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Evaluating the Impact of BII's Industries, Technology and Services (ITS) Portfolio

Portfolio Evaluation Report

Authors: Caren Holzman, Zoë Sutherland, Jessica Rust-Smith, Keir Macdonald, Daan Schuttenbelt

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itad

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Disclaimer

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This assessment is being carried out by e-Pact and Itad. The project manager is Daan Schuttenbelt. The other team members are Caren Holzman, Jessica Rust-Smith, Zoe Sutherland, Keir Macdonald, and Chris Barnett. For further information contact daan.schuttenbelt@itad.com

The contact points for the client are Natalia Langlais, natalia.langlais@fcdo.gov.uk and Nicholas Salway, nicholas.salway@fcdo.gov.uk. The client reference number for the project is PO 10085.

Foreword

I am pleased to introduce this report, the final in a series of independent portfolio-wide analyses of British International Investment's (BII) investments, published as part of the FCDO-BII Evaluation and Learning Programme.

The Industries, Technology and Services (ITS) portfolio encompasses a range of sectors that are vital for productive, sustainable, and inclusive development. Whilst the sectors covered by these investments vary, they are all aligned around the common aim of creating jobs, improving access to basic goods and services, connecting economies with international markets, and enabling growth.

Drawing from an expansive internal set of data shared with the evaluators by BII, and supported by external evidence, this report has been structured to facilitate learning across BII and draws out lessons across several themes aimed at informing BII on how it can potentially enhance and better track the development impact of its investments.

This evaluation provides some promising insights into BII's investments when considering its dual mandate to deliver development impact whilst ensuring value for money for the taxpayer, with most investments being both financially healthy and on track to deliver their intended impact. Considering BII's commitment to ensure that 50 percent of its investments are made into the most fragile markets by 2030, the finding that BII demonstrates a propensity to invest in countries with greater fragility is also very welcome.

The report provides some welcome suggestions on areas where BII could further strengthen its approach to systematically incorporate across the portfolio the themes of gender and diversity, climate change and digital transformation set at the centre of its 2022-26 strategy.

I wish to thank the independent evaluators at Itad, Oxford Policy Management and Enabling Outcomes, and to my colleagues who sit alongside me on the FCDO-BII Evaluation and Learning Steering Group who have provided valuable guidance on the direction of this work.

Professor Adnan Khan

Chief Economist and Director for Economics and Evaluation Directorate

Foreign, Commonwealth & Development Office (FCDO).

Table of contents

List of Figures

List of Tables

List of abbreviations

AgTech	Agricultural Technology
AI	Artificial Intelligence
B2B	Business-To-Business
B2C	Business-To-Consumer
BI	Business Integrity
BII	British International Investment
BOLD	Black Ownership & Leadership for Development
CAGR	Compound Annual Growth Rate
C&BS	Consumer and Business Services
CCUS	Carbon Capture Use and Storage
CRE	Construction and Real Estate
DFID	Department for International Development
DI	Development Impact
E&S	Environmental and Social
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
EDGE	Excellence in Design for Greater Efficiencies
EdTech	Educational Technology
EQ	Evaluation and Learning Question
ESG	Environmental, Social and Governance
EWS	Economically Weaker Section
F&A	Food & Agriculture
FAO	Food and Agriculture Organization
FCDO	Foreign, Commonwealth & Development Office
FTE	Full-Time Equivalent
GDP	Gross Domestic Product
GHG	Greenhouse Gas
HIPSO	Harmonized Indicators for Private Sector Operations
HPV	Human Papillomavirus Infection
HVC	High-Value Crops
IBPS	India BPO Promotion Scheme
IC	Investment Committee
ICT	Information and Communications Technology
IFC	International Finance Corporation
ILO	International Labour Organization
IoT	Internet of Things
ISO	International Organization for Standardization
ITS	Industries, Technology and Services
ITU	International Telecommunication Union
JIM	Joint Impact Model
LDC	Least Developed Country
LEED	Leadership in Energy and Environmental Design
LMIC	Low and Middle-Income Country
HealthTech	Health Technology
MSME	Micro, Small and Medium-Sized Enterprise
MTCO2e	Metric Tonnes of Carbon Dioxide Equivalent
NEBPS	North East BPO Promotion Scheme
OECD	Organisation for Economic Co-operation and Development
PPE	Personal Protective Equipment
PPP	Purchasing Power Parity
PSI	Productive, Sustainable and Inclusive
QA	Quality Assurance
QMR	Quarterly Monitoring Report
RAG	Red, Amber, Green
SaaS	Software as a Service
SMART	Services, Manufacturing, Agriculture, Real Estate and Construction, and Technology and Telecoms
SME	Small and Medium-Sized Enterprise
SSB	Stabilised Soil Brick
TA	Technical Assistance
TCFD	Task Force on Climate-Related Financial Disclosures
TVET	Technical and Vocational Education and Training
UN	United Nations
USD	United States Dollar
VC	Venture Capital

