20 per cent); better education outcomes (18 per cent informal schooling compared to 21 per cent); and lower unemployment rate (9 per cent compared to 14 per cent).

Other differences are also observed in employment status: the sample of people in CCT communities includes a greater proportion of subsistence farmers and those self-employed, and fewer people who are retired. These may also be partly explained by the nature of CCT processes; encouraging participants to recognise and mobilise the resources they already have, and often leading to entrepreneurship and investment in assets. The greater proportion of subsistence farmers may also be partly explained by the higher representation of CCT communities in the 'traditional village' and 'expanded village or growing settlement' categories.

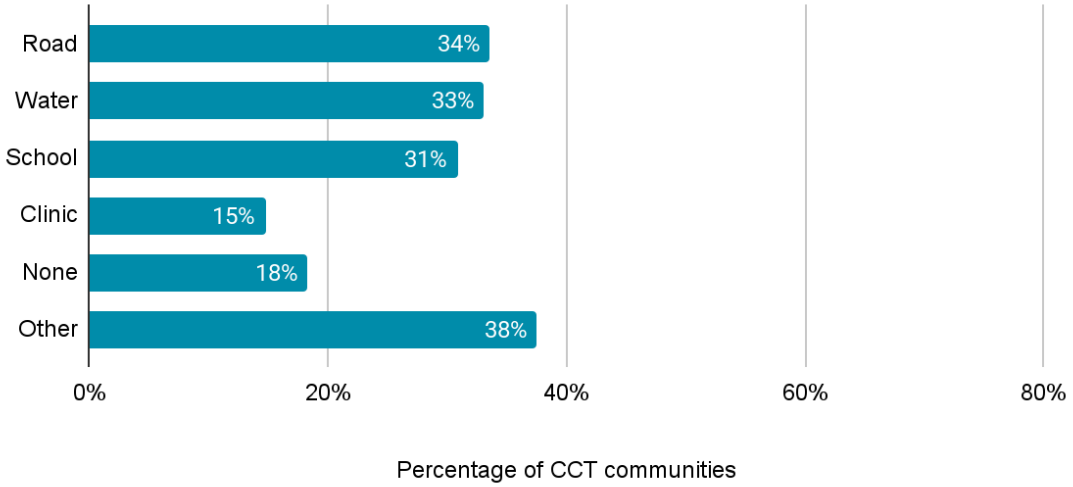
This more detailed urban/rural categorisation introduced in phase two does shed light on the difference between CCT communities and non-CCT communities, and highlights the importance of controlling for this as an additional proxy for socio-economics (Box 3, Section 3.4.3). In general, the differences are not a concern once we use regression analysis and control for all these demographic characteristics.[84]

[84] Although not shown here, a similar review was done at the country level as well. Aside from some differences in the urban/rural categories for Nigeria, the samples were satisfactorily similar.

4.3 Community assets and activities due to CCT

CCT facilitators across all eight countries were asked what new or improved assets their community has, as an outcome of CCT. [85] The most commonly reported new or improved community assets are roads (34 per cent of CCT facilitators reported this) and water access (33 per cent), followed by schools (31 per cent) (see Chart 1 below). 'Other' reported assets include developments to church buildings (including toilets), agriculture projects, and electricity supply.

Chart 1: Reported new or improved community assets, due to CCT
(n=360, all eight countries)



The phase-two facilitator survey (n=176) included additional questions on what activities each CCT church is involved in to meet the needs of its community, due to CCT (Chart 2 below). The most common activities included providing money/resources or practical help/emotional support to meet the needs of vulnerable members of the community, such as people who are sick, orphans, widows, migrants (72 per cent and 68 per cent, respectively). Almost as common, 68 per cent of facilitators reported that their church has set up savings groups or self-help groups and 66 per cent reported activities that improve the local environment, such as litter picking and tree planting.

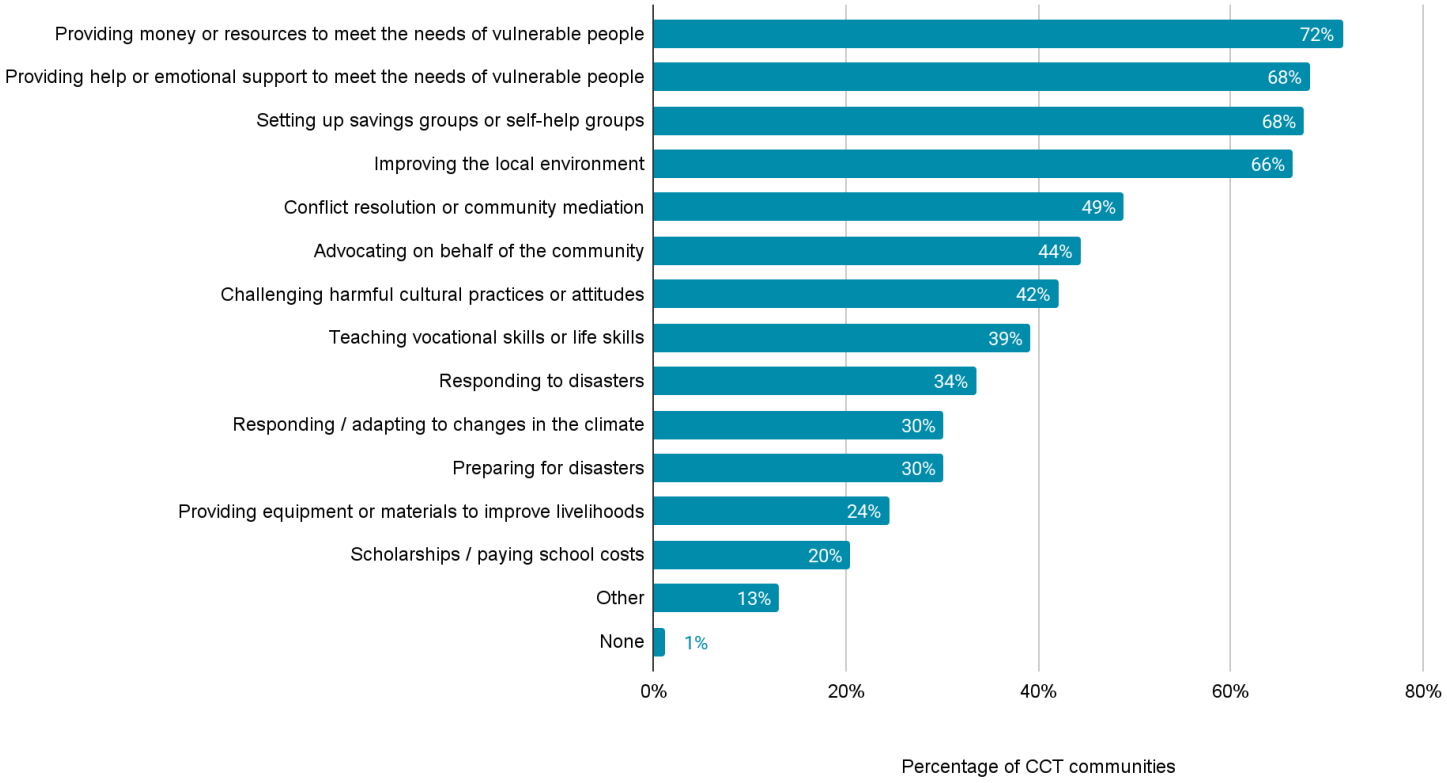
Notably, only one per cent of facilitators reported that their church is engaged in none of the listed activities. We cannot be certain that some of these assets and activities might not have come about in the community anyway, without the input from CCT.[86]

[85] Countries in phase one sometimes had more than one response from facilitators per community (n=248). To obtain community-level observations, we keep one randomly selected facilitator per community, resulting in n=184 for phase-one countries. n=176 in phase-two countries.
[86] The survey of church leaders indicated that some non-CCT churches are engaging in activities to meet the needs of the community, but a considerably lower proportion than CCT churches.

Indeed, it is to be expected that other agencies (besides Tearfund and partners) are present in the CCT communities and implementing development interventions,[87] and CCT facilitators/church leaders confirmed this. In Section 8, we explore the role of other agencies, how these might be linked to reported assets, and the extent to which they might be responsible for some of our observed increased wellbeing. (We conclude there is limited concern about other development agencies influencing wellbeing more than CCT influences it).

Chart 2: Reported community activities, due to CCT

(n=176, four countries included in phase two only)



[87] In all four of Tearfund's Qualitative Impact Assessment Protocol studies, community members named a number of NGOs – not only Tearfund and partners – as having contributed to changes in their wellbeing. See Tearfund (2021).

4.4 Wellbeing measures

Table 10 outlines a summary of responses to our wellbeing questions and shows comparisons between non-CCT communities and CCT communities. Our key measure (life satisfaction) is treated as a continuous variable (with numeric answers) and presented as means. For ease of presentation, all other measures are converted to binary variables,[88] and we present the percentage of respondents who answered positively, reporting a positive outcome.[89] For all measures apart from not suffering from illness, the proportion of people who responded positively is higher in CCT communities than non-CCT communities. For many of these measures the differential is large.

However, these simple two-way comparisons do not take into account any other factors that influence wellbeing, such as demographic factors. They **should not be used to draw conclusions about the impact of CCT processes.** Instead, we strongly encourage the reader to focus on the differences in wellbeing that are reported in Section 5 (see Chart 4 in Section 5.1, for example), since these are the results of regression analysis and they *do* take into account other factors.

Nonetheless, **as long as we do not draw conclusions about impact, exploring descriptive statistics helps to understand our dataset better**. For example, we can gain the following insights from Table 10:

- Certain measures of wellbeing are very high across the whole sample, even in non-CCT communities. This is particularly the case for some measures related to 'care of the environment' in the Economic and environmental domain (over 95 per cent of respondents appreciate the natural world and treat nature with respect), and some measures in the Personal domain (over 90 per cent of respondents are satisfied with the close relationships in their lives, and feel valued and respected by their family).[90]
- In contrast, other measures of wellbeing are notably low across the sample, especially the proportion of people earning the same or more than this time last year (48 per cent); who report that their general health is good or very good (47 per cent); and who have participated in raising an issue to decision-makers (46 per cent). The lowest-scoring measure was in the Spiritual domain: the proportion of people who report having a sense of inner peace, even when things go wrong (38 per cent).[91]
- In the Economic and environmental domain, it seems to be slightly more common for people to go without enough food to eat, than to go without medicine or medical treatment when required. This is

[88] For example, the first economic outcome summarises the question: 'In the last 12 months, how often has your family... gone without enough food to eat?' [often, sometimes, rarely, never]. The percentage reported is the percentage who answered 'rarely' or 'never'.
[89] See Appendix A12 for details of all survey questions and answers.
[90] This suggests that there is relatively little room for CCT processes to improve these four measures of people's wellbeing. Even if, through regression analysis, we detect statistically significant differences between subgroups, there is an inevitable 'ceiling' or limit on the magnitude of the effect. However, if these four survey questions had been worded slightly differently, or if slightly different measures had been chosen to represent 'care of the environment' and 'personal relationships' in our survey, then it is possible that we would have observed greater differentiation between subgroups. Some measures were adapted for this reason between phase one and phase two (see Box 1 in Section 3.1.2).
[91] This suggests that these are areas of people's lives in which there is a high level of need, and there is the *potential* for CCT processes to have a positive impact. However, we will draw conclusions about this on the basis of regression analysis, in Section 5.

also more common than reporting that a family member has had to miss school, due to not being able to afford school fees or supplies.[92]

- In the Spiritual and Social domains, a majority of respondents (74 per cent) report that they sometimes or often help others in need, and a similar proportion (79 per cent) believe that people in their community would be there for them if they needed help, suggesting that within communities there may be reciprocal, supportive relationships.
- In the Personal and Spiritual domains, a large majority of people feel that they can create change in their own life (90 per cent) and feel confident they could cope with unexpected events (80 per cent), yet only 38 per cent of respondents experience a sense of inner peace even when things go wrong for them.

Table 10: Wellbeing measures, CCT communities compared to non-CCT communities

	Non-CCT communities	CCT communities	All
Economic and environmental wellbeing measures (9)			
You or family gone without food[93] – % rarely/never	49.8%	61.9%	58.9%
You or family gone without medicine – % rarely/never	57.2%	67.1%	64.6%
You or family missed school – % rarely/never	55.0%	66.3%	63.5%
Women's participation in financial decisions^ – % yes	66.3%	71.1%	69.9%
Invested in assets, in last year – % yes	40.9%	61.3%	56.2%
Earnings compared to last year – % same/more	36.5%	51.7%	47.9%
Treat nature with respect* – % agree/strongly agree	94.7%	97.0%	96.4%
Appreciate the natural world* – % agree/strongly agree	96.2%	97.7%	97.3%
Taking action to care for the environment* – % yes	76.0%	83.7%	81.6%

[92] Note that in Table 10 these measures are reported as the percentage of people who have *rarely* or *never* gone without these things (the positive response).
[93]The food poverty variable is being used as a control variable, as a proxy for poverty, in most regressions in this report (see Section 4.2), except where food poverty is the outcome. Reducing food poverty is still considered an important outcome of CCT, hence it is reported in this table and included as one of the six economic outcomes. Where it is considered an outcome, it cannot be included as a control.

	Non-CCT communities	CCT communities	All
Personal wellbeing measures (9, plus life satisfaction)			
Our 'key' measure, life satisfaction on a scale 0–10 – mean score	**4.98**	**6.13**	**5.85**
Outlook one year from now – % believe better off	67.9%	82.8%	79.2%
Can create change in own life – % agree/strongly agree	84.2%	92.5%	90.4%
Cope with unexpected events – % quite/completely confident	68.3%	84.0%	80.1%
Local trust – % a little/completely	79.1%	90.1%	87.4%
Valued & respected by family – % agree/strongly agree	88.0%	94.8%	93.1%
Satisfied with close relationships – % a little/completely satisfied	87.7%	95.1%	93.3%
General health* – % good/very good	42.6%	48.0%	46.6%
Suffered from illness in last month* – % no	53.9%	52.9%	53.2%
Barriers to accessing health services* – % no barriers	57.2%	61.2%	60.1%
Social wellbeing measures (6)			
Worked on shared projects – % yes	37.7%	67.4%	60.1%
People are there for me – % agree/strongly agree	64.3%	83.1%	78.5%
Belong to community – % agree/strongly agree	64.3%	83.1%	78.5%
Make decisions in household – % agree/strongly agree	79.8%	87.3%	85.5%
Raise issues to decision-makers – % sometimes/often	33.4%	50.2%	46.0%
Influence decisions in community – % agree/strongly agree	60.1%	79.5%	74.7%

	Non-CCT communities	CCT communities	All
Spiritual wellbeing measures (4)			
Inner peace, even when things go wrong* – % often/always	32.1%	39.8%	37.7%
Importance of faith* – % more important	67.6%	78.4%	75.5%
Practising faith (3 actions: worship God with others, express feelings to God, read scriptures)*– % do all several times a week/daily	59.2%	68.8%	66.3%
Helping others – % sometimes/often	62.7%	77.5%	73.9%

Notes: Measures denoted with * include only data from Bangladesh, Burundi, Malawi and Nigeria (phase-two countries). Measures denoted with ^ include only data from females.

5. Wellbeing research findings – regression analysis

In this section we report results from regression analysis (explained in Section 3.4) that explore each of the research questions in turn. Each table of regression results starts with the outcome variable (or measure of wellbeing). Underneath this are the key explanatory variables – the ones we are most interested in. More explanatory variables – also known as control variables – were included in all models but are not reported here.[94] For reference, the full regression output (ie including the coefficients on all of our control variables) of our first regression (Model 1, Table 11, Section 5.1) is presented in Appendix A8. Unless otherwise stated, all regressions in Section 5 include this same set of control variables.

Where an explanatory variable included in the model is a category (defining different subgroups of respondents), this must include a 'base group' to which other groups are compared. The base group or comparison group is indicated by a coefficient of 0.000. For example, in Model 1 in Table 11, non-CCT communities are the base group, and reported coefficients for the other subgroup (those who live in a CCT community) are relative to the base group of non-CCT communities.

A reported coefficient indicates the difference in the outcome variable that is due to that explanatory variable, and is not explained by the control variables. This means the coefficient is the change in the outcome variable that is associated with being in that subgroup.

Each coefficient is reported with a level of significance – indicated by the number of asterisks. All coefficients of interest are reported, but only statistically significant coefficients are reported as conclusive findings.[95] If the coefficient is positive, there is a positive difference associated with being in that subgroup compared with the base group.

[94] Allowing us to focus on our explanatory variables of interest.

[95] *** indicates significance at the 1% level, ** at the 5% level, and * at the 10% level. In this report, significance at the 10% level and above is considered sufficient for conclusions to be drawn. If it is not significant, no conclusion can be drawn about the relationship.

5.1 Wellbeing impact of living in a CCT community

Research question 1(i): Is living in a CCT community associated with increased wellbeing (across four domains: economic and environmental, personal, social and spiritual)?

In Table 11 we present regression results isolating the impact of living in a CCT community on life satisfaction, comparing CCT communities to non-CCT communities.

Table 11: Regression coefficients indicating impact of living in a CCT community on life satisfaction

Dependent variable: life satisfaction [scale 0–10]	Basic model, compared to non-CCT communities (Model 1)
Respondents in non-CCT communities	0.000
Respondents in CCT communities	0.857***
Observations[96]	15,172
Adjusted R-squared[97]	0.209

Notes: The dependent variable Y = life satisfaction on a scale of 0 to 10. Each column represents a separate regression model. Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. Only the coefficient of the variable of interest is shown here. Control variables include age, gender, marital status, religion, gender of household head, number of people in household, education level, level of disability, country (captures timing of data collection), detailed urban/rural classification, and food poverty. Coefficients of other control variables can be viewed in Appendix A8. A coefficient of 0.000 means this is the base group other subgroups were compared to.

Our key wellbeing measure, life satisfaction, is 0.857 points higher in CCT communities compared to non-CCT communities (Table 11, this is on a scale of 0–10).[98] [99] We explore this main finding for each country separately (Chart 3 below, and also in Table 11A further on).[100] Living in a CCT community is associated with higher life satisfaction for all countries except Zimbabwe, where no significant difference was found.[101] The largest difference in life satisfaction associated with living in a CCT community is observed in Sierra Leone.

[96] All regressions in Section 5 aim to use the full sample of individuals (15,640). However, where a lower number of observations are reported for any regressions, this is due to missing answers. If any answer is missing, eg the answer to any of our control variables, that observation cannot be included in the regression. Therefore, the number of observations represents the number of respondents for which we have *full* information of the dependent variable (outcome of interest) and all independent variables (key explanatory variables and all control variables).

[97] Adjusted R-squared indicates the fit of the model (how much of the variation in the dependent variable can be explained by variation in the explanatory variables). Adjusted R-squared ranges between 0 and 1, with a higher number indicating a better fit. Wellbeing regressions typically produce an R-squared value of 0.1–0.3. Fujiwara, Kudrna and Dolan (2014) report 0.13 and 0.15, and Shi et al (2019) report 0.33, and acknowledge that this is higher than other similar models in the literature.