1. Introduction

1.1 Objectives

The Foreign, Commonwealth & Development Office (FCDO) commissioned Itad to conduct an evaluation of British International Investment (BII)[1] investments in its industries, technology and services (ITS) portfolio.[2]

The ITS portfolio covers several sectors:

- **Industries** consist of (i) food and agriculture (F&A) and (ii) manufacturing.
- **Technology** refers to information and communications technology (ICT) infrastructure, businesses that leverage technology solutions to deliver services in other sectors, and businesses that operate within the technology sector.
- **Services** include consumer and business services (C&BS) and social infrastructure services, such as health, education, and construction and real estate (CRE).

The purpose of the evaluation is to better understand the development outcomes and impact associated with BII's investments in ITS industries and draw out key learning opportunities. This is the third of a series of sectoral evaluations being undertaken across BII's portfolio. It will complement evaluations of BII's investments in financial institutions and infrastructure.

The evaluation is split into two phases: Phase 1 – a desk-based evaluation at ITS portfolio level, analysing the achievement of development impact (DI) across the portfolio; Phase 2 – a series of in-depth studies, assessing how specific BII investments have contributed to DI. We will synthesise the analysis and learning from the two phases into a final assessment, which will form the final evaluation report.

This evaluation report covers the analysis and conclusions of Phase 1 of the evaluation, which was conducted between January 2023 and November 2023. The report consists of the following sections:

Section 1	Outlines the objectives, scope and focus of the evaluation.
Section 2	Explains BII's strategy for achieving DI in ITS.
Section 3	Describes the methodology we have used to analyse the ITS portfolio and its DI, and the limitations faced in the evaluation.
Section 4	Presents the analysis of the portfolio, identifying trends over the years.
Section 5	Summarises the DI of each of the sectors within ITS, including against key cross-cutting themes related to productivity, sustainability and inclusivity.
Section 6	Is a synthesis of our findings and conclusions.
Section 7	Presents the recommendations.
Annexes	Supplemental information is included in the annexes and referenced throughout the report

Supplemental information is included in the annexes and referenced throughout the report.

[1] On 4 April 2022 CDC was renamed 'British International Investment'. In this report, the acronym 'BII' is used. However, during much of the evaluation period, investments and operations were undertaken using the name 'CDC'.
[2] ITS was previously known as SMART (Services, Manufacturing, Agriculture, Real Estate and Construction, and Technology and Telecoms).

1.2 Scope of Phase 1 of the evaluation

The study covers an 11-year period of investments made between 2012 and 2022 in Africa and South Asia. It includes direct (equity and debt) and intermediated investments (through sector-specific funds and multi-sector funds). It considers commitments (investments approved by the BII Investment Committee (IC)) to direct investments and funds. It also includes analysis of disbursements (actual capital deployed) to identify how funds have allocated capital into sectors, geographies and companies.

1.3 Evaluation and learning questions

The objective of the overall evaluation is to answer the evaluation and learning questions (EQs), presented in Table 1. Evaluation and learning questions, as agreed at the end of inception. As outlined in our inception report, we plan to answer the questions through Phase 1 and/or through different methods in the in-depth studies in Phase 2.

This evaluation report primarily addresses EQ1 by analysing data from BII (as described in Section 3). It also analyses EQ2, EQ3, EQ4 and EQ5, to the extent that BII has data available on achievements against these topics; however, the evaluation team will develop more detailed analysis and findings on each of these EQs through the in-depth studies in Phase 2.

Phase 1 focuses on identifying existing evidence and gaps for EQ6 and EQ7. However, the evaluation team did not expect to generate findings against these EQs in this phase, but instead to understand the current status of evidence on these topics to inform the focus of Phase 2, where these questions will be explored in more detail.

Table 1. Evaluation and learning questions

1.	What are the expected and achieved outputs, outcomes and impacts of BII's ITS investments, based on data from BII and its investees, with assumptions supported by secondary/external evidence?
2.	To what extent have BII's ITS investments contributed to poverty reduction (for example, through employment, entrepreneurship, tax effects and economic growth, health or education outcomes)?
3.	To what extent have BII's ITS investments contributed to gender, diversity and inclusion outcomes?
4.	To what extent have BII's ITS investments contributed to climate change mitigation and adaptation?
5.	To what extent has BII contributed additional skills and expertise to its ITS investments, over and above finance, which has strengthened the development impact achieved?
6.	To what extent is there evidence of unintended consequences or distortions from BII's ITS investments – either positive or negative?
7.	What are the key learnings and innovations from BII's ITS investments that have the most potential to fill critical knowledge gaps and generate further impact?

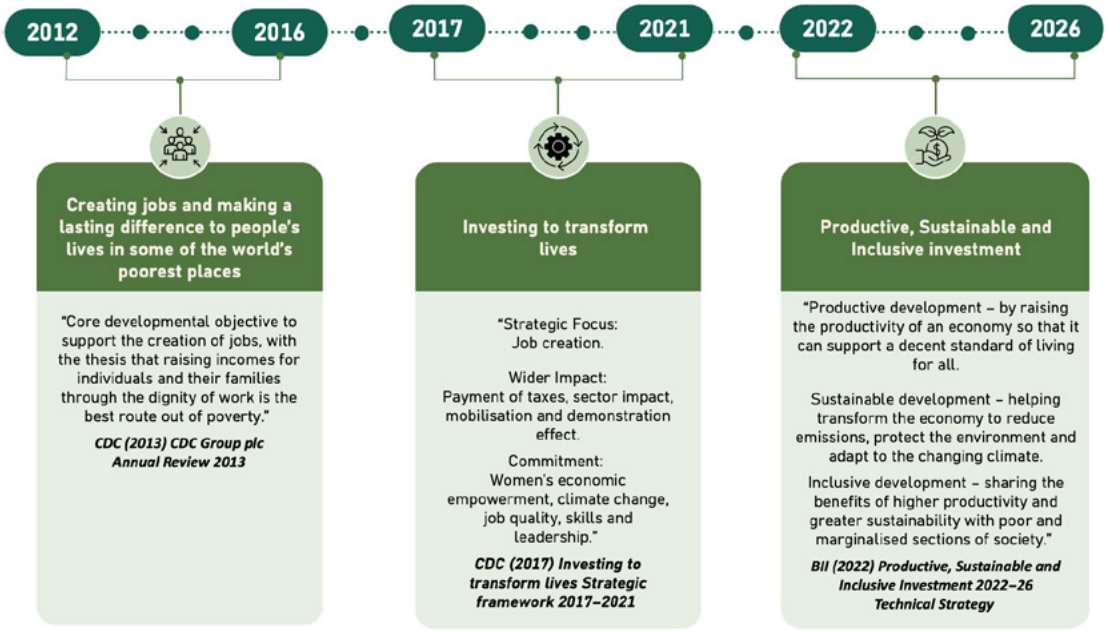
2. BII's approach to development impact in industries, technology and services

This section provides the strategic context for BII's intended achievement of DI in ITS. We outline how BII's approach to investing in DI is structured, focusing on the relevant BII strategies that fall under the evaluation period and each one's key focus and the investment approaches it uses. Information on BII's frameworks and tools for assessing DI can be found in Annex B.

2.1 BII's approach to investing in development impact

2.1.1 BII investment strategies

Figure 1. BII strategy development timeline



The timeframe of this evaluation covers the three different BII strategy periods referenced in Figure 1, with evolving priorities around DI that have influenced investment theses as well as the quality of data available to answer the EQs.