[98] This is statistically significant at the 1% level (Model 1), even after controlling for various demographic factors and control variables.

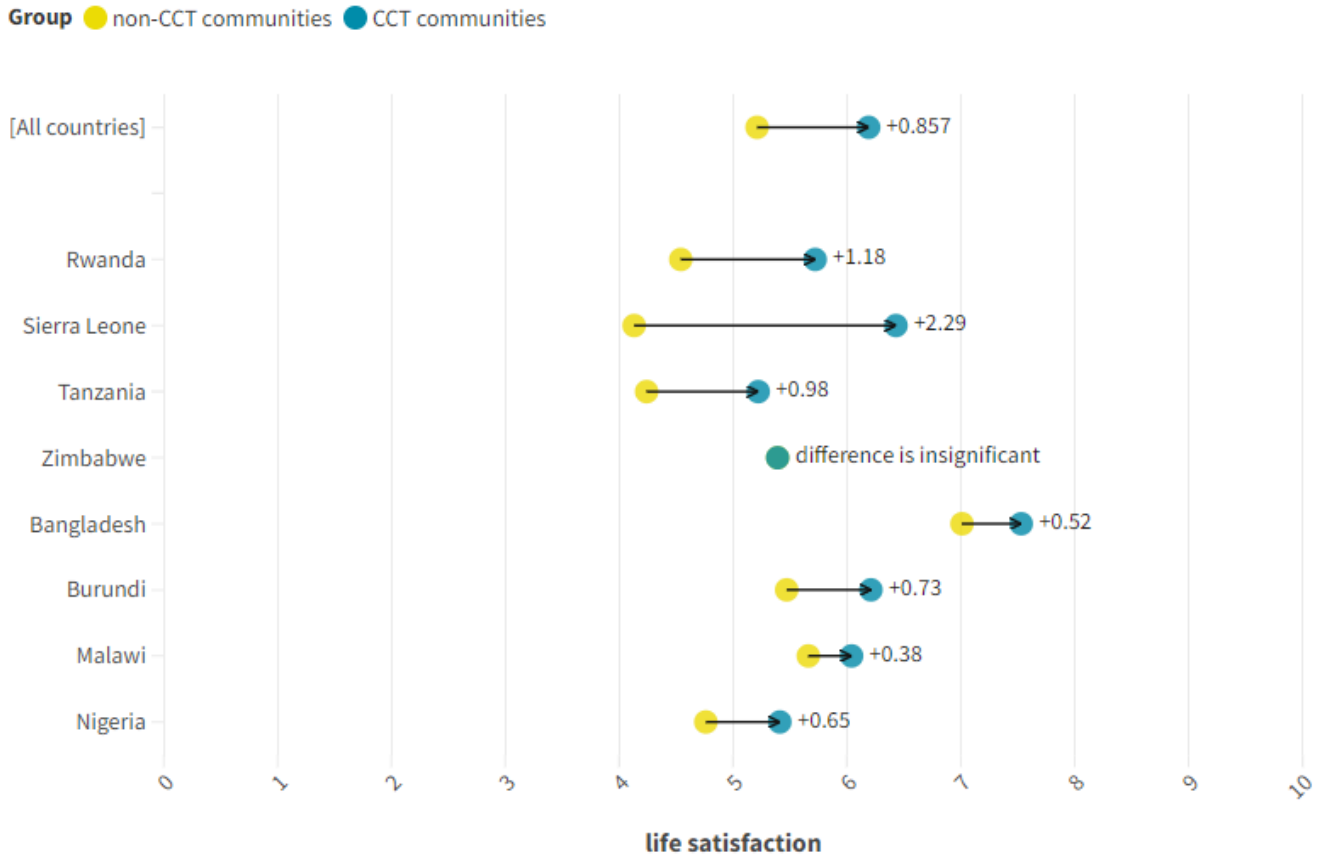
[99] This finding is robust to clustering; Model 1 was also run using clustered standard errors (clustered at the community level) and the coefficient remains highly significant.

[100] When regressions are repeated for each country alone, this means using a smaller sample size (approximately 2,000 rather than 15,000).

[101] In Zimbabwe, non-participants did not have higher life satisfaction than people in non-CCT communities, but participants did (refer to Tables 12A–C below). Therefore the positive wellbeing effect of CCT processes seemed to be limited to individuals who participate directly. A challenging economic and political environment were thought to have limited the degree to which non-participants benefited, and this was a key point of learning for the Tearfund team and partners in Zimbabwe, in 2022/23. Non-participants made up 45% of the CCT community sample in Zimbabwe, and this is considered the main reason no significant difference was found between CCT and non-CCT communities.

Chart 3: Life satisfaction in CCT communities and non-CCT communities

Reported life satisfaction takes into account the influence of other factors observable in the data (control variables).



Notes: Significant differences are indicated with labels of the difference in life satisfaction. Statistical significance is considered at the 10% level. The sample from all countries is 15,172. Samples from each country range between 1,364 (Nigeria) and 2,293 (Sierra Leone).

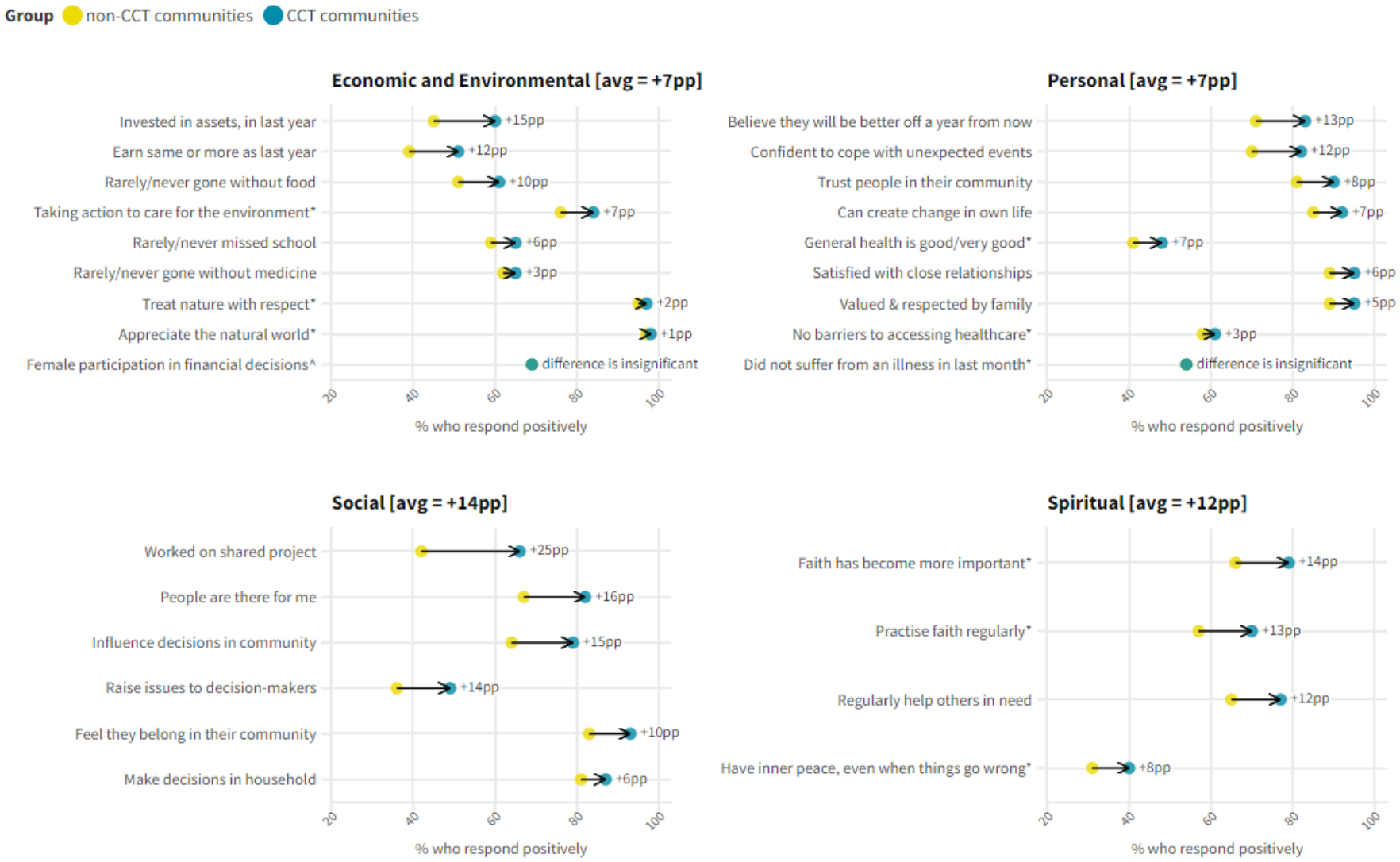
Chart 4 presents 'percentage point differences'. What is this?

A percentage point (pp) difference is simply the difference between two percentages, such as the percentage of people in CCT and non-CCT communities who gave a positive answer* to each of our wellbeing questions. For example, the difference between 30 per cent and 33 per cent is 3 percentage points.

**As we are using regression analysis, this is the predicted percentage who report a positive answer, after controlling for other factors observable in the data. This is what is presented in Chart 4.*

Chart 4: Impact of living in a CCT community, on all measures of wellbeing (economic and environmental, personal, social and spiritual)

Percentage point (pp) differences in those who respond positively. Takes into account other factors observable in the data (control variables).



Notes: Significant differences are indicated with labels of the difference in percentage points. Statistical significance is considered at the 10% level. Most measures include the full sample size from all eight countries, approx.15,000. Measures denoted with * include only data from Bangladesh, Burundi, Malawi and Nigeria (phase-two countries of the study). Measures denoted with ^ include only data from female respondents.

Table 11A: Living in a CCT community – testing for different countries and for other wellbeing measures

"People in CCT communities report higher wellbeing compared to those in non-CCT communities." [102]					
Does this hold for life satisfaction in individual countries?	Rwanda ✔, Sierra Leone ✔, Tanzania ✔, Zimbabwe ~ Bangladesh ✔, Burundi ✔, Malawi ✔, Nigeria ✔				
Does this hold for other measures?[103]	Economic and Environmental	Personal	Social	Spiritual	**All domains**
Number of wellbeing measures:	8/9	8/9	6/6	4/4	**26/28**
Average pp difference:	+7pp	+7pp	+14pp	+12pp	**+10pp**

Notes: ✔ = conclusion holds and is statistically significant at 10% level, ~= no significant difference, ❌= opposite conclusion holds and is statistically significant at 10% level. (X/X) = number of measures, within each domain, for which the conclusion holds and is statistically significant at 10% level.

Findings from this section are summarised in Table 11A above. For 26 out of 28 of our other wellbeing measures, the percentage who respond positively is higher in CCT communities compared to those in non-CCT communities. When we average responses across the four domains of wellbeing,[104] we find that people in CCT communities are 10pp more likely to respond positively than those in non-CCT communities. This difference is greatest for wellbeing measures related to social (on average 14pp) and spiritual (on average 12pp) wellbeing.

For individual wellbeing measures, greatest differences are seen within the social domain; for example, working on a shared project is 25 percentage points higher in CCT communities than non-CCT communities (Chart 4). The wellbeing measures for which we do not find a significant difference between CCT and non-CCT communities are avoiding illness and women's participation in financial decisions.

[102] For best use of space, full regression output is not reported here but presented as a summary. Table 12A is also visualised in Charts 3 and 4.
[103] Detail for each measure is shown in Chart 4.
[104] Averaged across domains rather than all wellbeing measures, so as to give each domain equal weight.

Key finding #1: Living in a CCT community is associated with increased wellbeing

Is living in a CCT community associated with increased wellbeing (across four domains: economic and environmental, personal, social and spiritual)?

Life satisfaction, plus 26 out of 28 wellbeing measures, are higher in CCT communities than in communities that have not yet started a CCT process.

Life satisfaction is 0.86 points higher (on a scale of 0 to 10) in CCT communities. Beyond life satisfaction, and averaged across our four domains, people in CCT communities are 10 percentage points more likely to respond positively, compared to those in non-CCT communities. Positive differences are found across all domains, with greatest differences observed in social and spiritual wellbeing; those living in CCT communities are 14 percentage points more likely to respond positively for social wellbeing measures and 12 percentage points more likely to respond positively for spiritual wellbeing measures. The two wellbeing measures for which there is no significant difference between CCT and non-CCT communities are avoiding illness and women's participation in financial decisions.

5.2 Wellbeing impact for participants and non-participants

Research question 1(ii-iii): Is living in a CCT community associated with increased wellbeing (across four domains – economic and environmental, personal, social and spiritual) both for participants (those who take part in CCT activities or initiatives) and for non-participants (those who live in CCT communities but do not take part)?

Next we use interaction variables (Section 3.4.2), to distinguish between those who participate in CCT activities or initiatives and those who do not (Table 12, Chart 5). We then explore each of these comparisons across countries and for other wellbeing measures.

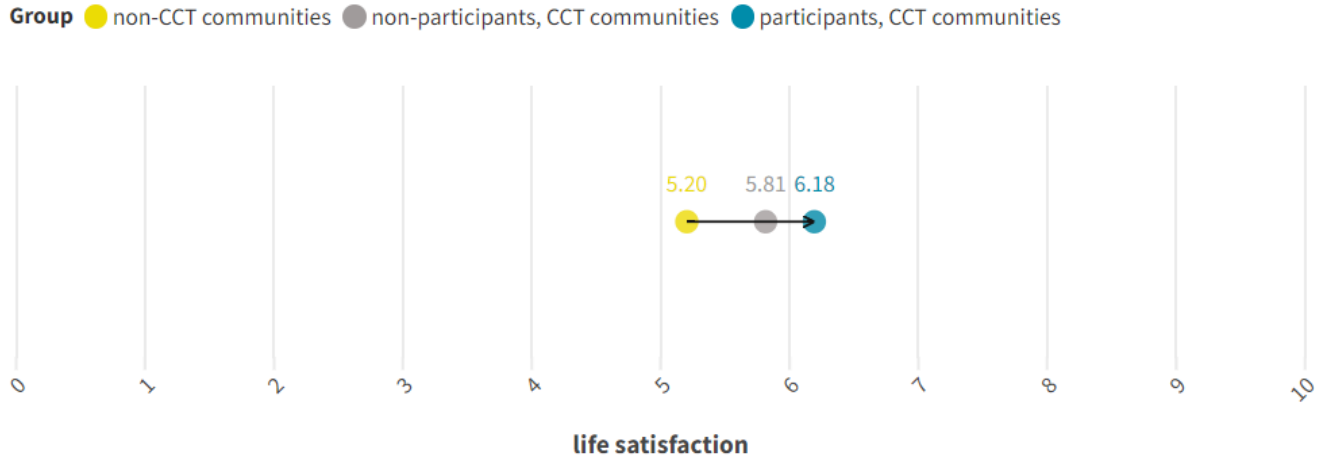
Table 12: Regression coefficients indicating impact of participation in CCT on life satisfaction

Dependent variable: life satisfaction [scale 0–10]	With interaction terms	
	Compared to non-CCT communities (Model 2)	Compared to those CCT communities who do not participate (Model 3)
Non-CCT communities	0.000	-0.612***
Lives in a CCT community, *does not* participate in CCT activities	0.612***	0.000
Lives in a CCT community, *does* participate in CCT activities	0.993***	0.381***
Observations	14,873	14,873
Adjusted R-squared	0.216	0.216

Notes: The dependent variable Y = life satisfaction on a scale of 0 to 10. Each column represents a separate regression model. Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. Only the coefficient of the variable of interest is shown here. Control variables include age, gender, marital status, religion, gender of household head, number of people in household, education level, level of disability, country (captures timing of data collection), detailed urban/rural classification, and food poverty. A coefficient of 0.000 means this is the base group other subgroups were compared to.

Chart 5: Impact of participating in CCT activities on life satisfaction

Level of life satisfaction takes into account other factors observable in the data (control variables)



Notes: Sample from all eight countries (N=14,873, Table 13).

5.2.1 Participants compared to non-CCT communities

This comparison is key to exploring the impact of direct, individual participation. This is the comparison made in Model 2 in Table 12; our key wellbeing measure, life satisfaction, is 0.993 points higher for participants in CCT communities, compared to non-CCT communities (on a scale of 0–10).[105] Table 12A shows a summary of testing this conclusion in the different countries (the same conclusion is found in all eight countries) and for other wellbeing measures.

Table 12A: Impact on participants – testing in different countries and for other wellbeing measures

"Participants in CCT communities report higher wellbeing than people in non-CCT communities." [106]					
Does this hold for life satisfaction in individual countries?	Rwanda ✔, Sierra Leone ✔, Tanzania ✔, Zimbabwe ✔ Bangladesh ✔, Burundi ✔, Malawi ✔, Nigeria ✔				
Does this hold for other measures?	Economic and environmental	Personal	Social	Spiritual	**All domains**
Number of wellbeing measures:	9/9	8/9	6/6	4/4	**27/28**
Average pp difference:	+8pp	+8pp	+18pp	+15pp	**+12pp**

Notes: ✔ = conclusion holds and is statistically significant at 10% level, ~= no significant difference, ❌= opposite conclusion holds and is statistically significant at 10% level. (X/X) = number of measures, within each domain, for which the conclusion holds and is statistically significant at 10% level.

For 27 out of 28 of our other wellbeing measures, the percentage who respond positively is higher among CCT participants compared to those in non-CCT communities (Table 12A). Averaging percentage point differences across all four domains, we find that CCT participants are 12pp more likely to respond positively compared to those in non-CCT communities (Table 12A). Higher levels of wellbeing are found across all domains (Table 12A) with greatest differences observed in social and spiritual wellbeing; CCT participants are 18pp more likely to respond positively for social wellbeing, and 15pp more likely to respond positively for spiritual wellbeing (compared to those in non-CCT communities). Specific measures are shown in Box 4.

[105] This is statistically significant at the 1% level (Model 2), even after controlling for various demographic factors and control variables.
[106] For best use of space, full regression output is not reported here but presented as a summary.

Box 4 | Specific wellbeing measures for participants, compared to non-CCT communities

CCT participants are...

- 33.7pp more likely to work on shared projects with others in their community (Social)
- 19.5pp more likely to invest in assets in the past year, such as a house, business or livestock (Economic and environmental)
- 19.3pp more likely to raise issues to decisions-makers (Social)
- 18.7pp more likely to feel that people would be there for them if they needed help (Social)
- 18.5pp more likely to influence decisions made in their community (Social)
- 16.7pp more likely to report that their faith has become more important to them (Spiritual)*
- 16.3pp more likely to practise their faith regularly, in prayer, worship, and reading or listening to scriptures (Spiritual)*
- 14.8pp more likely to believe they will be better off one year from now (Personal)
- 14.6pp more likely to regularly help others in need (Spiritual)
- 13.6pp more likely to feel confident they can cope with unexpected events (Personal)
- 13.0pp more likely to never or rarely go without enough food (Economic and environmental)

… compared to people in non-CCT communities.