We bring the core elements of the 2022–26 strategy into our evaluation framework. This includes a focus on 'gender lens' finance (as defined by the 2X Criteria, see section 2.1.5), climate and climate finance, and digital transformation. Women's economic empowerment and climate were included in BII's 2017–21 strategy, under which BII developed relevant approaches to address these commitments. We also address job creation and wider impacts.

The ITS sector is intended to create jobs, improve access to basic goods and services, connect economies with international markets, and enable growth.[3] Investment intentionality and outcomes, as defined in the 2022–26 Technical Strategy should:

- improve manufacturing and production potential;
- increase connectivity and productivity through ICT;
- support food security and conservation;

[3] BII (2021) *Productive, Sustainable and Inclusive Investment: 2022 – 26 Technical Strategy*. Visit assets.bii.co.uk/wp-content/uploads/2022/01/06170001/2022-2026-technical-strategy-2.pdf

- enable sustainable urbanisation and logistics through CRE;
- provide education for employment and skills development;
- invest in healthcare solutions across health ecosystems;
- develop diverse business services for job creation and consumers; and
- support consumer services in improving access to, and growing, regional brands.

2.1.2 BII's investment approaches

Another important aspect of BII's investments is its different risk/return profiles for different portfolios, within which BII uses different investment instruments (for example, direct equity and direct debt). The following three investment approaches are considered:

- **Growth** – individual investments to support more proven enterprises that will drive economic development.[4]
- **Catalyst** – individual investments that aim to tackle persistent market failures and cultivate new markets where a broader risk appetite is required to test new solutions.[5]
- **Kinetic** – a pilot facility testing different ways in which concessional finance can be used to make higher-risk investments in nascent markets.[6]

Kinetic investments have the highest risk profile, followed by Catalyst and then Growth.

2.1.3 BII investment instruments

BII makes direct debt, direct equity, and intermediated debt and intermediated equity (or 'fund') investments. For direct investments, through debt or equity, BII invests in a specific business with intended impact. At IC approval stage, BII articulates the intended impact that the business is targeting with BII's investment and why they have opted for a particular instrument. The choice between direct debt and direct equity in ITS depends on the specific company, the type of capital needed to unlock growth, and additionality.

For intermediated investments, BII invests in a fund based on the fund manager's team and their investment and impact strategy, often with sight of a pipeline of potential underlying investments but without confirmation of exactly which companies the fund manager will invest in (sometimes referred to as a 'blind pool'). Therefore, by the very nature of intermediated investments, BII does not have as much direct control or oversight of the impact of these investments as it has in direct investments, although it does monitor these investments closely through Limited Partner Advisory Committee seats, Environmental, Social and Governance (ESG) and DI committees (where applicable), and annual monitoring of the fund investments. When BII, over time, has introduced specific policies or exclusions, they would apply to new funds and would be shared with existing funds; but existing funds are not required to apply those policies or restrictions or to exit investments that might not comply with a newly introduced policy or exclusion.

2.1.4 Impact frameworks, tools and principles

BII has used different frameworks and tools to identify the impact potential of investments, and in 2020 introduced guiding principles for impact (a detailed table of these tools is included in Annex B). The development and application of frameworks and tools have evolved over time. All the frameworks and tools featured in Annex B are presently being applied except for the DI Grid, which was phased out at the end of 2021. In recent years BII has introduced Sector-Specific Frameworks.

[4] Ibid.
[5] Ibid.
[6] BII. "Blended Finance for Pioneering Impact." 2021, Visit bii.co.uk/en/about/our-company/investment-portfolios/kinetic/

Impact intent is defined in the IC paper and is monitored via quarterly impact reporting, annual collection of DI metrics, and DI RAG (Red, Amber, Green) ratings that assess investment impact performance, including DI risk.

2.1.5 BII cross-cutting themes

BII is focused on three cross-cutting themes: (i) gender and diversity; (ii) climate change; (iii) digital transformation.