**indicates measure reflects phase-two countries only*

5.2.2 Non-participants compared to non-CCT communities

This comparison allows us to explore potential indirect benefits: exploring whether people who do not participate in CCT activities nonetheless benefit indirectly from living in and being part of a CCT community. This is the comparison made in Model 2 in Table 12; our key wellbeing measure, life satisfaction, is 0.612 points higher for non-participants in CCT communities, compared to non-CCT communities (on a scale of 0–10).[107] Table 12B (below) shows a summary of testing this conclusion in the different countries (the same conclusion is found in six out of eight countries[108]) and for other wellbeing measures.

Table 12B: Impact on non-participants – testing in different countries and for other wellbeing measures

"Even people in CCT communities who do not participate in CCT report higher wellbeing than people in non-CCT communities." [109]					
Does this hold for life satisfaction in individual countries?	Rwanda NA, Sierra Leone ✔, Tanzania ✔, Zimbabwe ~ Bangladesh ✔, Burundi ✔, Malawi ✔, Nigeria ✔				
Does this hold for other measures?	Economic and environmental	Personal	Social	Spiritual	**All domains**
Number of wellbeing measures:	5/9	8/9	5/6	4/4	**22/28**
Av. pp difference:	+3pp	+5pp	+5pp	+7pp	**5pp**

Notes: ✔ = conclusion holds and is statistically significant at 10% level, ~= no significant difference, ❌= opposite conclusion holds and is statistically significant at 10% level. (X/X) = number of measures, within each domain, for which the conclusion holds and is statistically significant at 10% level. NA for Rwanda because there was not a sufficient sample from non-participants in this country to make a comparison.

For 22 out of 28 of our other wellbeing measures, the percentage who respond positively is higher among non-participants in CCT communities compared to those in non-CCT communities (Table 12B). Averaging percentage point differences across all four domains, we find that non-participants in CCT communities are 5pp more likely to respond positively compared to those in non-CCT communities (Table 12B). This higher wellbeing for non-participants is found across all domains (Table 12B) with greatest differences observed in spiritual wellbeing; non-participants are 7pp more likely to respond positively for spiritual wellbeing (compared to those in non-CCT communities). Specific measures are shown in Box 5.

[107] This is statistically significant at the 1% level (Model 2), even after controlling for various demographic factors and control variables.
[108] Six out of seven countries *for which it could be tested*, since it could not be tested in Rwanda. As explained previously, in phase one of the study it was communicated to country teams that mobilising non-participants in CCT communities was optional. In Rwanda this led to very few non-participants being surveyed. In phase two, the research team communicated the importance of mobilising non-participants much more clearly.
[109] For best use of space, full regression output is not reported here but presented as a summary. Table 12A is also visualised in Charts 3 and 4.

Box 5 | Specific wellbeing measures for non-participants, compared to non-CCT communities

Even non-participants who live in CCT communities are...

- 10.4pp more likely to feel confident they can cope with unexpected events (Personal)
- 8.6pp more likely to feel that people would be there for them if they needed help (Social)
- 7.9pp more likely to regularly help others in need (Spiritual)
- 7.8pp more likely to report that their faith has become more important to them (Spiritual)*
- 7.2pp more likely to believe they will be better off one year from now (Personal)
- 7.1pp more likely to report that a family member has never or rarely missed school (Economic and environmental)
- 7.0pp more likely to feel they belong in the community (Social)
- 6.8pp more likely to influence decisions made in their community (Social)
- 6.5pp more likely to have invested in assets in the past year, such as a house, business or livestock (Economic and environmental)

… compared to people in non-CCT communities.

**indicates measure reflects phase-two countries only*

5.2.3 Participants compared to non-participants

Both participants and non-participants respond more positively compared to people in non-CCT communities, but crucial to evidencing the impact of CCT processes is a direct comparison, *within* CCT communities, between participants and non-participants. This enables us to explore whether wellbeing is highest for those individuals who participate directly. This is the comparison made in Model 3 in Table 12; our key wellbeing measure, life satisfaction, is 0.378 points higher for participants compared to non-participants (in CCT communities, on a scale of 0–10).[110] Table 12C (below) shows the summary of testing this conclusion; the same conclusion is found in four out of eight countries.[111]

Table 12C: Impact of participation – testing in different countries and for other wellbeing measures

"Within CCT communities, participants report higher wellbeing than those who do not participate." [112]					
Does this hold for life satisfaction in individual countries?	Rwanda NA, Sierra Leone ✔, Tanzania ✔, Zimbabwe ✔ Bangladesh ✔, Burundi ~ , Malawi ~, Nigeria ~				
Does this hold for other measures?	Economic and Environmental	Personal	Social	Spiritual	**All domains**
Number of wellbeing measures:	7/9	6/9	6/6	4/4	**23/28**
Average pp difference:	+6pp	+3pp	+13pp	+8pp	**+7pp**

Notes: ✔ = conclusion holds and is statistically significant at 10% level, ~= no significant difference, ❌= opposite conclusion holds and is statistically significant at 10% level. (X/X) = number of measures, within each domain, for which the conclusion holds and is statistically significant at 10% level. NA for Rwanda because there was not a sufficient sample from non-participants in this country to make a comparison.

For 23 out of 28 of our other wellbeing measures, the percentage who respond positively is higher for participants compared to non-participants (Table 12C). Averaging percentage point differences across all four domains, we find that participants are 7pp more likely to respond positively compared to non-participants (Table 12C). This higher wellbeing is found across all domains (Table 12C) with greatest differences observed in social wellbeing; participants are 13pp more likely to respond positively for social wellbeing (compared to non-participants). Notably, the lowest average pp difference is observed in personal wellbeing (+3pp). Specific measures are shown in Box 6.

[110] This is statistically significant at the 1% level (Model 3), even after controlling for various demographic factors and control variables.
[111] Four out of seven countries *for which it could be tested*, since it could not be tested in Rwanda. In Burundi, Malawi and Nigeria, life satisfaction is not significantly higher for participants than non-participants, but many other measures of wellbeing are: 22 out of 28 in Burundi, 15 out of 28 in Malawi, and 11 out of 28 in Nigeria.
[112] For best use of space, full regression output is not reported here but presented as a summary.

Box 6 | Specific wellbeing measures for participants, compared to non-participants

CCT participants are…

- 27.5pp more likely to work on shared projects with others in their community (Social)
- 17.4pp more likely to raise issues to decisions-makers (Social)
- 12.9pp more likely to have invested in assets in the past year, such as a house, business or livestock (Economic and environmental)
- 11.8pp more likely to influence decisions made in their community (Social)
- 10.2pp more likely to earn more or the same as last year (Economic and environmental)
- 10.2pp more likely to feel that people would be there for them if they needed help (Social)
- 9.7pp more likely to practise their faith regularly, in prayer, worship, and reading or listening to scriptures (Spiritual)*
- 8.9pp more likely to report that their faith has become more important to them (Spiritual)*
- 8.3pp more likely to never or rarely go without enough food (Economic and environmental)
- 7.6pp more likely to believe they will be better off one year from now (Personal)

… compared to non-participants who live in CCT communities.

**indicates measure reflects phase-two countries only*

Key finding #2: Living in a CCT community is associated with increased wellbeing, whether or not a person participates in CCT activities. Being a participant is associated with even greater benefits, and there appears to be some spillover of benefits to the wider community too.

Is living in a CCT community associated with increased wellbeing (across four domains: economic and environmental, personal, social and spiritual) both for participants (those who take part in CCT activities or initiatives) and for non-participants (those who live in CCT communities but do not take part)?

For participants compared to people in non-CCT communities, life satisfaction is 0.99 points higher (on a scale of 0 to 10), and the average likelihood of responding positively for other wellbeing measures is 12pp higher. Higher likelihood of responding positively is found for 27 out of 28 wellbeing measures, with the greatest difference observed in social and spiritual wellbeing.

For non-participants compared to people in non-CCT communities, life satisfaction is 0.61 points higher (on a scale of 0 to 10), and the likelihood of responding positively for other wellbeing measures is 5pp higher. Higher likelihood of responding positively is found for 22 out of 28 wellbeing measures, with the greatest difference observed in spiritual wellbeing.

Furthermore, comparing participants to non-participants improves the robustness of our findings on the impact of CCT processes. Life satisfaction is 0.38 points higher (on a scale of 0 to 10) for participants compared to non-participants, and their likelihood of responding positively is 7pp higher. This higher likelihood is found across all domains, and for 23 out of 28 measures, with the greatest differences observed in social wellbeing.

This suggests that CCT processes most strongly benefit those most closely involved, particularly in terms of their social and spiritual wellbeing. There are also spillover effects of a CCT process to the wider community: even individuals who do not directly participate in CCT activities benefit, particularly in terms of their spiritual wellbeing.

5.3 Wellbeing impact at different levels of CCT maturity

Research question 2: Is increased wellbeing sustained throughout and beyond the formal CCT process?

To answer this question we focus on communities that have begun to engage with a CCT process within the last two years, and those that have been engaging with CCT for 5+ years. As outlined in Section 1.1, in most countries, churches that have been engaged in a CCT process for 5+ years should be continuing on a journey of serving and seeking to transform their communities. However, the majority will have completed the formal process that was designed to 'kick-start' this journey (including facilitator training), and effectively graduated from Tearfund and partners' support. They are therefore 'beyond the CCT formal process' (to use the research question wording). In Table 13 we present regression results isolating the impact of different levels of CCT maturity on life satisfaction. Tables 13A and 13B summarise these findings for each country separately, and for all our wellbeing measures.

Table 13: Regression coefficients indicating impact of CCT maturity on life satisfaction

Dependent variable: life satisfaction [scale 0–10]	Compared to non-CCT communities (Model 4)
Non-CCT communities	0.000
0–2 years	0.800***
3–5 years	0.893***
More than 5 years	0.879***
Observations	15,172
Adjusted R-squared	0.210

Notes: The dependent variable Y = life satisfaction on a scale of 0 to 10. Only the coefficient of the variable of interest is shown here. A coefficient of 0.000 means this is the base group other subgroups were compared to. Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. Control variables include age, gender, marital status, religion, gender of household head, number of people in household, education level, level of disability, country, detailed urban/rural classification. Coefficients of other control variables can be shared on request.

Our key wellbeing measure, life satisfaction, is +0.800 points higher in communities that have been engaged in a CCT process for 0–2 years, and is 0.879 points higher in communities that have been engaged for more than five years, compared to non-CCT communities (Table 13; this is on a scale of 0–10).[113] These differences are found in all countries, except Zimbabwe (Tables 13A and 13B below).[114] The coefficients in our overall sample (+0.879 and +0.800) are not statistically significantly different from each other.[115] We therefore conclude that the difference in life satisfaction, associated with living in a CCT community, is similar regardless of whether the community has been engaged with CCT for 0–2 or 5+ years.

[113] These are both statistically significant at the 1% level (Model 4).
[114] And Burundi for 5+ years, as the data didn't allow us to make this comparison.
[115] Not reported here, but from a similar regression to that in Table 14, where the 0–2 group is the 'base group'.

5.3.1 CCT communities engaged for 0–2 years

Table 13A: The first two years of a CCT process – testing in different countries and for other wellbeing measures

"People in communities that have been engaged in a CCT process for 0–2 years report higher wellbeing than those in non-CCT communities." [116]					
Does this hold for life satisfaction in individual countries?	Rwanda ✔, Sierra Leone ✔, Tanzania ✔, Zimbabwe ~ Bangladesh ✔, Burundi ✔, Malawi ✔, Nigeria ✔				
Does this hold for other measures?	Economic and environmental	Personal	Social	Spiritual	**All domains**
Number of wellbeing measures:	7/9	7/9	6/6	4/4	**24/28**
Average pp difference:	5pp	6pp	13pp	14pp	**9pp**

Notes: ✔ = conclusion holds and is statistically significant at 10% level, ~= no significant difference, ❌= opposite conclusion holds and is statistically significant. (X/X) = number of measures, within each domain, for which the conclusion holds and is statistically significant at 10% level.

For 24 out of 28 of our other wellbeing measures, the percentage who respond positively is higher in CCT communities engaged for 0–2 years than in non-CCT communities. Averaged across all measures, those living in 0–2 year CCT communities are 9pp more likely to respond positively (Table 13A). This higher likelihood of responding positively is strongest for spiritual wellbeing (+14pp), followed by social wellbeing (+13pp) (Table 13A). Specific measures are shown in Box 7.

Box 7 | Specific wellbeing measures for CCT communities in the first two years of a CCT process, compared to non-CCT communities

People in CCT communities that have been engaged for 0–2 years are…

- 23.6pp more likely to work on shared projects with others in their community (Social)
- 17.9pp more likely to practise their faith regularly, in prayer, worship, and reading or listening to scriptures (Spiritual)
- 15.5pp more likely to raise issues to decisions-makers (Social)
- 14.2pp more likely to influence decisions made in their community (Social)
- 13.8pp more likely to report that their faith has become more important to them (Spiritual)
- 13.5pp more likely to feel that people would be there for them if they needed help (Social)
- 12.9pp more likely to regularly help others in need (Spiritual)
- 11.3pp more likely to feel confident they can cope with unexpected events (Personal)

… compared to people in non-CCT communities.

[116] For best use of space, full regression output is not reported here but presented as a summary.

5.3.2 CCT communities engaged for 5+ years

Table 13B: The most mature CCT communities – testing in different countries and for other measures

"People in communities that have been engaged in a CCT process for 5+ years report higher wellbeing than those in non-CCT communities." [117]					
Does this hold for life satisfaction in individual countries?	Rwanda ✔, Sierra Leone ✔, Tanzania ✔, Zimbabwe ~ Bangladesh ✔, Burundi NA, Malawi ✔, Nigeria ✔				
Does it hold for other measures?	Economic and environmental	Personal	Social	Spiritual	**All domains**
Number of wellbeing measures:	8/9	8/9	6/6	4/4	**26/28**
Average pp difference:	7pp	7pp	8pp	2pp	**6pp**

Notes: ✔ = conclusion holds and is statistically significant at 10% level, ~= no significant difference, ❌= opposite conclusion holds and is statistically significant. number of measures, within each domain, for which the conclusion holds and is statistically significant at 10% level. NA for Burundi because there were no churches at 5+ years maturity sampled in this country.

For 26 out of 28 of our other wellbeing measures, the percentage who respond positively is higher in CCT communities engaged for 5+ years than in non-CCT communities. Averaged across all measures, those living in 5+ year CCT communities are 6pp more likely to respond positively (Table 13B). This higher likelihood of responding positively is strongest for social wellbeing (+8pp), followed by economic and environmental wellbeing (+7pp) and personal wellbeing (+7pp) (Table 13B). Specific measures are shown in Box 8.

Box 8 | Specific wellbeing measures for the most mature CCT communities, compared to non-CCT communities

People in CCT communities that have been engaged for 5+ years are…

- 27.0pp more likely to work on shared projects with others in their community (Social)
- 17.0pp more likely to feel that people would be there for them if they needed help (Social)
- 16.5pp more likely to influence decisions made in their community (Social)
- 15.5pp more likely to have invested in assets in the past year, such as a house, business or livestock (Economic and environmental)
- 14.4pp more likely to feel confident they can cope with unexpected events (Personal)
- 14.1pp more likely to raise issues to decisions-makers (Social)
- 12.5pp more likely to never or rarely go without enough food (Economic and environmental)
- 11.6pp more likely to earn more or the same as last year (Economic and environmental)
- 11.2pp more likely to regularly help others in need (Spiritual)
- 10.6pp more likely to feel they belong in the community (Social)

… compared to people in non-CCT communities.

[117] For best use of space, full regression output is not reported here but presented as a summary.

Key finding #3: Increased wellbeing is sustained throughout, and beyond the end of, the formal CCT process

Is increased wellbeing sustained throughout and beyond the CCT process?

By comparing communities engaged in CCT for different lengths of time, we can make inferences about how the impact changes over time. It appears that CCT processes initially make the biggest improvements in spiritual and social wellbeing, and as communities continue engaging with the process, greater impact spreads to other domains of wellbeing – economic and environmental, and personal.

The higher life satisfaction reported in CCT communities is sustained throughout, and beyond the end of, the formal CCT process: it is similar regardless of whether the communities have been engaged for 0–2 years or 5+ years (+0.80 points for those engaged for 0–2 years and +0.88 points for those engaged for 5+ years, on a scale of 0–10).

The average pp difference in wellbeing between CCT and non-CCT communities is larger for 0–2 year CCT communities than for 5+ year CCT communities. In addition, the difference in spiritual and social wellbeing is largest when comparing 0–2 year CCT communities to non-CCT communities. However, for 5+ year communities compared to non-CCT communities, higher wellbeing is observed for more measures (26 compared to 24 measures) and is stronger in the economic and environmental, and personal, domains. In contrast, the difference in spiritual wellbeing is less pronounced when comparing 5+ year CCT communities to non-CCT communities (+2pp, compared to a difference of 13pp between 0–2 year CCT communities and non-CCT).

5.4 Wellbeing impact in different contexts

Research question 3: Is this increased wellbeing found only in specific contexts?

To answer this question we repeat analysis from question 1 but split the sample in a number of ways (Table 14). We therefore answer this question with regards to life satisfaction, and not wellbeing overall. For detail on how these sub-samples were drawn, see Appendix A9.

Table 14: Impact on life satisfaction of CCT in different contexts

"Living in a CCT community is associated with higher life satisfaction compared to living in non-CCT communities."	
Does this hold in different contexts?	
(i) Only in Africa?	Non-African context ✔, African context ✔
(ii) Only in rural contexts?	Non-rural ✔, rural[118] ✔
(iii) Only in majority christian contexts?	Majority Christian context ✔, Minority Christian context ✔
(iv) Regardless of the intended length of the CCT process?	Shorter process (2 years) ✔, Longer process (3–5 years) ✔
(v) At different points in time?	2022 (phase 1 countries) ✔, 2023–2024 (phase 2 countries) ✔

Notes: ✔ = conclusion holds and is statistically significant at 10% level, ~= no significant difference, ❌= opposite conclusion holds and is statistically significant. For how these sub-samples were drawn, see Appendix A9.

For all the contexts we tested, we found a positive and significant coefficient comparing life satisfaction in CCT communities to non-CCT communities.

Key finding #4: Higher life satisfaction associated with living in a CCT community is found in multiple different contexts

Is this increased wellbeing found only in specific contexts?

It is observed for a variety of CCT processes of different intended lengths, at different points in time, and in all other sub-samples for which it was specifically tested; ie not only in Africa, rural areas or majority Christian contexts.

[118] For the distinction in (ii), we grouped the detailed geographical categories (where rural = 'expanded village or growing settlement' or 'traditional village' and non-rural otherwise).

6. Social value of CCT

Research question 4: What is the overall social value of CCT processes?

The positive impacts of CCT processes on wellbeing, observed consistently across diverse contexts and lengths of time, can be quantified to assess their broader social value. Social value is the quantification of the relative importance that people place on the changes they experience in their lives.[119] It is based on the principles and ideas of welfare economics and concerns overall social welfare efficiency, not simply economic market efficiency.[120] By comparing these benefits to the associated costs, we can determine whether investing in CCT processes is a cost-effective means to achieving improved wellbeing. In this section, we conduct a Social Cost-Benefit Analysis, providing a systematic and comprehensive measure of the net value CCT delivers to society.

6.1 What is a Social Cost-Benefit Analysis?

Cost-Benefit Analysis (CBA) compares the costs and benefits of an intervention, where both are expressed in monetary units. Traditionally, these only included financial costs and benefits, and the resulting net benefit or Benefit-Cost Ratio (BCR) were in relation to a company or organisation. However, Social Cost-Benefit Analysis extends traditional CBA by also factoring in social value, and evaluating a project from the viewpoint of society as a whole.

By including the non-market benefits and costs mentioned above, the resulting Net Social Benefit (NSB) or Social Benefit-Cost Ratio (Social BCR) therefore indicates whether the programme is worthwhile to society.

6.1.1 Defining the scope of this social CBA

After carefully considering the theory of change behind CCT processes, we have identified four crucial components of the costs and benefits of CCT:

1. **Direct benefits:** the additional wellbeing experienced by CCT participants only.
2. **Indirect benefits:** the additional wellbeing experienced by people living in CCT communities but not participating in the CCT process.
3. **Direct costs:** the resources spent by Tearfund and local partners on supporting CCT communities (including training and follow-up support to facilitators) and the value of hours spent by facilitators and other volunteers on leading CCT activities in their churches and communities.
4. **Indirect costs:** the resources that communities mobilise themselves for CCT initiatives, such as building or improving specific community assets (see Section 1.1 for further explanation).

[119] Social Value UK (2023).

[120] HM Treasury (2022). For example, the social benefit we experience from increased sense of self-worth, on top of the financial benefit of receiving a pay rise in our job; or the social cost we experience from pollution, on top of the financial cost of a new infrastructure project.

Therefore, there are multiple potential perspectives on what to include in the social CBA modelling and what to leave out. These include (but are not limited to):

- Approach A – include direct benefits and costs only
- Approach B – include both direct and indirect costs and benefits
- Approach C – include both direct and indirect costs, but only direct benefits

We consider these different perspectives in Sections 6.3 and 6.5.

6.2 Benefits

6.2.1 Applying the WELLBY valuation method

Our Social Cost-Benefit Analysis is informed by the UK government's guidance on policy appraisal and evaluation (The Green Book).[121] Although the aim of social CBA is to measure impacts on welfare, or wellbeing, there are some outcomes that are easier than others to monetise. For example, market outcomes such as economic output, tax revenue or employment are more objectively quantifiable and easier to include in CBA, although they may not be the most important outcomes. The latest HM Treasury Green Book guidance aims to address this and provides a methodology to include wellbeing effects, captured by life satisfaction and a WELLBY[122] valuation, in social CBA.[123]

Estimating the average impact of an intervention on the life satisfaction of its target population and applying the WELLBY valuation methodology has been the bread and butter of State of Life's work for the past few years.[124] In simple terms, this involves obtaining robust life satisfaction coefficient estimates (as we have done in Section 5) and multiplying by the suggested value per WELLBY.

The guidance recommends that individual wellbeing effects, captured by life satisfaction, should be included as non-market value in social CBA at a recommended valuation rate of £13,000[125] per WELLBY, inflation-adjusted to £15,300 in 2023 prices. This means that any intervention that improves one person's life satisfaction by one point for one year is valued at £15,300 to society (in 2023). However, this valuation rate (£15,300) is relevant to price and income levels in the UK.[126]

[121] HM Treasury (2022).

[122] Wellbeing-adjusted Life Year; one person moving one point on the 0–10 life satisfaction scale, for one year.

[123] HM Treasury (2021).

[124] www.stateoflife.org

[125] This figure is the midpoint between two values using different methods (£10,000 is based on converting the UK value of a Quality- Adjusted Life Year (QALY) and £16,000 is based on estimating the effect of changes in income on life satisfaction).

[126] See 'Converting the WELLBY' blog for more information on our use of the WELLBY outside of the UK context.

6.2.2 Applying the WELLBY to our eight countries

Most of the WELLBY research is grounded in the UK setting and limited research exists in low and middle income countries. Exactly replicating the WELLBY research[127] in the necessary countries would require large-scale studies of nationally representative data sets.

In the absence of this we must decide on the best method to convert the UK WELLBY valuation rate (referred to as 'WELLBY value') to the context of our eight countries. Following the same approach used in the phase-one study, we use the ratio between median personal income in the UK and countries participating in this study to proportionally scale the UK-based WELLBY value.[128]

There is no single, clear source of median income data across countries. The Centre for Global Development's calculation of median income points out its absence in the World Bank's global poverty database.[129] Therefore, we use three resources deemed most reliable for median income and calculate each country's average ratio to the UK (see Appendix A10). Given that the minimum and maximum ratios across all eight countries are fairly similar (Malawi with 0.0333 and Bangladesh with 0.0780, respectively), an average ratio is calculated and used to convert £15,300 into a WELLBY value that is appropriate in our eight countries: £788. It is then converted to US$[130] to obtain our country-appropriate WELLBY value, which gives us $1,083 (Table 15).

Table 15: Calculation of WELLBY value for use in our four countries

	Lower estimate[131] (min ratio)	**Mid estimate (mean ratio)**	**Upper estimate (max ratio)**
Ratio	0.0333	**0.0515**	0.0780
Converted £ WELLBY value (£15,300*ratio)	£509	**£788**	£1,193
$ WELLBY value	$699	**$1,083**	$1,640

[127] The research that informed this £13,000 figure.
[128] A direct exchange-rate calculation would likely overestimate the value, so it is scaled using average income. Median income is used as it better conveys the material wellbeing of a typical individual in a country. See our phase-one report (Section 5.3) for a thorough discussion.
[129] Diofasi and Birdsall (2016).
[130] The USD was chosen given its global understanding and trading power. Converted using the midpoint of December 2021 (phase-one data collection) and March 2022 (phase-two data collection) yearly average exchange rates, (1.377 + 1.371)/2 = £1 : $1.374.
[131] For various figures throughout this methodology, a lower and upper estimate may be presented. Presenting ranges in all measurements would be unmanageable, so these ranges are applied in the most appropriate places, ie where there is less certainty.

6.2.3 Estimating individual–level benefits

Direct benefit

We estimate the direct benefit of CCT participation using the regression model coefficient on life satisfaction for CCT participants compared to those in non-CCT communities (Section 5.2). The positive difference in life satisfaction for participants, 0.993, is multiplied by our converted WELLBY value ($1,083), implying that **one person participating (however regularly) in CCT activities, compared to living in a non-CCT community, is worth approximately $1,080 per person, per year.**[132]

Indirect benefit

For the indirect benefit, we use the regression model coefficient on life satisfaction for those who do not participate in CCT activities compared to those in non-CCT communities (Section 5.2). Just as for the direct benefit above, the positive difference in life satisfaction for non-participants, 0.612, is multiplied by our converted WELLBY value, implying that **one person living in a CCT community but not participating in CCT activities, compared to living in a non-CCT community, is worth approximately $660 per year.**

6.2.4 Estimating community-level benefits

Box 9 | Equation for estimating community-level benefits

Direct benefit (Value to average CCT participant **x** Number of CCT participants)

+

Indirect benefit (Value to average non-participant **x** Number of non-participant members of CCT community)

=

Total community-level benefits

To convert these individual-level changes into community-level changes, we estimate how many people take part in CCT activities, and (in the case of indirect benefits) the approximate size of the communities engaged in a CCT process, minus the number of direct participants, using data from the facilitator survey (see Appendix A13). This survey was completed by facilitators in 365 CCT communities across all countries, representing 94 per cent of the CCT communities included in the study. For most values, we calculated both upper and lower estimates, based on averages and conservative averages (excluding outliers).[133] Multiplying

[132] Monetary figures are appropriate to the year 2024. These should be quoted alongside the appropriate year, or discounted if applied to future years.
[133] Any values at least three standard deviations away from the mean.

these numbers of people with the values per individual identified above, gives us estimates of the direct and indirect benefits of CCT per community per year.

Direct benefit

The direct benefit is calculated by multiplying the average number of CCT participants per community (from the facilitator survey) by the individual-level social value of participation, estimated at $1,080 per person per year. **The direct social benefit of CCT per community per year ranges from $88,400 to $126,000 (midpoint $107,200).**

Table 16: Calculating direct benefits per CCT community

	Lower estimate	Upper estimate
16.1 Average number of people who participated in CCT activities in the last year, per community	82	117
Coefficient	0.993	0.993
Value per WELLBY	$1,083	$1,083
16.2 Direct social benefit for those who participate, per person per year	$1,080	$1,080
Direct social benefit for those who participate, per community per year (16.1*16.2)	**$88,400**	**$126,000**

Indirect benefit

To estimate the number of non-participants who may benefit from the spillover effects of a CCT process (and while acknowledging that this number will vary considerably across the sample), we subtract the number of participants from the average population size of CCT communities.

The indirect benefits are then estimated by applying a proportional effect on the number of non-participants. The upper estimate assumes 100 per cent of all non-participants in a CCT community are affected. Our lower estimate acknowledges that not all of the wider population would be affected, taking a lower proportion of 47 per cent. Estimating this proportion was beyond the scope of the project, so this comes from our closest proxy: the proportion of non-participants who have heard of CCT (Table 8, Section 4.1.2)[134]. This results in **an estimated wider social benefit of $1.3 million to $2.9 million per community per year (midpoint $2.1 million).**

[134] This may be an underestimate, since the CCT process results in community assets (such as a health clinic) that may benefit the whole community, without the knowledge that they came about through CCT. However, it could also be an overestimate, since it is from the sample of people who agreed to respond to the survey. Either way, it is our closest proxy for the proportion of the wider population who are affected by CCT.

Table 17: Calculating indirect benefits per CCT community

	Lower estimate	Upper estimate
17.1 Average number of people who participated in CCT activities in the last year	82	117
17.2 Average population size of the community in which CCT is taking place [135]	4,446	4,446
17.3 Average number of people in the community who do not take part in CCT activities (17.2 minus 17.1)	4,364	4,331
17.4 Estimated proportion of population affected	47%	100%
17.5 Estimated population affected (17.3 multiplied by 17.4)	2,030	4,331
Coefficient	0.612	0.612
Value per WELLBY	$1,083	$1,083
17.6 Indirect social benefit for those who do not participate, per person per year	$660	$660
Approximate indirect social benefit per community per year (17.5*17.6)	**$1,339,500**	**$2,857,700**

6.3 Costs

Direct costs

Direct costs of CCT are estimated using financial data on the costs incurred by Tearfund and partners per community per year, collected from Tearfund's central finance team and country teams (see Appendix A11 for a detailed breakdown),[136] along with the monetised value of volunteer time. There is relative certainty in the Tearfund direct spending and labour costs, so this average is used as both the lower and upper estimate.[137]

[135] Here we present our conservative population size for both the lower and upper estimate. Using our full data collected, our upper estimate would have been 47,488, which is highly influenced by very high populations reported for some urban churches in Sierra Leone.
[136] Defined as the costs of 'supporting CCT communities'. For example, this includes the cost of training and mentoring facilitators, and the Tearfund staff time spent on this. In cases where the CCT process is integrated with other types of Tearfund programming (eg a livelihood intervention in Malawi, see Section 1.1), the cost of that additional programming has been included. On the other hand, there are also overhead costs from Tearfund that are necessary (such as HR, IT etc), but it was considered beyond the scope of the project to account for these.
[137] Social benefit calculations using the WELLBY give us a monetary value per year. Since data collection for phase one took place in mid 2022, and for phase two in 2023/24, calculations for costs are reported for the calendar years 2021/22 and 2023/24.

Table 18: Calculating direct costs per CCT community

	Lower estimate	Upper estimate
18.1 Tearfund and partners' spend, per community per year	$609	$609
18.2 Tearfund's labour cost, per community per year	$86	$86
Approximate direct financial cost, per community per year	**$695**	**$695**
18.3 Average number of hours CCT facilitator spends facilitating CCT activities, per facilitator per year (monthly converted to annual)	127	151
18.4 Average number of other volunteers (besides the CCT facilitator) who enable CCT to happen, per community per year	5	7
18.5 Average number of hours volunteers give to CCT activities, per volunteer per year (monthly converted to annual)	75	86
18.6 Average total hours given to CCT by volunteers, per community per year (18.4*18.5)	385	595
18.7 Average total hours given to CCT by volunteers and CCT facilitator, per community per year (18.6+18.3)	512	745
18.8 Hourly rate of volunteer's time	$1.43	$1.43
Approximate value of volunteer hours given to CCT, per community per year	**$730**	**$1,060**
Approximate direct cost (financial plus volunteer time) of implementing CCT, per community per year	**$1,420**	**$1,750**

Notes: Values 18.3, 18.4 and 18.5 come from the CCT facilitator survey (n=365). 18.3 and 18.5 were asked per month, as an easier reference point, and then converted to annual figures. Volunteers include those who enable CCT activities to happen, but excludes the CCT facilitator. Costs were reported in GBP, converted to USD using yearly average exchange rates for the year each survey was collected, and inflation-adjusted using US Bureau of Labour Statistics CPI Inflation calculator to October 2024 prices.

Volunteer hours are converted to an annual figure and multiplied by an estimated hourly wage rate, derived by applying the 5.15% ratio between UK[138] and country-specific median incomes (Section 6.2). This gives an hourly rate of $1.43.[139]

Adding together the direct financial cost and our estimate of volunteer time, **the direct cost of CCT is estimated to be $1,400 to $1,800 per community per year (midpoint $1,600).**

[138] Hourly wage rate is calculated by dividing annual median income by the number of work hours in a day (seven). Source of UK annual median income can be found here.
[139] Upper and lower estimates are informed by two averages calculated: one from all data points and one as a more conservative average, which excludes outliers. Any values at least three standard deviations away from the mean.

Indirect costs (or intermediate outputs)

Indirect costs are calculated from the value of additional resources mobilised by communities, including a) monetary contributions, b) goods, c) labour mobilised through the church and community, and d) funding that has been mobilised from other sources (eg government, private companies or NGOs other than Tearfund). These values, collected through the CCT facilitator survey,[140]are presented as upper and lower estimates, informed by averages from all data points and conservative averages excluding outliers.[141] Considering mobilised resources, **the indirect cost associated with CCT is estimated to be $3,000 to $5,100 per community per year (midpoint $4,100).**

Table 19: Calculating indirect costs per CCT community

	Lower estimate	Upper estimate
19.1 Average monetary contributions from the church and community towards CCT, per community per year	$1,403	$2,473
19.2 Average value of goods from the church and community put towards CCT, per community per year	$782	$1,261
19.3 Average value of labour from the church and community put towards CCT, per community per year	$757	$1,104
19.4 Average mobilised funds that the church and community have acquired for CCT initiatives from other sources (eg government, private companies, NGOs other than Tearfund), per community per year	$108	$304
Approximate indirect cost of intermediate outputs, per community per year, rounded	**$3,000**	**$5,100**

Notes: Values 19.1, 19.2, 19.3 and 19.4 come from the CCT facilitator survey (n=365). Unless reported in dollars (Zimbabwe) data from all countries were converted to USD using US Treasury yearly average exchange rates for the year each survey was collected, and inflation-adjusted using US Bureau of Labour Statistics CPI Inflation calculator to October 2024 prices.

Before proceeding, we need to decide how to treat these mobilised resources and where to include them in our Social Cost-Benefit Analysis. According to Tearfund's theory of change for CCT, resources mobilised by communities can be considered intermediate outputs of a CCT process – given that a significant focus is on helping people to become more aware of, and start to use, the resources they have locally (eg for improving or building new community assets). Tearfund is not paying for or providing these resources, and without the CCT process they may not have been mobilised for meeting community needs. In this perspective, mobilised resources should not be counted as costs, yet their benefits are partly captured in improved life satisfaction,

[140] Burundi's cost data was reported to be significantly higher than the indirect costs of CCT in other countries. As a result, an additional data-cleaning step was conducted with the Tearfund Burundi team to identify and address double-counting and exaggeration of figures.
[141] Any values at least three standard deviations away from the mean.

including indirect effects to the wider community. Therefore, any Social Cost-Benefit ratio may be overestimated.

On the other hand, mobilised resources could be considered secondary inputs; without them the improved wellbeing would likely not be achieved to the same extent. In this perspective, mobilised resources should be included as costs, while acknowledging that their benefits may only partly be captured through improved life satisfaction. Therefore, any Social Benefit-Cost Ratio may be underestimated.

For the purposes of this Social Cost-Benefit Analysis, these mobilised resources are being treated as a cost. The rationale is that all costs, regardless of their source, should be included in the analysis, as advised by the UK government methodology[142], and without them the wellbeing benefits could not be realised. This approach ensures a more comprehensive evaluation. A more detailed discussion is available in our phase-one report.

6.4 Net Social Benefits and Social Benefit-Cost Ratio

In Table 20, we present the total benefits and costs. The lower estimate of indirect social benefits is significantly larger than even the upper estimate of direct benefits. We have less confidence in our estimate of indirect benefits (compared to direct benefits), since it relies on untested assumptions about *how much* of the wider CCT community experiences spillover effects. However, the difference between direct and indirect costs is less pronounced.

Table 20: Calculating total costs and benefits per community

	Lower estimate	Upper estimate
Direct social benefits	$88,400	$126,000
Indirect social benefits	$1,345,500	$2,870,500
Approximate total benefits	**$1,433,900**	**$2,996,500**
Direct cost of implementing CCT (financial plus volunteer time)	$1,420	$1,750
Indirect cost of mobilised resources	$3,000	$5,100
Approximate total costs	**$4,420**	**$6,850**

Therefore, to avoid overstating benefits and presenting implausibly high BCRs, we report our main Net Social Benefit (NSB) and Social BCR using only direct benefits and total costs (both direct and indirect[143]). The main

[142] HM Treasury (2022).
[143] Approach C as outlined in Section 6.1.

calculation shows that the **Net Social Benefit of CCT is approximately $101,600**, ranging from $81,600 to $121,600, per community per year, based on direct participation. **The Social BCR is approximately 1:21**, ranging from 1:13 to 1:29, meaning that for every $1 invested (by Tearfund, partners, facilitators, other volunteers and the community), approximately $13 to $29 (midpoint $21) in social value is generated.