Gender and diversity

i. The goal of BII's commitments on gender and diversity is to increase the participation of women and underrepresented groups across the private sector by promoting more inclusive practices at all levels of business operations (ownership, governance, leadership, workforce, and supply chains) and to encourage the development of products and services that meaningfully support all segments of society, particularly those that have been traditionally underserved.[7] 2X Criteria, which BII helped to develop and which was adopted by BII in 2018, is a tool that BII uses to assess the gender components of an investment. BII looks to originate deals that meet the 2X Criteria, but also seeks out ways to improve gender outcomes through its gender advisory team and technical assistance (TA). Gender is, however, not a new theme, as women's economic empowerment has been an intended outcome of BII's strategic thinking since 2017, and BII collects gender-disaggregated data on jobs supported and leadership. BII also has tools and guidance to identify and mitigate risks to women in its investments.

   As of 2022, BII has also committed to promoting and increasing representation of Black African-owned and led businesses in its sub-Saharan Africa investments by applying Black Ownership and Leadership for Development (BOLD) criteria. BII's Gender and Diversity Finance Position Statement for the 2022–26 strategy period specifically cites 2X and BOLD criteria[8]. Investments that promote gender equality and diversity are now systematically incentivised throughout the portfolio, as they make up part of BII's Impact Score.

Climate change

ii. BII's (2020) climate change strategy, *Investing for Clean and Inclusive Growth*,[9] has two main objectives. The first objective is to take responsibility for the climate impact of (BII's) entire portfolio and pursue increased opportunities in climate sectors "through aligning BII's investment strategy to the goals of the Paris Agreement. BII's Paris alignment approach has three building blocks: net zero by 2050, just transition, and adaptation and resilience. The second is to future-proof [BII's] dual mandate of financial return and development impact" through implementing the recommendations of the Task Force for Climate Related Financial Disclosures. Climate finance investments are now systematically incentivised throughout the portfolio, as they make up part of BII's Impact Score.

[7] For more information, visit assets.bii.co.uk/wp-content/uploads/2022/02/02182247/Gender-and-Diversity-Finance-Position-Statement-2022-26-1.pdf

[8] BII (2022) *Gender and Diversity Finance Position Statement.* Visit assets.bii.co.uk/wp-content/uploads/2022/02/02182247/Gender-and-Diversity-Finance-Position-Statement-2022-26-1.pdf

[9] BII (2020) *Investing for clean and inclusive growth.* Visit assets.cdcgroup.com/wp-content/uploads/2020/07/01181554/CDC-climate-change-strategy_FINAL-FOR-PUBLICATION-1.pdf

Digital transformation

iii. BII's effort to recognise and address how technology can spread across a market and facilitate impact at scale and in a cost-effective way. BII invests in technology-based businesses, with an aim to achieve its productivity objective. This includes investing in 'digitally enabled' businesses with the potential to support jobs and improve access to goods and services, and providing funding to 'digitally native' businesses, using technology to tackle development challenges, as well as 'disruptive digital' emerging technologies, according to the BII digital stack framework. The stack is a pyramid to represent how 'digital infrastructure' is a critical foundation layer on which digital solutions businesses can be built and, ultimately, digitally disruptive technologies can be created.

Table 2. Digital stack framework definitions

Framework term	Definition
Digital infrastructure	Infrastructure which enables the digital economy.
Digitally enabled businesses	Businesses that offer traditional products/services that are made more efficient and accessible by technology.
Digitally native businesses	Businesses that have digital technology at their core – without the Internet their operations would shut down.
Disruptive digital	Digital technologies with market-disrupting potential but underdeveloped real-world applications.

2.1.6 BII value addition

BII provides non-financial support known as 'value addition'. This is support to investees in the form of expertise on the issues of gender and diversity, climate, mitigating and managing ESG risk, and business integrity (BI). It can also include support for policy development, certifications, addressing health and safety risks, safeguarding, and initiatives such as job quality improvement or resource use efficiency. BII's investment teams provide strategic advice (in some cases through meetings and conversations all the way through joining the board of an investee company), and BII Plus supports BII investees who are selected through an application process for TA funding to deepen their DI in cross-cutting and risk management themes. The full list of BII's value add services is as follows:

- knowledge and advice;
- improvement of processes, practices, or standards;
- job quality;
- women's economic empowerment;
- climate change;
- human capital/skills;
- support for developmental strategies; and
- reputational improvement.