Box 10 | Main calculation of NSB and Social BCR using direct benefits and total (direct + indirect) costs

The Net Social Benefit (NSB) of CCT per community per year is calculated as the difference between the total estimated benefits and costs at the community level:

Direct social benefit of CCT	-	Total cost of implementing CCT	=	Net Social Benefit
$88,400–$126,000		**$4,420–$6,850**		**$81,600–$121,600 (midpoint: $101,600)**

Alternatively, the Social Benefit-Cost Ratio (Social BCR) is derived by dividing the estimated benefit by the total cost per community:

Social benefit of CCT		Social Benefit-Cost Ratio (Social BCR)	
$88,400–$126,000	=	**12.9–28.5**	**~1:21**
Cost of implementing CCT			
$4,420–$6,850			

A positive NSB (greater than 0) or a BCR greater than 1 indicates that the intervention is a worthwhile social investment compared to the counterfactual (do-minimum) baseline scenario.

Box 11 | Comparing Tearfund and partner costs, community inputs and direct benefits

To determine what community resources and benefits are unlocked by Tearfund and partners' investments into the CCT process, we compare direct financial costs with community costs (ie indirect costs and volunteer time), and with direct benefits:

For every $1 invested in implementing the CCT process, communities mobilise approximately $7.1 worth of time and resources ($5.4–$8.9 using upper and lower estimates), **which ultimately creates $154 of social value in terms of improved wellbeing**.

6.5 Sensitivity testing of Net Social Benefit and Social Benefit-Cost Ratio

There are many parameters to consider in the NSB and Social BCR. In this section we consider what the Social BCR calculation in Box 5 would be if other parameters had been chosen.

6.5.1 Using a more conservative estimate of the direct benefits, and including direct and indirect costs

If we focus on the individual-level benefit of participating in CCT compared to *living in a CCT community and not participating in the CCT process* (rather than compared to non-CCT communities (the coefficient of 0.381)), total direct benefits would be $33,800 to $48,100. Using our direct and indirect costs ($4,420–$6,850), this perspective results in a Social BCR of 4.9 to 10.9. However, we have eliminated the comparison to control communities.

6.5.2 Including direct benefits, direct costs and volunteer time only

If indirect costs mobilised and secured by the community ($3,000 to $5,100) were *not included,* total direct costs would be $1,420 to $1,750. Using our direct benefits from Section 6.2 ($88,400–$126,000), this tighter definition of inputs results in a Social BCR of 51 to 89. However, we have excluded inputs (mobilised resources), which are vital to the CCT process.

6.5.3 Including direct benefits and direct costs only

CBA best practice is to consider all costs to any part of society needed for CCT to take place, irrespective of where these come from.[144] Hence, our main CBA calculation includes inputs from facilitators and the community, as well as Tearfund and partners. We appreciate that some audiences may wish to consider the inputs from Tearfund and partners *only*. If indirect costs mobilised and secured by the community ($3,000 to $5,100) *and* volunteer time ($730 to $1,060) were *not included*, total direct costs would be $695. Using our direct benefits above ($88,400–$126,000), this even tighter definition of inputs results in a Social BCR of 154

[144] Best practice is also to include all benefits; however, our main calculation excludes the wider benefit as our estimates of effect size and number of people affected are less reliable. For completeness, we consider a perspective with all benefits in the sensitivity analysis as well.

(127 to 181). However, for this Social BCR we have excluded inputs (mobilised resources *and* volunteer time), which are vital to the CCT process. If this Social BCR is used, it should acknowledge that the $1 invested by Tearfund and partners is coupled with an additional $1.1 to $1.5 of volunteer time per community,[145] and an additional $4.3 to $7.3 worth of mobilised resources per community ($5.4 to $8.9 of community inputs in total),[146] in order to realise the benefits .[147]

6.5.4 Including direct and indirect benefits and direct and indirect costs

If the estimated wider benefits to non-participants in the community ($1.3m to $2.9m) *were included* in the calculation, total benefits would be $1.4m to $3m. Using our direct and indirect costs above ($4,420–$6,850), this wider definition of benefits results in a Social BCR of 442 (208 to 678). However, we might be overclaiming the wider benefits by applying our observed benefit to large parts of the local community.

6.5.5 Including direct benefits and a broader definition of direct and indirect costs

We noted above that the direct costs of CCT are estimated using financial data on the costs incurred by Tearfund and partners per community per year. If we were to incorporate not only the direct costs to Tearfund and partners and indirect costs to communities related to CCT, but a relevant proportion of Tearfund's fundraising, running and support costs[148], which sustain Tearfund's key global functions like fundraising, financial management, human resources, IT, logistics, and regional personnel, total costs would be $4,640–$7,070. Using our direct benefits of $88,400–$126,000, this broader definition of costs results in a Social BCR of $20 (12.5-27.2). Turning again to the community resources and benefits unlocked by Tearfund and partners' investments into the CCT process, we can compare direct costs, now including fundraising, running and support costs, with indirect community costs, and with direct benefits, resulting in a ratio of 1:5:117, respectively.

[145] Volunteer time divided by Tearfund inputs. 730/695 = 1.1 and 1,060/695 = 1.5.
[146] Mobilised resources divided by Tearfund inputs. 3,000/695 = 4.3 and 5,100/695 = 7.3.
[147] If one single ratio is needed, it would be fair to take the midpoint of these values: 1:7.1 or rounded to 1:7. Note this is the comparison made in Box 6.
[148] As in the 2024/24 Tearfund Annual Report (p64), for every £1 donated, 25 pence goes to Tearfund fundraising, running and support costs, which suggests an overhead rate, and therefore an addition to the direct costs, of 33% (25/75=⅓).

Key finding #5: The overall social value of CCT processes is high

What is the overall social value of CCT processes?

The social value of the CCT process is approximately $21 for every $1 invested. The direct social benefit of CCT is approximately $107,200 per community.[149] This includes those who participate directly. Considering the potential impact on the wider community who do not participate, the indirect social benefit of CCT is approximately $2.2 million per community. In order to not overclaim the benefit, in our Social Benefit-Cost Ratio we include the direct benefits only. When considering costs, we find that for every $1 invested in CCT (by Tearfund, partners, facilitators, volunteers and the community), approximately $21 in social value is generated. This equates to a Net Social Benefit of $101,600 per community per year. Considering Tearfund and partners only, for every $1 invested in CCT, approximately $7 is secured in community resources (facilitators, volunteers and the community). In turn, approximately $154 in social value is generated.

[149] Due to relative uncertainty of these values, we have used ranges throughout our analysis in Section 6, but report midpoints here.

7. Summary of findings

Findings are drawn from regression analysis, which means these differences are, as far as possible, attributable to CCT and not to other factors controlled for in the models.

Key finding #1: Living in a CCT community is associated with increased wellbeing.

Is living in a CCT community associated with increased wellbeing (across four domains: economic and environmental, personal, social and spiritual)?

Life satisfaction, plus 26 out of 28 wellbeing measures, are higher in CCT communities than in communities which have not yet started a CCT process.

Life satisfaction is 0.86 points higher (on a scale of 0 to 10) in CCT communities. Beyond life satisfaction, and averaged across our four domains, people in CCT communities are 10 percentage points more likely to respond positively, compared to those in non-CCT communities. Positive differences are found across all domains, with greatest differences observed in social and spiritual wellbeing; those living in CCT communities are 14 percentage points more likely to respond positively for social wellbeing measures and 12 percentage points more likely to respond positively for spiritual wellbeing measures. The two wellbeing measures for which there is no significant difference between CCT and non-CCT communities are avoiding illness and women's participation in financial decisions.

Key finding #2: Living in a CCT community is associated with increased wellbeing, whether or not a person participates in CCT activities. Being a participant is associated with even greater benefits, and there appears to be some spillover of benefits to the wider community too.

Is living in a CCT community associated with increased wellbeing (across four domains: economic and environmental, personal, social and spiritual) both for participants (those who take part in CCT activities or initiatives) and for non-participants (those who live in CCT communities but do not take part)?

For participants compared to people in non-CCT communities, life satisfaction is 0.99 points higher (on a scale of 0 to 10), and the average likelihood of responding positively for other wellbeing measures is 12pp higher. Higher likelihood of responding positively is found for 27 out of 28 wellbeing measures, with the greatest difference observed in social and spiritual wellbeing.

For non-participants compared to people in non-CCT communities, life satisfaction is 0.61 points higher (on a scale of 0 to 10), and the likelihood of responding positively for other wellbeing measures is 5pp higher. Higher likelihood of responding positively is found for 22 out of 28 wellbeing measures, with the greatest difference observed in spiritual wellbeing.

Furthermore, comparing participants to non-participants improves the robustness of our findings on the impact of CCT processes. Life satisfaction is 0.38 points higher (on a scale of 0 to 10) for participants

compared to non-participants, and their likelihood of responding positively is 7pp higher. This higher likelihood is found across all domains, and for 23 out of 28 measures, with the greatest differences observed in social wellbeing.

This suggests that CCT processes most strongly benefit those most closely involved, particularly in terms of their social and spiritual wellbeing. There are also spillover effects of a CCT process to the wider community: even individuals who do not directly participate in CCT activities benefit, particularly in terms of their spiritual wellbeing.

Key finding #3: Increased wellbeing is sustained throughout, and beyond the end of, the formal CCT process.

Is increased wellbeing sustained throughout and beyond the CCT process?

By comparing communities engaged in CCT for different lengths of time, we can make inferences about how the impact changes over time. It appears that CCT processes initially make the biggest improvements in spiritual and social wellbeing, and as communities continue engaging with the process, greater impact spreads to other domains of wellbeing – economic and environmental, and personal.

The higher life satisfaction reported in CCT communities is sustained throughout, and beyond the end of, the formal CCT process: it is similar regardless of whether the communities have been engaged for 0–2 years or 5+ years (+0.80 points for those engaged for 0–2 years and +0.88 points for those engaged for 5+ years, on a scale of 0–10).

The average pp difference in wellbeing, between CCT and non-CCT communities, is larger for 0–2 year CCT communities than for 5+ year CCT communities. In addition, the difference in spiritual and social wellbeing is largest when comparing 0–2 year CCT communities to non-CCT communities. However, for 5+ year communities compared to non-CCT communities, higher wellbeing is observed for more measures (26 compared to 24 measures) and is stronger in the economic and environmental, and personal, domains. In contrast, the difference in spiritual wellbeing is less pronounced when comparing 5+ year CCT communities to non-CCT communities (+2pp, compared to a difference of 13pp between 0–2 year CCT communities and non-CCT).

Key finding #4: Higher life satisfaction associated with living in a CCT community is found in multiple different contexts.

Is this increased wellbeing found only in specific contexts?

It is observed for a variety of CCT processes of different intended lengths, at different points in time, and in all other sub-samples for which it was specifically tested; ie not only in Africa, rural areas or majority Christian contexts.

Key finding #5: The overall social value of CCT processes is high.

What is the overall social value of CCT processes?

The social value of the CCT process is approximately $21 for every $1 invested. The direct social benefit of CCT is approximately $107,200 per community.[150] This includes those who participate directly. Considering the potential impact on the wider community who do not participate, the indirect social benefit of CCT is approximately $2.2 million per community. In order to not overclaim the benefit, in our Social Benefit-Cost Ratio we include the direct benefits only. When considering costs, we find that for every $1 invested in CCT (by Tearfund, partners, facilitators, volunteers and the community), approximately $21 in social value is generated. This equates to a Net Social Benefit of $101,600 per community per year. Considering Tearfund and partners only, for every $1 invested in CCT, approximately $7 is secured in community resources (facilitators, volunteers and the community). In turn, approximately $154 in social value is generated.

[150] Due to relative uncertainty of these values, we have used ranges throughout our analysis in Section 6, but report midpoints here.

8. Limitations, discussion and options for further study

8.1 Potential selection bias in the choice of first communities to implement CCT

Our non-CCT communities should be similar to CCT communities, hence should be at a similar theoretical 'baseline' before the implementation of CCT in the community. Our best choice of non-CCT communities were those that have not yet done CCT but it is planned they will take part in the future (Section 3.2.3). We explored the risk of a consistent and systematic reason certain communities were selected to first implement CCT (therefore giving them a different 'baseline' wellbeing), resulting in our estimates suffering from selection bias.

Selection of communities to implement CCT is based on three criteria i) level of need, ii) level of engagement of church leaders, and iii) geographical accessibility. The relative importance of these three factors vary by partner and between countries. We should consider how this criteria may influence the 'baseline' in CCT communities and control communities.

- Selecting communities based on level of need implies that those selected first (CCT communities) are likely to have had a lower baseline compared to control communities, and hence may downward bias our estimates of the impact of CCT.
- The level of engagement of church leaders may reflect the readiness of church members (and perhaps even the wider community) to engage, hence may imply a higher baseline for CCT communities for some social wellbeing measures such as 'working on a shared project'. It is unlikely this is reflected in baseline life satisfaction and other wellbeing measures. On the other hand, church leaders in non-CCT communities may in fact have higher willingness to engage; they have given up their time to mobilise the community for this research without yet having experienced the positive impacts of CCT. Bias due to this criterion could be in either a positive or negative direction.
- The level of geographic accessibility influenced the selection not only of CCT communities, but also of control communities for this research project. Therefore, it is unlikely that the criterion has a systematic effect.

To sum up, we conclude that downward bias on our estimates of the impact of CCT is overall more likely than upward bias. We also conclude that our control variables, which are proxies for socio-economic status (food poverty and detailed geographical area), sufficiently account for some systematic differences between CCT communities and non-CCT communities. ***We therefore saw no justification for applying an adjustment to account for selection bias of CCT communities.***

8.2 Potential selection bias in mobilisation of respondents

We considered the possibility that individuals who were able to take part in the survey were more satisfied and had better wellbeing for reasons unrelated to their participation in CCT. To this end, potential systematic bias influencing respondents mobilised to take part was mitigated by implementing a rough *stratified sampling* technique within each community (Section 3.2.3).

The threat comes if the CCT facilitator specifically selects survey respondents they expect to report higher wellbeing. This bias was reduced through the implementation of a stratified sampling technique and specific mobilisation instructions; partners and CCT facilitators were given parameters to follow in order to achieve the right mix of survey respondents on the day of data collection.

Stratification could not be followed perfectly (for ethical reasons enumerators were trained to not turn away people who had given up their time). The level of involvement of eventual respondents in CCT communities (27 per cent do not participate in CCT activities, Table 4, Section 4.1) is evidence this stratification was largely followed. In addition, non-participants appear distant from CCT, with 47 per cent reporting they have not heard of CCT (Table 8, Section 4.1.2). ***We therefore conclude that selection bias of chosen respondents was sufficiently minimised through our stratified sampling technique.***

8.3 Potential selection bias in those who continue taking part

We consider the possibility that our estimates on those who participate are biased due to unobservable personality characteristics that influence a person's propensity to 'select into' a programme or to continue once they are in; those who participate in CCT (and choose to continue) are making a conscious choice to do so.

Bias caused by the unobservable characteristics (for example, being more motivated) that make certain people more likely to select into, or continue on, a programme is more difficult to mitigate in cross-sectional analysis. Other research techniques that could address this bias (such as longitudinal data collection[151]) were not feasible.

An advantage of multiple research questions (and multiple ways of defining the 'intervention') means that we are not relying on any one comparison, which might suffer from the worst selection bias. For example, our comparison involving maturity of the CCT process in the community (regardless of how long individuals have been involved) eliminates influences of the choice of individuals to select into or continue participating. ***Nevertheless, we must acknowledge that the conclusions we draw about the impact of participating in CCT may be affected by unobservable selection bias; there may be differences we cannot measure between the individuals who choose to participate and those who do not. Future studies could also explore this through capturing whether individuals previously participated but no longer do so.***

[151] Data that is collected repeatedly over time from the same individuals, households, or establishments.

8.4 Attribution to CCT processes and not other development agencies

There is a challenge of knowing what might have happened in CCT communities if a CCT process had not been undertaken, particularly in terms of mobilised resources for community assets. Tearfund's stakeholder mapping indicates that many communities have other agencies operating in them. We explored the presence and role of other development agencies, including their role in caring for people in vulnerable situations, and tested statistically if the effect of CCT could be due to other agencies.

Firstly, we explore whether other development agencies are more often reported in CCT communities than non-CCT communities. This comparison was not feasible in phase one, as this question was not asked in non-CCT communities. The church health survey in phase two enabled us to make this comparison. For phase-two countries, ***development agencies are reported more often in CCT than non-CCT communities***: 41 per cent of CCT communities compared to 25 per cent in non-CCT communities.

Secondly, we explore whether the community assets due to CCT (Section 4.3) are more commonly reported when other development agencies are also reported.[152] ***We find that the likelihood of facilitators reporting new or improved assets due to CCT is higher when other agencies are also present*** (see Appendix A14). This is true across all types of assets, although for roads and schools the difference is insignificant. The likelihood of health clinics (21 per cent compared to 7 per cent) and improved water access (38 per cent compared to 27 per cent) being reported is higher when other development agencies are present. This may be due to increased awareness of other agencies through the building of assets, or complementary interventions: assets may be more likely to be built if they are done so with other agencies. The greatest differential is for health clinics, perhaps the asset which requires most external specialism.

Thirdly, we consider how respondents report the care provided for people in vulnerable situations across different agencies, comparing CCT communities and non-CCT communities. All respondents were asked who cares for the vulnerable from given options including non-government organisations (NGOs). ***Across all the given options, people in CCT communities are more likely to report that different agencies provide care for the vulnerable***[153] (Appendix A14). The greatest differential is observed for religious organisations (a difference of 16 percentage points), followed by NGOs (a difference of 15 percentage points).[154] For other external actors (private companies, government and civil-society organisations) the differential is between 10 and 11 percentage points. It could be that all potential actors, including the government, have a greater presence in CCT communities, but this is considered unlikely. It is considered more likely that those in CCT communities have greater awareness of who cares for people in vulnerable situations, particularly religious organisations. Our analysis of wellbeing measures shows engagement in advocacy (raising issues to decision-makers and influencing decisions in the community) is higher in CCT communities. Helping others in need is considered an outcome of CCT (spiritual domain), and we observe that people in CCT communities report higher rates of

[152] In phase one, presence of other agencies and community assets reported was answered by facilitators in the wellbeing survey. In phase two, the same questions were asked of facilitators in the church health survey. These have been brought together for the sake of these tests, and appended with our main dataset.

[153] These differences are statistically significant based on a simple t-test.

[154] Differences based on descriptive statistics, not regression analysis.

support for people in vulnerable situations from family, relatives and friends: 7 percentage points (although, given the differential observed in other agencies, we might expect this difference to be greater).

Lastly, we consider whether the higher wellbeing associated with living in a CCT community could actually be down to other agencies and not CCT. We test the impact of including 'presence of other agencies' as an additional control in our model, using the sample for which it is possible.[155]

Repeating Model 1 for this sample, we find that living in a CCT community is associated with higher life satisfaction, by +0.57 points. ***When we control for other agencies, the coefficient on CCT is marginally smaller but remains similar*** (+0.55***). The coefficient on our control for other agencies is significant (+0.133***), ***but this estimated impact of other agencies is smaller in magnitude than the estimated impact of CCT.*** Furthermore, exploring these as interaction terms shows us that ***the association between CCT and life satisfaction is marginally higher in communities where other development agencies are also present***. In non-CCT communities specifically, the presence of other agencies is associated with +0.409 points in life satisfaction; ***other agencies seem more impactful in non-CCT communities***. In order to use the full sample, we also test the impact of including 'NGOs' care for the vulnerable' in our model. Repeating Model 1 – for the sample for whom this question is answered[156] – we find that living in a CCT community is associated with +0.88 points higher life satisfaction.[157] ***When we control for whether NGOs support the vulnerable, the coefficient on CCT is smaller but remains similar*** (+0.87***). The coefficient on our control for NGOs supporting people in vulnerable situations is significant, but the ***estimated impact of other NGOs caring for people in vulnerable situations is smaller in magnitude than that of CCT*** (+0.083***).

In summary, CCT processes increase likely awareness of other development agencies, and these other agencies likely complement the CCT processes. However, there is limited concern that other development agencies (we can account for) influence wellbeing more than CCT does.

In our Social Cost-Benefit Analysis, resources mobilised by CCT communities (often mobilised for building or improving community assets) are considered costs of CCT processes. If some of these resources would have been mobilised even without the CCT process, the more likely potential error is that we may be overestimating the cost of CCT (rather than potentially overestimating the benefit attributable to CCT).

The presence of other agencies is asked directly of CCT facilitators, so not externally verified. Independently exploring the attribution of developmental outcomes to different development actors would involve a complex study. Tearfund may wish to connect more closely with development agencies working in CCT communities in order to coordinate efforts and maximise potential outcomes.

8.5 Potential further omitted variable bias

[155] The question on presence of other agencies was only asked of non-CCT communities as well as CCT communities in phase two, hence this restricts us to our four phase-two countries. In addition, it was missing for four communities, which must be excluded. This leaves us a sample of 7,249 responses from phase-two countries.

[156] The sample is matched exactly when doing these sensitivity tests so that the only difference between the models is the additional control.

[157] Similar to our reported coefficient in Model 1, 0.857, since the only difference is we excluded those who skipped the questions around who supports the vulnerable.

In non-randomised quantitative research there is likely to be some form of omitted variable bias (we cannot measure everything) but it is important to consider where this threat is likely and where it can be reduced. Wellbeing might be affected by other external factors, such as environmental shocks or economic policy. We use data from the church health survey (therefore phase-two countries only), and compare how common reported shocks are between CCT and non-CCT communities (Appendix A15). We find that drought, flood, crop failure and conflict are more commonly reported in CCT communities, and bushfire and disease (other than Covid-19) are more commonly reported in non-CCT communities. Some of these differences are insignificant (flood, disease and conflict). Drought is reported in 29 per cent of CCT communities (compared to 20 per cent of non-CCT communities), crop failure is reported in 43 per cent of CCT communities (compared to 31 per cent of non-CCT communities) and bush fire is reported in five per cent of non-CCT communities (compared to one per cent of CCT communities).

We consider whether the wellbeing effect associated with CCT changes when we control for these shocks. As above, we do this on the sample for which it is possible (phase-two countries, and those for which we hold data on shocks).[158] Repeating Model 1 for this sample, we find that living in a CCT community is associated with higher life satisfaction by +0.56 points. We repeat this model controlling for all shocks. ***When we control for external shocks, the coefficient on CCT is similar*** (+0.57***). Our control for conflict has a negative coefficient (-0.145*), which makes intuitive sense that conflict is associated with lower wellbeing. Otherwise it is only our control for drought that has a significant coefficient, interestingly positive (+0.209***). ***Therefore our main finding is robust to the influences of external shocks that we have been able to account for. Nonetheless, in this type of analysis some omitted variable bias may remain.***

8.6 Survey translation

The survey was professionally translated into 11 different local languages. Necessary steps were taken to ensure translation errors were avoided, such as number coding of the questions and answers.

The research team was aware that translation into different languages may lead to slight inconsistencies in interpretation of questions. It was considered that having many measures of wellbeing could help mitigate the influence of this: if a conclusion is found over multiple measures, we can be more confident that misinterpretation of translated questions has not biased results. In addition, each training session of enumerators included some time studying and understanding the English language survey, and ensuring a good understanding of each question. Afterwards, time was dedicated to studying local language versions, ensuring that the essence of the question was captured. At this point some minor tweaks and corrections were made to the professional translation. With these actions in place, the ***increased accessibility of having the survey in a local language outweighed any potential bias***.

8.7 Using the WELLBY in low- and middle-income countries

[158] This leaves us a sample of 7,209 responses from phase-two countries.

The life satisfaction question may be understood differently in low-income contexts, although our analysis reveals that various demographics impact life satisfaction in our data in the same way they do in UK data: those who are female, have a higher level of education or are retired tend to have higher life satisfaction. Having a disability that affects your daily life, being unemployed or living in food poverty are associated with lower life satisfaction (see full regression results in Appendix A8). Therefore, ***we can be confident that life satisfaction is an appropriate summary measure of wellbeing in our study contexts***. As explained in Section 6.2, our approach of converting the WELLBY value using the ratio between median income in the UK and our eight countries is the best option given constraints of available research. It is important to note that this value should be accompanied by the necessary caveats: that it is based on UK research, it assumes the relationship between income and wellbeing in our eight countries is similar to in the UK, and that the monetary value is converted using the best available data on median income.

8.8 Appended data from two different rounds of data collection

Data was collected over two different rounds of data collection, using different survey platforms. While some improvements were made between phase one and phase two (such as asking wellbeing questions first in the survey), consistency was considered the main priority: ensuring consistent question formats and answer options. To account for differences in monetary benefits and costs between years, we adjust for inflation to report values in real terms. ***Overall, appending two different rounds of data did not compromise the validity of the overall dataset. However, we should be mindful that for some wellbeing measures added in phase two – those reflecting physical health, care of the environment and some measures reflecting living faith – the findings reflect only four countries and not all eight.***

8.9 Benefits are assumed to be consistent across all members of the population

Aside from one wellbeing measure which restricts the sample – women's participation in financial decisions – all research questions are answered using the pooled sample, maximising the sample size. It was beyond the scope of this study to consider how wellbeing impacts might differ for different people. ***Further study using this data could explore if the impact of CCT varies for specific subgroups of the population such as men and women, or younger and older people.***

8.10 Longer-term impacts and sustainability

This study's timeframe is limited to a single year, which may not capture the full range of long-term benefits. The initial investment in the CCT process is front-loaded, while resulting improvements in people's lives are realised over a longer horizon. As a result, our estimate of net social return is likely to be conservative. ***Future studies could extend over a longer timeframe (eg the full length of the 'formal' CCT process) to offer a more comprehensive evaluation.***

The hypothesis outlines an aim to investigate changes that are 'sustained' over time. We have explored CCT maturity and the impact in communities that have been engaged in a CCT process for more than five years. Within this group, the average length of time implementing a CCT process is 7.5 years, and 15 of our surveyed

communities have been implementing CCT processes for at least ten years. ***Therefore, we have considered it appropriate to conclude that the increased wellbeing associated with CCT is sustained for some years (Key finding #3). However, further studies could explore sustainability in more depth (with a bigger sample of CCT communities engaged for 10+ years) or explore whether the impact is sustained even in CCT communities that may have 'dropped out' of the CCT journey and stopped practising CCT principles (by intentionally sampling such communities).***

8.11 Wider social and economic benefits

Our social value calculation focuses on direct wellbeing benefits for participants. Our evidence also suggests there are likely to be indirect benefits for the wider community, but these were excluded in our main assessment due to their relative uncertainty. It was also beyond the scope of the study to more specifically consider the economic impact of new and improved community assets (such as roads and improved water sources, Section 4.3). It is likely these assets result in productivity gains and a multiplier effect (eg through improved access to markets), perhaps even benefiting those outside the considered 'community'. Other productivity gains may come through learning from others while working together. A fuller assessment could offset any benefit with productivity foregone in independent work in order to participate in CCT. Community assets may also reduce pressure on public services (eg building of schools and clinics), which have not been considered here. When we consider these wider impacts, it again suggests our estimates of social value are conservative. It is likely that the benefit goes beyond the direct wellbeing benefit to participants we have included. ***Further work could consider a fuller assessment of the wider social benefits, or the net economic benefits to communities.***

Bibliography

Blackham, Jodi, Grace Kariuki and Esther Lindop (2021) *An introduction to church and community transformation (CCT): Overcoming poverty through a whole-life response to the gospel,* London, UK: Tearfund. https://learn.tearfund.org/en/resources/tools-and-guides/an-introduction-to-church-and-community-transformation-cct

Daehnhardt, Madleina, and Cathy Bollaert (2021) *Doing research ethically – principles and practices for international development practitioners and evaluators*, London, UK: Tearfund and Christian Aid. https://learn.tearfund.org/en/resources/tools-and-guides/doing-research-ethically

Diofasi, Anna and Nancy Birdsall (2016) 'The World Bank's Poverty Statistics Lack Median Income Data, So We Filled In the Gap Ourselves – Download Available' www.cgdev.org/blog/world-bank-poverty-statistics-lack-median-income-data-so-we-filled-gap-ourselves-download-available

Fawcett, Rose, Lizzie Trotter, Will Watt and Iulian Gramatki (2023) *Church and community transformation (CCT) impact study series Local church, lasting transformation: 2022 Technical Report*, London, UK: State of Life. https://res.cloudinary.com/tearfund/image/fetch/https://learn.tearfund.org/-/media/learn/resources/impact-reports/2023/2023-tearfund-impact-report-cctimpactstudyseries-2022-en.pdf

Fujiwara, Daniel and Ross Campbell (2011) *Valuation Techniques for Social Cost-Benefit Analysis: Stated Preference, Revealed Preference and Subjective Well-Being Approaches,* London, UK: HM Treasury and Department for Work and Pensions. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/209107/greenbook_valuationtechniques.pdf

Fujiwara, Daniel, Laura Kudrna and Paul Dolan (2014) *Quantifying and Valuing the Wellbeing Impacts of Culture and Sport,* London, UK: Department for Media, Culture and Sport. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/304899/Quantifying_and_valuing_the_wellbeing_impacts_of_sport_and_culture.pdf

Helliwell, John F., Richard Layard, Jeffrey D. Sachs, Jan-Emmanuel De Neve, Lara Aknin & Shun Wang (Eds.) (2024) *World Happiness Report 2024,* University of Oxford: Wellbeing Research Centre. https://worldhappiness.report/ed/2024/#appendices-and-data

HM Treasury (2021) *Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance*, London, UK: HM Treasury. www.gov.uk/government/publications/green-book-supplementary-guidance-wellbeing

HM Treasury (2022) *The Green Book: appraisal and evaluation in central government*, London, UK: HM Treasury and Government Finance Function. www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government

HM Revenue & Customs (2024) *HMRC currency exchange average rates*, London, UK: HMRC. www.trade-tariff.service.gov.uk/exchange_rates/average

Kristoffersen, Ingebjørg (2017) 'The metrics of subjective wellbeing data: An empirical evaluation of the ordinal and cardinal comparability of life satisfaction scores', *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*, vol 130 (2) pp. 845–865. https://ideas.repec.org/a/spr/soinre/v130y2017i2d10.1007_s11205-015-1200-6.html

Leibniz Institute for the Social Sciences (2023) 'International Social Survey Programme' www.gesis.org/en/issp/home

Office for National Statistics (2018a) 'Surveys using our four personal well-being questions' www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/surveysusingthe4officefornationalstatisticspersonalwellbeingquestions

Office for National Statistics (2018b) 'Personal well-being frequently asked questions: What is meant by 'evaluative' 'eudemonic' and 'affective' well-being?' www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/personalwellbeingfrequentlyaskedquestions#what-is-meant-by-evaluative-eudemonic-and-affective-well-being

Office for National Statistics (ONS) (2022) *Annual Survey of Hours and Earnings time series of selected estimates,* London, UK: ONS. www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/ashe1997to2015selectedestimates

Randolph, Gregory and Michael Storper (2022) 'Is urbanisation in the Global South fundamentally different? Comparative global urban analysis for the 21st century', *Urban Studies Journal*, vol 60 (2023) pp. 3–25.

Shi, Yipu, Craig Joyce, Ron Wall, Heather Orpana and Christina Bancej (2019) 'A life satisfaction approach to valuing the impact of health behaviours on subjective well-being', *BMC Public Health,* vol 19 (1547) pp. 1–11.

Social Value UK (2023) 'What is Social Value and Why does it matter?' https://socialvalueuk.org/what-is-social-value/

State of Life (2023) 'Social value and wellbeing economics' www.stateoflife.org/

Tearfund (2018) 'Flourishing Churches, Flourishing Communities: Church and community mobilisation in Uganda' learn.tearfund.org/-/media/learn/resources/reports/2018-tearfund-flourishing-churches-flourishing-communities-ccm-in-uganda-en.pdf

Tearfund (2019) *Church and Community Mobilisation Process Facilitator's Manual,* London, UK: Tearfund. https://learn.tearfund.org/en/resources/series/church-and-community-mobilisation-process-ccmp/ccmp-facilitators-manual

Tearfund (2021a) ‘Researching the impact of the local church and CCM: Qualitative Impact Assessment Protocol (QuIP) studies on the impact of church and community mobilisation’ https://learn.tearfund.org/en/resources/research-report/researching-the-impact-of-the-local-church-and-ccm

Tearfund (2021b) ‘Flourishing Churches, Flourishing Communities: Church and community mobilisation process in Sierra Leone’ learn.tearfund.org/-/media/learn/resources/reports/2021-tearfund-sierra-leone-quip-report-en.pdf

Tearfund (2022) *A short introduction to the CCT theory of change: How church and community transformation is achieved,* London, UK: Tearfund. https://learn.tearfund.org/en/resources/tools-and-guides/how-church-and-community-transformation-is-achieved

Tearfund (2025) ‘About us’ www.tearfund.org/about-us

Tearfund (2024) *The Light Wheel toolkit: A facilitator’s guide to understanding and measuring holistic wellbeing,* London, UK: Tearfund. https://learn.tearfund.org/en/resources/tools-and-guides/the-light-wheel

Tinkler, Lucy and Stephen Hicks (2011) *Measuring subjective well-being,* London, UK: Office for National Statistics. www.ons.gov.uk/ons/guide-method/user-guidance/well-being/wellbeing-knowledge-bank/understanding-wellbeing/measuring-subjective-well-being.pdf

U.S. Bureau of Labor Statistics (2024) *CPI Inflation Calculator*, Washington D.C., U.S.: BLS. www.bls.gov/data/inflation_calculator.htm

World Values Survey Association (2020) ‘World Values Survey’ www.worldvaluessurvey.org/wvs.jsp

Appendices

A1 Criteria for country selection for the research

a) The CCT process is currently being implemented at scale in the country. This means it is not limited to a few localised places, but is at regional or national scale.
b) Maturity of the CCT process – there should be sufficient churches that have been through the whole cycle (generally four or more years).
c) The country team has an existing evidence base with a good monitoring system in place to track outputs and outcomes.
d) There is a clear theory of change/understanding of the exact CCT process being used.
e) Capacity of the country team to engage with the study and recruit, deploy and manage local enumerators (for example, from universities, research organisations or researcher networks).
f) Ability of the country team to calculate the financial investment into CCT.
g) Freedom/ability for impact data generated (including the role of the church) in the country to be communicated widely and without restriction.

A2 The sample aim – communities and respondents

	Phase 1 (four countries)	Phase 2 (four countries)	Overall sample (all eight countries)
Communities			
CCT communities	50 per country	50 per country	400
Non-CCT communities	5 per country	17 per country	88
		Total communities:	**488**
Individuals			
CCT participants	*25 per community*	*25 per community*	*10,000*
Non-participants who live in CCT communities	*5 per community*	*5 per community*	*2,000*
		CCT community responses:	12,000
Non-CCT community respondents	100 per community	30 per community	-
		Non-CCT community responses:	4,040
		Total respondents:	**16,040**

A3 Participation information sheet – example from Tanzania

My name is [enumerator's name] and I am working on behalf of Tearfund. You may have heard of Tearfund, or you may have heard of our partner – [relevant partner name]. Together, Tearfund and [partner name] support a process called church and community transformation (CCT). We are visiting 50 communities in Tanzania, including this one today, to conduct research into the impact of CCT on the wellbeing of individuals and communities.

Invitation to take part

We would like to invite you to participate in this research study by responding to a short survey. If you do choose to participate, I will ask you questions about various aspects of your life, including your wellbeing, material assets, personal relationships and social connections. The questions are not specifically about CCT, so you can answer them even if you have not heard of CCT. However, if I ask you a question that you do not understand or are not comfortable answering, you can ask me to clarify it. The survey will take approximately 15 minutes to complete. I will record your responses in an online application.

There are a few more things I need to tell you about before you decide whether to take part or not, including how we will use the information you share with us. Is that okay?

How we will use the information

If you take part, the information that you provide will be used only for the purpose named above – assessing the impact of CCT. It will become part of a large electronic dataset that will be stored safely and securely, and only for as long as it is being used for the purpose. The dataset itself will only be accessible to authorised members of the research team, who will analyse it to understand the impact of CCT. Then we will write a report about our findings. We will publish the report online by the end of this year, on the following websites: www.tearfund.org and www.learn.tearfund.org

Ultimately, we will be able to use the findings to promote support for CCT and introduce it to more churches and communities in Tanzania and beyond.

Any personal data (information that may identify you) that we collect today will be known only to authorised members of the research team and not disclosed publicly. Nobody outside of the research team will be able to link the answers that you give back to you.

Certainly none of your personal data will be included in the report that we publish on our websites: it will not be possible for anyone to identify you from the report.

Your right to opt out

Your participation in the study is voluntary. I am going to ask you whether you are happy to take part, and it is fine for you to answer 'no' – we will not collect any data from you and there will not be any negative consequences. If you say 'yes' and we go ahead with the survey, you can still change your mind at any time and ask me not to continue. Please also feel able to ask me questions at any time. Do you have any questions for me at the moment?

Consent questions		
Do you confirm that you have understood the information provided about the study?	▢ YES	▢ NO
Do you understand that your participation is voluntary and that you are free to withdraw at any time without giving a reason and without any negative consequences?	▢ YES	▢ NO
Do you agree to take part in the study?	▢ YES	▢ NO

How to contact us

All individuals involved in the study shall be treated equally, irrespective of race, ethnicity, gender, religion/or none, sexual orientation, profession, lifestyle, marital status, age, community background or disability. No one will be judged or discriminated against on the basis of any aspect of their identity.

If this has not been your experience, or you feel any negative effects as a result of participating in this study, you should report it immediately. This might include feeling bullied or harassed, or simply more at risk as a result of participating. You can contact us at safeguarding@tearfund.org or otherwise contact the country director of our Tearfund [country] office, who is not a part of the research team:

Name:

Email:

Phone number:

We also understand that you may have other questions or comments about your participation in the project. If that is the case, at any time, please get in touch with the following member of the research team:

Name:

Email:

Phone number:

A4 Guidance for mobilising respondents – example from Burundi

Background: We have sampled 67 churches in Burundi (50 CCT churches and 17 non-CCT churches). The CCT impact study will involve three separate surveys:

1. The church health survey is to be answered by a senior leader in each sampled church (CCT and non-CCT).
2. The facilitator survey is to be answered by the CCT facilitator within each sampled church (excluding non-CCT churches).
3. The wellbeing survey is to be answered by members of each sampled church (CCT and non-CCT) and its wider community – the community that surrounds the church.

Objective of mobilisation: Partners to work with each CCT facilitator or church/community leader to mobilise people to take part in the study. Arrange for them to gather on the assigned day/time (according to the data-collection schedule); when enumerators will visit and conduct surveys with them.

For each CCT church/community:

1. Please mobilise **at least 30 people to take part in the wellbeing survey…**
    - including 25 respondents who participate in CCT activities and/or initiatives (aim for a spread across different CCT activities)
    - and five respondents who do not participate in anything related to CCT. These could be:
        - people who are part of the CCT church but are not involved in CCT activities
        - members of another church located in the same community (eg another denomination)
        - people of other faith groups who live in the same community.
    - If the CCT church is small and there are less than 25 participants, please mobilise more than five non-participants to make the total close to 30.

2. Consider whether to mobilise more than 30 people if you think some may not turn up on the day!

3. Aim for a good mix of people, with:
    - approximately half of the mobilised respondents being female, and half male
    - a good mix of ages (including some 18–25, 26–50 and some 50+ years)
    - some people who are members of the sampled church and some who are not members of the sampled church
    - people with disabilities and older people are very welcome to attend and participate in the survey
    - the survey is only for adults – please only mobilise people who are over the age of 18.

4. Please also invite the **senior pastor/leader of the sampled church to attend the data collection and take part** in our survey of church leaders.
    - If you find that they will not be available on the day of data collection, please invite the next most senior leader to attend and take part instead.

5. Please also invite the **CCT facilitator to attend the data collection and take part** in our survey of facilitators.

6. Share information about the purpose of the study with all mobilised respondents:
    - Use this participant information sheet as a guide.
    - Make sure each person knows that their participation is optional.
    - Note that the surveys for church leaders and CCT facilitators are quite long. They could take 30–40 minutes to complete.
    - The wellbeing survey should only take 15 minutes to complete, per respondent, and enumerators will do their best to conduct them as efficiently as possible. However, some people will have to wait for longer than others.

For each non-CCT church/community:

1. Please mobilise **at least 30 people to take part in the wellbeing survey.** These could be:
    - people who are part of the sampled church
    - members of another church located in the same community (eg another denomination)
    - people of other faith groups who live in the same community.

2. Consider whether to mobilise more than 30 people if you think some may not turn up on the day!

3. Aim for a good mix of people, with:
    - approximately half of the mobilised respondents being female, and half male
    - a good mix of ages (including some 18–25, 26–50 and some 50+ years)
    - some people who are members of the sampled church and some who are not members of the sampled church
    - people with disabilities and older people are very welcome to attend and participate in the survey
    - the survey is only for adults – please only mobilise people who are over the age of 18.

4. Please also invite the **senior pastor/leader of the sampled church to attend the data collection and take part** in our survey of church leaders.
    - If you find that they will not be available on the day of data collection, please invite the next most senior leader to attend and take part instead.

5. Share information about the purpose of the study with all mobilised respondents:

- Use this participant information sheet as a guide.
- Make sure each person knows that their participation is optional.
- Note that the survey for church leaders is quite long. It could take 30–40 minutes to complete.
- The wellbeing survey should only take 15 minutes to complete, per respondent, and enumerators will do their best to conduct them as efficiently as possible. However, some people will have to wait for longer than others.

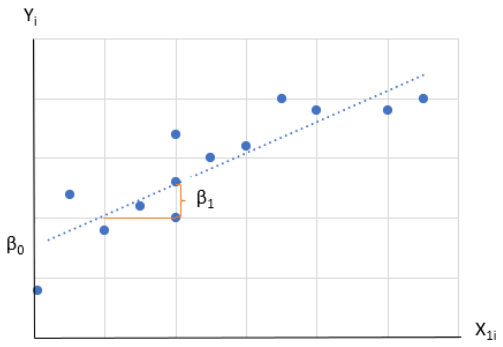
A5 Explanation of regression analysis and assumptions

A regression tells us how a collection of explanatory variables (X_1,X_2,X_3 etc) influences a dependent variable (Y). More specifically, it estimates how a change in one of these Xs, when all other Xs are kept the same, impacts the value of Y. This is done by estimating the following equation:

Equation 1: $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots \beta_n X_{ni} + \mu_i$

where Y_i is the dependent variable, β_0 is the intercept, X_{1i} is our independent variable of interest, $\beta_2 X_{2i} + \ldots \beta_n X_n$ are other explanatory variables that also might affect Y_i, β are the slope coefficients for each explanatory variable, μ_i is the error term, and $_i$ denotes that there are multiple observations.

Imagine looking only at Y_i and X_{1i}, we could draw a line of best fit (like the chart to the right). β_0 gives the estimate of Y if X was 0. The line shows our best estimate of the relationship between X and Y; what happens to Y if X increases by one point is therefore shown by our coefficient of interest, β_1.



Multiple linear regression analysis estimates the β coefficients (in equation one) of different X explanatory variables all at once, so our β coefficients show the relationship between our explanatory variables of interest on the outcome variable, once taking into account other observable factors.

A regression with interaction terms would estimate the following equation:

Equation 2: $Y_i = \beta_0 + \beta_1 X_{1=no} X_{2i} + \beta_2 X_{1=yes} X_{2i} + \ldots \beta_n X_{ni} + \mu_i$

This gives us two different coefficients: β_1 for the impact of X_2 on Y, when X_1= 0 (no), and β_2 for the impact of X_2 on Y, when X_1= 1 (yes).

Linear regression assumptions

In order for linear regression estimation to both a) be possible, and b) produce meaningful estimates for inference and hypothesis testing, a series of assumptions must hold:

a) **A linear relationship between the outcome (dependent variable) and explanatory (independent) variables** – since we are fitting coefficients to the linear model equation described in (1) above, this equation must be a truthful description of the relationship between the outcome and explanatory variables. If the true relationship is of a different nature (eg polynomial, exponential, piecewise or completely irregular), fitting a linear model will not be able to approximate the true relationship.
b) **No perfect multicollinearity** – this means that we cannot have an explanatory variable that is identical to another (or scaled by a constant factor, or to a sum/difference of other explanatory variables (scaled by a constant factor). This is a technical mathematical condition required to have a

unique solution for the linear regression coefficients. Otherwise, it would be possible to change the coefficients while obtaining the exact same outcomes for any possible values of the independent variables.

c) **Random sampling** – to be able to make inference about the underlying population based on the sample on which one performs regression analysis, the sample must be a random draw from the population (also referred to as 'representative' of the population). This is required to be able to apply statistical theorems (the Law of Large Numbers and Central Limit Theorem), which show that the estimated coefficients from the regression based on the sample will approximate population parameters as the sample grows larger.

d) **Exogeneity of the error term** – apart from the terms explained by the independent variables and their coefficients, everything else (captured by the term μ in (1)) must be a random variation in the outcome, unrelated to the independent variable. The regression estimation assumes this by default; therefore, if this actually does not hold in the population, the resulting regression coefficients will be **biased** (ie different from the true relationship in the population). There are multiple reasons why this may not hold, the most popular being selection bias, omitted variable bias, and reverse causality.

e) **Homoscedasticity** – this is the assumption that the error term μ has constant variance. It is only required to reduce the variance of the linear regression estimator, thus making it efficient.

We can discuss the extent to which these assumptions hold for our data.

We cannot know for sure whether the relationship between the outcomes and our explanatory variables (CCT participation and demographic controls) is linear. However, we get around this somewhat thanks to the fact that all the variables included in the regression are categorical (that is, only being able to take a small number of different values). This adds a level of flexibility to the model because each regression coefficient describes the relationship with a variable that can only be in two possible states: 1 (the respondent is in this category) and 0 (the respondent is not in this category). One single coefficient (representing the difference in the outcome between the two states) plus a constant term is sufficient to describe ANY possible relationship of an outcome with a variable that only has two possible states.

The no perfect multicollinearity assumption clearly holds – otherwise regression coefficients simply cannot be produced. Statistical software packages such as STATA automatically remove the variables that cause perfect multicollinearity (such as base/reference levels of any categorical variable or a category that is never encountered in the data).

While we cannot ensure perfectly random sampling, the data-collection effort in this project was sufficiently advanced to ensure a relatively high degree of sample representativeness. A random sampling technique was used for CCT communities. A stratified sampling technique was used within communities, enabled by: a considered mobilisation strategy; good cooperation by Tearfund partners, CCT facilitators and the participating communities; recruitment; and professionally training paid enumerators. In addition, a large sample size reduced the influence of sampling errors.

Exogeneity of the error term is the trickiest assumption to assess – it is untestable in practice and can only be discussed using theoretical reasoning. The control variables were chosen following established guidelines in

the wellbeing economics literature (see below) to reduce the amount of omitted variable bias influencing the outcome. In spite of the considerable data collection and sampling efforts, one cannot fully rule out selection bias (that is, if happier people or people who benefited more from the programme were more likely to respond to the survey, or more likely to participate in CCT in the first place). Selection effects are very difficult to measure (they involve comparing your sample to someone you have no data about) and practical methods to fully account for selection effects do not exist (other than a double-blind randomised control trial with perfect compliance, which is impractical). We believe our research design is close to the maximum of what is practically feasible to produce the best possible estimates in our context.

Selection of the model and explanatory variables

Control variables are included in the model equation (1) to capture the effects of selection bias in the respective coefficients of the control variables, and therefore prevent as many demographic factors as possible from affecting the estimate of the coefficient of interest β_1 of the key explanatory variable X_1. There is no well-established standard or consensus in the literature regarding what demographic variables are necessary or sufficient to include in a wellbeing regression. It is generally a trade-off between bias mitigation and data availability in population surveys as well as model overfitting. Most studies mentioned in the literature include some combination of age, gender and income, but this accounts only for a small proportion of the variance in wellbeing. Fujiwara and Campbell (2011) provide a list of the most frequent determinants of wellbeing used in the literature:

- Income
- Age
- Gender
- Marital status
- Educational status
- Employment status
- Health status
- Social relations
- Religious affiliation
- Housing and environmental conditions and crime levels in the vicinity
- Number of children and other dependants (including caring duties)
- Geographic region
- Non-market good being valued
- Personality traits (such as extroversion)

While we had the freedom to choose what demographic control variables to ask in our bespoke survey, we considered the list above, as well as what is generally collected in large, nationally representative surveys in the UK and other OECD countries, but also its adaptability to our chosen countries and the CCT context in particular. This led to a slightly reduced version of the list being used, as some questions were either too sensitive, too difficult to answer without confusion, or inapplicable to the context.

A6 Detail of the sample by country

	Rwanda	Sierra Leone	Tanzania	Zimbabwe	Bangladesh	Burundi	Malawi	Nigeria
486 communities	**57**	**55**	**65**	**53**	**72**	**69**	**69**	**46**
Non-CCT communities	5	5	13	6	17	17	17	17
CCT Communities	52	50	52	47	55	52	52	29
15,640 respondents	**2,017**	**2,371**	**1,940**	**1,485**	**2,170**	**2,066**	**2,181**	**1,410**
In non-CCT communities	474	546	421	326	516	501	553	524
In CCT communities	1,543	1,825	1,519	1,159	1,654	1,565	1,628	886
participants	*1,500*	*1,207*	*1,225*	*610*	*1,022*	*1,030*	*1,023*	*716*
non-participants	*14*	*478*	*248*	*473*	*621*	*523*	*598*	*165*
0–2 years maturity	*321*	*183*	*198*	*619*	*883*	*902*	*483*	*215*
3–5 years maturity	*1,060*	*749*	*700*	*120*	*477*	*663*	*738*	*289*
5+ years maturity	*162*	*893*	*621*	*420*	*294*	*0*	*407*	*382*

Notes: The sample is lower than expected in Zimbabwe. This was mostly due to it being the first country where logistics were still being fine-tuned and improved for the other countries. The sample of non-CCT communities is slightly higher than expected as the Tanzania team in phase one decided to survey more non-CCT communities with fewer respondents per community (more in line with the year-two design). The sample of CCT communities in Nigeria is slightly smaller than expected. Once the sample was set, it was discovered some CCT communities were not as far through the process as had been understood. These were considered neither CCT communities nor non-CCT communities so were removed from the sample (but were explored in the Nigeria-specific report).

A7 Detailed urban/rural classifications

1. Downtown / city centre – commercial, cultural, historical, political centre and geographical heart of city - mostly shops and public buildings, likely to have paved roads, electricity and piped water

2. Urban suburbs - between the city centre and peri-urban areas - mostly housing, less dense than central areas, shops are separate from housing, likely to have electricity and piped water

3. Informal housing / slum settlements - overcrowded, poor quality, informal housing area, outside of city centre, may be at risk of flooding or next to a main road, may lack electricity or piped water

4. Peri-urban / edge of city - edge of an urban settlement, growing rapidly, mix of (possibly informal) housing, farming and business, usually spread out, may lack electricity or piped water

5. Town - Smaller than a city but larger than a village, may be a district or local administrative centre, usually well-connected by road, some services (clinic, school), shops and businesses, likely to have electricity

6. Expanded village or growing settlement - may be well-connected by road, may have some services (clinic, school), shops, businesses, transitioning towards becoming a town

7. Traditional village - most rural type of settlement, mostly housing, may rely on other villages / town for services and shops, predominantly small-scale farming / fishing/ mining, may be far from roads, lack electricity or piped water

A8 Full results for Model 1 (Table 11, Section 5.1)

Regression coefficients indicating impact of being in a CCT community on life satisfaction:

	Model 1
Living in a non-CCT community	0.000
Living in a CCT community	0.857***
Age	-0.010
Age-squared	0.000*
Male (base group)	0.000
Female	0.151***
Other gender	-0.885*
Married or living with partner (base group)	0.000
Divorced	-0.056
Separated	-0.323***
Widowed	-0.065
Single	0.106
Christian (base group)	0.000
Muslim	-0.665***
Any other religion	-0.799***
No religion	-0.597**
Female household head	-0.282***
Male household head (base group)	0.000
Male and female together head up household	-0.053
Child household head	-0.564**

	Model 1
Other household head	-0.367***
0–5 in household (base group)	0.000
6–10 in household	0.059
11–15 in household	0.059
16+ in household	0.199
No formal schooling or informal schooling only	-0.410***
Some primary schooling	-0.091
Intermediate school or some secondary/high school	-0.043
Secondary/high school completed (base group)	0.000
Post-secondary qualifications other than university	0.345***
University completed	0.418***
Postgraduate	0.623***
In paid work (as an employee, or working for your family)	0.137**
Self-employed	0.233***
Subsistence farmer	0.008
In education (not paid for by employer) even if on vacation	0.388***
Unemployed	-0.162**
Not working – permanently sick or disabled	-0.205
Retired	0.263**
Doing unpaid housework, looking after children or others	0.164**
No disability (base group)	0.000
Yes, but disability does not affect	0.012
Yes, disability affects a little	-0.210***

	Model 1
Yes, disability affects a lot	-0.606***
Prefer not to say (disability)	-0.091
Rwanda (base group)	0.000
Sierra Leone	0.425***
Tanzania	-0.599***
Zimbabwe	-0.135
Bangladesh	1.811***
Burundi	0.710***
Malawi	0.839***
Nigeria	-0.630**
Downtown / city centre (base group)	0.000
Urban suburbs	-0.207**
Informal housing / slum settlements	-0.204
Peri-urban / edge of city	0.050
Town	-0.300***
Expanded village or growing settlement	-0.108
Traditional village	-0.011
Often gone without food	-0.740***
Sometimes gone without food (base group)	0.000
Rarely gone without food	0.373***
Never gone without food	0.862***
Constant	4.743***
Observations	15172

	Model 1
Adjusted R-squared	0.209

Notes: The dependent variable Y = life satisfaction on a scale of 0 to 10. Each column represents a separate regression model. Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. A coefficient of 0.000 means this is the base group other subgroups were compared to.

A9 Sub-samples explored in research question 3

Table showing how sub-samples for research question 3 were achieved:

Sub-sample		Rwanda	Sierra Leone	Tanzania	Zimbabwe	Bangladesh	Burundi	Malawi	Nigeria
i	Non-Africa (N= 2,126)					✔			
	Africa (N=13,046)	✔	✔	✔	✔		✔	✔	✔
ii	Rural (N=10,041)	✔	✔	✔	✔	✔	✔	✔	✔
	Non-rural (N=5,131)	✔	✔	✔	✔	✔	✔	✔	✔
iii	Majority Christian (N= 10,753)	✔		✔	✔		✔	✔	✔
	Minority Christian (N=4,418)		✔			✔			
iv	Shorter process (N=3,988)	✔					✔		
	Longer process (N=11,184)		✔	✔	✔	✔		✔	✔
v	2022–2023 (N=7,555)	✔	✔	✔	✔				
	2023–2024 (N=7,617)					✔	✔	✔	✔

(i), (iii), (iv) and (v) are achieved by directly grouping countries, eg Rwanda and Burundi both generally run the CCT process over a shorter period of time.

For the distinction in (ii), we grouped the detailed geographical categories (where rural = 'expanded village or growing settlement' or 'traditional village' and non-rural otherwise). These are distributed across all countries.

A10 Estimating the ratio between UK median income and our four countries

Ratios of median income proportionate to reported value for UK:

	Daily median income, 2020 or later	Median income, March 2021	Daily median income, 2011/2012	Average ratio to UK median income
Source	Wise Voter	World Population Review	Centre for Global Development	
UK value reported	$45	$14,793	$37.8	
Calculated ratio of reported country value to reported UK value				
Rwanda	0.0460	0.0420	0.0423	0.0434
Sierra Leone	0.0658	0.0517	0.0489	0.0555
Tanzania	0.0518	0.0475	0.0529	0.0507
Zimbabwe	0.0589	0.0630	-	0.0609
Bangladesh	0.0796	0.0765	-	0.0780
Burundi	0.0378	0.0321	0.0317	0.0339
Malawi	0.0340	0.0327	0.0331	0.0333
Nigeria	0.0656	0.0558	0.0476	0.0563

A11 Calculating direct costs per CCT community

	Rwanda	Sierra Leone	Tanzania	Zimbabwe	Bangladesh	Burundi	Malawi	Nigeria	Average
Tearfund and partners' budget spent	$253,813	$48,214	$414,850	$231,425	$194,733	$333,206	$412,317	$113,256	-
Tearfund's labour cost	$27,414	$7,835	$24,911	$53,974	$20,882	$68,459	$16,791	$49,271	-
Number of CCT communities supported	1,482	67	476	322	630	349	590	2520	-
Tearfund and partners' spend, per community per year	$194	$813	$985	$812	$318	$983	$720	$46	$609
Tearfund's labour cost, per community per year	$21	$132	$59	$189	$34	$202	$29	$20	$86

Notes: Calculated using £ values reported by Tearfund and partners, converted using the midpoint of year 1 (2021) and year 2 (2022) yearly average exchange rates (£1 = $1.374), and inflation-adjusted to reflect real prices.

A12 Wellbeing survey

Section A. Questions for the enumerator to answer

A1. Name of enumerator

A2b. Name of province / area

A2b. Name of church and community

A3. Is this a CCT community or non-CCT community?

CCT community

Non-CCT community

A4. Is the respondent a trained CCT facilitator at this church?

Note for enumerator: Answer 'yes' if the respondent has been trained to facilitate CCT (by Tearfund or Tearfund's partner). There should only be one or two trained CCT facilitators per community.

0. No

1. Yes

Section B. Participant information and consent

Thank you for taking time to speak with me today. My name is [enumerator's name]. We are carrying out this survey on behalf of Tearfund, a Christian relief and development organisation, in order to evaluate their work with local churches. You may have heard of Tearfund, or you may have heard of our partner – [relevant partner name]. We are speaking with people in a number of different communities – some in which Tearfund is already working, others in which Tearfund is not working yet.

We would like to invite you to participate in this survey. If you do choose to participate, I will ask you questions about various aspects of your life. However, if I ask you a question that you don't understand or are not comfortable answering, you can ask me to clarify or skip it. The survey will take approximately 15 minutes to complete. I will record your responses in an online application.

There are a few more things I need to tell you about before you decide whether to take part or not. Is that okay?

If you take part, the information that you provide will be used only to evaluate Tearfund's work. We will not use this data to evaluate you or determine if you qualify for any support – your answers will be anonymised and combined with answers from lots of other people, so they cannot be traced back to you.

Your participation in the study is voluntary. It is fine for you to say 'no' – we will not collect any data from you and there will not be any negative consequences. If you say 'yes' and we go ahead with the survey, you can still change your mind at any time and ask me not to continue. Please also feel able to ask me questions at any time. Do you have any questions for me at the moment?

Yes

B1. Do you confirm that you have understood the information provided about the study?

Yes

B2. Do you understand that your participation is voluntary and that you are free to withdraw at any time without giving a reason and without any negative consequences?

Yes

B3. Do you agree to take part in the study?

Yes

Section C. Demographics

C1. What is your age?

Note for enumerator: If the respondent does not know their age, ask them to estimate. Do not spend too long on it.

C2. What is the respondent's gender?

Note for enumerator: Answer this question on the respondent's behalf

A. Female

B. Male

C. Other

C3. What is your current marital status?

A. Married or living with partner

B. Divorced

C. Separated

D. Widowed

E. Single

C4. What is your religion?

A. No religion

B. Christian (including Church of England, Catholic, Protestant and all other Christian denominations)

C. Buddhist

D. Hindu

E. Jewish

F. Muslim

G. Sikh

H. Any other religion

C5. Who heads up your household?

A. Adult female

B. Adult male

C. Adult male and adult female together

D. Child

E. Other

C6. How many dependants are there in your household?

Note for enumerator: A dependant is any person in the household who relies on another member of the household for financial support (eg could include children, a spouse, or other relatives).

C6b. How many people in total are there in your household?

Note for enumerator: This should be more than the number of dependants in question C6.

C7. What is your highest educational level or qualification?

A. No formal schooling, or informal schooling only

B. Some primary schooling

C. Intermediate school or some secondary / high school

D. Secondary / high school completed

E. Post-secondary qualifications other than university, eg polytechnic or college

F. University completed, eg undergraduate or bachelor's degree

G. Post-graduate

C8. What is your occupation?

Note for enumerator: Tick all that apply.

A. In paid work (or away temporarily) as an employee, or working for your family business

B. Daily wage labourer

C. Self-employed

D. Subsistence farmer

E. In education (not paid for by employer) even if on vacation

F. Unemployed

G. Not working – permanently sick or disabled

H. Retired

I. Doing unpaid housework, looking after children or other persons

J. Other

C9. Do you have any physical or mental health conditions or illnesses that have lasted or are expected to last 12 months or more?

0. No

1. Yes

2. Prefer not to say

C9b. Does your condition or illness/do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?

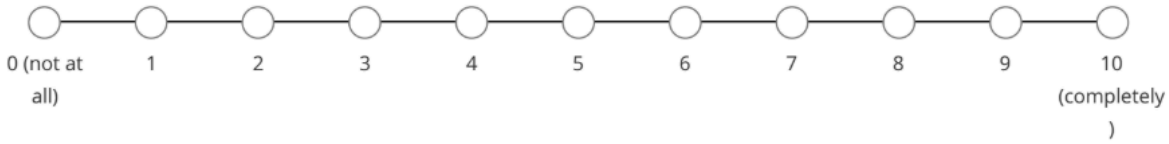
A. Not at all

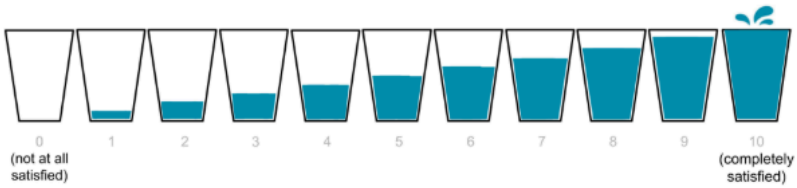
B. Yes, a little

C. Yes, a lot

Section D: Emotional and mental wellbeing

D1. Overall, how satisfied are you with your life? Please answer on a scale of 0 to 10, where 0 is not at all satisfied, and 10 is completely satisfied





D2. Looking ahead, how do you think you will be a year from now, overall? Will you be...

Note for enumerator: Please encourage the respondent to consider how their life will be overall (not just their finances).

A. Worse off than you are now B. About the same C. Better off than you are now

Section E: Personal relationships

E1. How much do you trust people in your local area?

1. Do not trust at all 2. Do not trust very much 3. Not sure 4. Trust a little 5. Trust completely

E2. Do you agree or disagree with the following statement: "I feel valued and respected by my family"?

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

E3. How satisfied are you with the close relationships in your life?

1. Not at all satisfied 2. Not very satisfied 3. A little satisfied 4. Completely satisfied

Section F. Social connections

F1. Over the last three months, have you worked with other people in your community as part of a shared project?

0. No

1. Yes

F2. Do you agree or disagree with the following statement: "If I needed help, there are people who would be there for me"?

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

F3. Do you agree or disagree with the following statement: "I feel like I belong to this community"?

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

F4. Besides your immediate family, how often do you help people who are in need?

A. Never B. Rarely C. Sometimes D. Often

F5. In your community, who provides care for the vulnerable?

Note for enumerator: Please tick 'yes' or 'no' on each row

	0. No	1. Yes

F5A. Private companies / for-profit organisations		
F5B.a. Church(es)		
F5B.b. Other religious organisations (excluding churches)		
F5C. Family, relatives or friends		
F5D. Government		
F5E. Non-government organisation (NGO)		
F5F. Other civil-society organisation (CSO)		

Section G. Participation and influence

G1. Do you agree or disagree with the following statement: "I am involved in making decisions in my household"?

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

G2. Do you agree or disagree with the following statement: "I can influence decisions made in my community"?

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

G3. In the last 12 months, how often did you get together with other people to raise an issue to decision-makers?

A. Never B. Rarely C. Sometimes D. Often

Section H. Living faith

H1. How often has the following statement been true for you: "I have had inner peace even when things go wrong"?

A. Never B. Rarely C. Sometimes D. Often E. Always

H2. In the last six months, which statement best describes your faith?

A. Faith has become less important

B. Faith has stayed about the same

C. Faith has become more important

D. Not applicable – I do not practise any faith

H3. Thinking about how often you practise your faith, how often do you...

	1. Daily	2. Several times a week	3. Once a week	4. Less than once a week	5. N/A
H3A. Worship God with others?					
H3B. Read or listen to scriptures?					
H3C. Express your feelings to God?					

Section I. Capabilities

I1. Do you agree or disagree with the following statement: "I can create changes in my own life"?

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

I2. Are you confident that you could cope with unexpected events?

1. Not at all confident 2. Not very confident 3. Not sure 4. Quite confident 5. Completely confident

Section J. Material assets and resources

J1. In the last 12 months, how often have you or your family...

	A. Never	B. Rarely	C. Sometimes	D. Often

J1A. Gone without enough food to eat?				
J1B. Gone without medicine or medical treatment that you needed?				
J1C. Had to miss school as you could not afford the fees or supplies?				

J2. During the past year did you invest in any assets? eg house, animals, land, business etc

0. No

1. Yes

J3. Who usually decides how money is spent in your household?

A. You

B. Your partner/spouse

C. You and your partner/spouse jointly

D. You and someone else

E. Other

J4. Are you now earning more or less than this time last year?

A. Less

B. About the same

C. More

D. I don't earn money

Section K. Physical health

K1. In general, would you say your health is...?

1. Very bad 2. Bad 3. Moderate 4. Good 5. Very good

K2. Have you suffered from an illness in the last month?

0. No

1. Yes

K3. In the last year, have you or a close family member faced any barriers or difficulties in accessing health services? Eg a local midwife or community health volunteer, pharmacy, primary health centre, clinic or hospital (not including traditional healers)

A. No

B. Yes – a few barriers/difficulties

C. Yes – many barriers/difficulties

D. Not applicable - I have not needed or have not tried to access health services

Section L. Care of the environment

L1. Do you agree or disagree with the following statements?

L1a. "I always treat nature with respect"

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

L1b. "I appreciate the natural world"

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

L2a. In the last year, have you taken any actions to care for the environment?

0. No

1. Yes

L2b. What actions have you taken to care for the environment?

Note for enumerator: Tick all that apply.

A. Alternative energy sources

B. Using eco-friendly brands/products/food

C. Protection/restoration of natural resources (eg tree planting, water usage)

D. Reduction of waste (eg recycling, litter picking)

E. Use of sustainable farming practices (eg organic fertiliser, rotating crops)

F. Low-carbon transport options (eg walk, bike, public transport)

G. Other

Section M. CCT participation

Note for enumerator: Answer the questions in this section through having a conversation with the respondent.

M1. Is the respondent a member of this church?

Note for enumerator: This question is referring to the church specified in answer to question A2.

0. No

1. Yes

M2. Is this respondent aware of CCT – have they heard of it?

0. No

1. Yes

M3a. Does this respondent participate / are they involved in any CCT activities or initiatives?

Note for enumerator: This could include CCT Bible studies, a church-based savings or self-help group, or CCT initiatives that the church has worked on with/for the benefit of the community.

0. No

1. Yes

M3b. Which CCT activities or initiatives are they involved in?

A. Yes - involved in CCT Bible Studies with [name of facilitator]
B. Yes - involved in a CCT initiative (an initiative that the church and community have worked on together)
C. Yes - involved in a savings / self-help group at the church
D. Yes - involved in something else related to CCT

M4. How long have they been involved in CCT for? (months)

Note for enumerator: Please enter the answer in months, eg if the respondent says they have been involved for two-and-a-half years, enter 30 months.

M5. How often have they participated in CCT activities in the last year?

1. Less than once a month 2. Once or twice a month 3. Once a week or more

Thank you

Thank you for participating in this study today. We are very grateful for your time.

If you have any questions or comments about your participation in the survey, you can contact staff at Tearfund. I am going to leave their contact details here, at the church, so that you and other respondents can refer to them in future.

Over the coming year, Tearfund will share the results of the survey with communities who have participated. Please get in touch if you have any questions before then.

A13 Facilitator survey

Section A. Questions for the enumerator to answer

A1. Name of enumerator

A2a. Name of state / local government area

A2b. Name of church and community

A3. Please confirm that the respondent is a trained CCT facilitator at this church

A4. What is the respondent's gender?

Section B. Participant information and consent

Thank you for taking time to speak with me today. My name is [enumerator's name].

We are carrying out a survey on behalf of Tearfund, a Christian relief and development organisation. You may have heard of Tearfund, or you may have heard of our partner – [relevant partner name]. The purpose of the survey is to evaluate Tearfund's work with local churches – especially the church and community transformation (CCT) process.

We would like to invite you to participate in this survey as someone who is a CCT facilitator. If you do choose to participate, I will ask you some questions about your experience of facilitating CCT and what it takes to make CCT happen in your community. The survey will take approximately 30 minutes to complete. I will record your responses in an online application.

If you take part, the information that you provide will be used only to evaluate Tearfund's work. We will not use this data to evaluate you or your facilitation skills – your answers will be anonymised and combined with answers from lots of other people, so they cannot be traced back to you. So please answer these questions truthfully and do not be concerned that your answers will be used against you.

Your participation in the study is voluntary. It is fine for you to say 'no' – we will not collect any data from you and there will not be any negative consequences. If you say 'yes' and we go ahead with the survey, you can still change your mind at any time and ask me not to continue. Please also feel able to ask me questions at any time. Do you have any questions for me at the moment?

B1. Do you confirm that you have understood the information provided about the study?

Yes

B2. Do you understand that your participation is voluntary and that you are free to withdraw at any time without giving a reason and without any negative consequences?

Yes

B3. Do you agree to take part in the study?

Yes

Section C. People

The first set of questions are about the people who make CCT happen in your community.

C1. On average, how many hours in a month do you spend facilitating CCT activities?

Notes for C1 (not the final answer)

C2. Apart from yourself, how many other (different) people volunteered in the last year to enable CCT activities to take place?

Notes for C2 (not the final answer)

C3. Thinking about the people mentioned in question C2: **On average,** how many hours in a month does one of these volunteers spend helping out with CCT activities?

Notes for C3 (not the final answer)

C4. Approximately how many different people have participated in CCT activities in the last year?

Notes for C4 (not the final answer)

Section D. Money and resources

The next set of questions are about the money and resources that make CCT happen in your community. Please answer all of these questions in Naira/ Malawian Kwacha/ Burundian Francs/ Bangladeshi taka.

D1. How much money has the church and community put towards CCT in the last year?

Notes for D1 (not the final answer)

You have entered NGN / MK / BIF / BDT (Number in D1)

D2. What is the value of the goods that the church and community have put towards CCT in the last year?

Notes for D2 (not the final answer)

You have entered NGN / MK / BIF / BDT (Number in D2)

D3. What is the value of labour that the church and community have put towards CCT in the last year?

Notes for D3 (not the final answer)

You have entered NGN / MK / BIF / BDT (Number in D3)

D4. How much money has the church and community mobilised for CCT from other sources (eg government, private companies, NGOs other than Tearfund) in the last year?

Notes for D4 (not the final answer)

You have entered NGN / MK / BIF / BDT (Number in D4)

Section E. The community

The next set of questions are about what has happened in the community due to CCT.

E1. What is the approximate population size of the community in which CCT is taking place?

E2. In the past year, has the church been involved in any activities to meet needs in the community due to CCT?

A. Building new community assets (eg schools, roads, clinics, water access)

B. Improving existing community assets

C. Setting up savings groups or self-help groups

D. Providing money or resources to meet the needs of vulnerable people (such as people who are sick,

orphans, widows, migrants)

E. Providing practical help or emotional support to meet the needs of vulnerable people (such as people who are sick, orphans, widows, migrants)

F. Scholarships / paying school costs

G. Improving the local environment (such as litter picking, tree planting)

H. Responding / adapting to changes in the climate

I. Preparing for disasters

J. Responding to disasters

K. Conflict resolution or community mediation

L. Teaching vocational skills or life skills

M. Providing equipment or materials to improve livelihoods (such as seeds or farming equipment or sewing machines)

N. Challenging harmful cultural practices or attitudes

O. Advocating on behalf of the community (such as petitions, meeting with local government leaders, advocacy meetings or dialogue)

P. Other – please specify

Q. None

E3. What new or improved community assets are there due to CCT?

A. Road

B. Water access (eg bore hole, wells, taps or pumps)

C. School

D. Clinic

E. None

F. Other –please specify

Section F. Experience of being a CCT facilitator

The final questions are about your personal experience of being a CCT facilitator. Remember that we are

asking these questions to evaluate Tearfund's work and not to evaluate you, so please feel able to answer truthfully.

F1. Approximately how many days of training in CCT have you received? _____

F1b. When did the facilitation of CCT start in this church? _____

F2. Do you agree or disagree with the following statements?

	1. Strongly disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. Strongly agree
Being a CCT facilitator has equipped me to support this community					
It is difficult to fit in CCT activities alongside my other roles (including personal and professional roles)					
I would recommend CCT to other churches					

Thank you

Thank you for participating in this study today. We are very grateful for your time.

If you have any questions or comments about your participation in the survey, you can contact staff at Tearfund. I am going to leave their contact details here, at the church, so that you and other respondents can refer to them in future.

Over the coming year, Tearfund will share the results of the survey with communities who have participated. Please get in touch if you have any questions before then.

A14 Testing the influence of other agencies

Reporting assets due to CCT, by reported presence of other agencies			
	Not present (n=165)	Present (n=173)	Difference
Road	30.3%	37.6%	+7.3pp
Water access**	27.3%	38.2%	+10.9pp
School	27.9%	32.9%	+5.00pp
Clinic***	6.7%	21.4%	+14.7pp

Notes: The answer to other agencies was 'I don't know' for 18 communities, and missing for four. Stars denote whether difference between 'agencies present' and 'agencies non-present' communities is statistically significant using a standard t-test: *p<0.1, **p<0.05, ***p<0.01.

In your community, who provides care for the vulnerable? (tick all that apply)			
	non-CCT (n=3,861)	CCT (n=11,779)	Difference
Private companies/for-profit organisations***	24.6%	35.0%	+10.4pp
Religious organisations, church***	72.1%	87.9%	+15.8pp
Family, relatives or friends***	70.0%	76.9%	+6.9pp
Government***	61.9%	73.0%	+11.1pp
Non-government organisation (NGO)***	47.5%	62.2%	+14.7pp
Civil-society organisation (CSO)***	28.2%	38.9%	+10.7pp

Notes: Stars denote whether difference between non-CCT and CCT communities is statistically significant using a standard t-test: *p<0.1, **p<0.05, ***p<0.01.

A15 Testing the influence of shocks

Reported shocks in communities, CCT compared to non-CCT communities			
	non-CCT (n=61)	CCT (n=354)	Difference
Drought*	19.7%	28.7%	+9.0pp
Flood	18.0%	21.1%	+3.1pp
Crop failure*	31.1%	42.7%	+11.6pp
Bushfire**	4.9%	1.2%	-3.7pp
Disease (other than Covid-19)	21.3%	20.5%	-0.8pp
Conflict	18.0%	19.3%	+1.3pp

Notes: Stars denote whether difference between non-CCT and CCT communities is statistically significant using a standard t-test: *p<0.1, **p<0.05, ***p<0.01.