2.1.7 Low-income populations

BII's ITS investments are intended to target poor and marginalised sections of society through the provision of jobs, economic opportunity (for example, access to markets, improved wages, access to skills development) and/or access to affordable goods and services. ITS investments are intended to intentionally reach and/or include low-income populations in both rural and urban settings. Previously, BII used a poverty line of daily individual consumption of $5.50/day, as defined by the World Bank, based on 2011 purchasing power parities (PPPs); during the evaluation period this was updated to $6.85/day,[10] based on 2017 PPPs.[11]

As part of BII's Inclusive score assessment under its Productive, Sustainable, and Inclusive (PSI) framework introduced in 2022, it assesses cross-country inequality, within-country inequality, and reaching or empowering otherwise excluded groups. The Inclusive score is based on the profile of the stakeholders that the investment is expected to benefit positively. One way this is done is through default country scoring, which "is used when micro data about the poverty level of key stakeholders is not available".[12] These scores are based on ranking countries according to the poverty gap, gross domestic product (GDP) per capita, and fragility measures, covering the categories in Table 3. Default country scoring.

Table 3. Default country scoring

Score	Category	Example countries
3	Alpha	Afghanistan, Malawi
2	Beta	Bangladesh, Kenya, Nigeria, Pakistan
1	Gamma	Egypt, Ghana, India, Nepal, South Africa
0	Delta	Morocco, Sri Lanka

The highest score, Alpha, "is the most in need and Delta the least".[13] See Annex B for the country default score list and see BII's 2022 Impact Score manual for more details on the Inclusive score methodology.[14]

2.1.8 Jobs

In BII's 2012 strategy, BII introduced a job creation mission and strategy and a geographic focus on Africa and South Asia. This focus continues and includes not only direct jobs supported but also indirect jobs supported,[15] as calculated by the JIM,[16] vis-à-vis the investees' footprint. The focus on jobs also considers the quality (including wages and benefits) of jobs in both the formal and informal sector. BII has also emphasised supporting jobs for women through its commitment to applying 2X criteria, which include sector-specific thresholds for the share of women in a company's workforce as well as job quality indicators.[17]

[10] These figures are roughly equivalent in real terms, so this change should be seen as a change to the units in which the poverty line is measured and not a change in the poverty line itself.
[11] BII (n.d.) 'Why use the $5.50 poverty line as a benchmark for inclusion?' Visit bii.co.uk/en/news-insight/research/why-use-the-5-50-poverty-line-as-a-benchmark-for-inclusion/#; BII (2023) *Insight: Understanding who we reach: a deep dive into our portfolio in India.* Visit https://assets.bii.co.uk/wp-content/uploads/2023/09/26095524/Understanding-who-we-reach-in-India-BII.pdf; World Bank (n.d.) 'Extreme poverty, 2015-2022'. Visit worldbank.org/en/topic/poverty#:~:text=Note%20on%20global%20poverty%20lines,2011%20PPP%20in%20previous%20editions (accessed 12 October 2023).
[12] BII (2022) Impact Score 2022 – 26 Strategy Period. Visit assets.bii.co.uk/wp-content/uploads/2022/02/02111950/BII-Impact-Score-2022-26.pdf
[13] Ibid.
[14] Ibid.
[15] 'Direct jobs supported' refers to direct full-time jobs supported at an investee company, and 'indirect jobs supported' refers to indirect jobs supported throughout the further supply chain and wage-induced jobs, as calculated by the Joint Impact Model (JIM).
[16] The Joint Impact Model (JIM) is a market level tool that allows users to estimate indirect jobs, value added, and greenhouse gas emissions, using input data such as revenue from investment portfolios. It is endorsed by 25 organisations. More information can be found on their website: https://www.jointimpactmodel.org/
[17] 2X Global (n.d.) '2X Criteria'. Visit 2xglobal.org/what-we-do/#2xcriteria (accessed 12 January 2024).

3. Methodology

This phase of the evaluation draws on secondary data, with no primary data collection or verification of evidence with investees or any stakeholders external to BII (stakeholders within BII that have been consulted are listed in Annex F). As such, it provides a snapshot of the portfolio, being highly reliant on the quality and completeness of data provided by BII and self-reported by investees, complemented by external evidence. Some of BII's data and systems are either audited or assured (for more details on what is and is not audited or assured, see Annex C). We cleaned and collated the data received by BII by undertaking several steps, which are outlined in Annex D.

Year-end 2022 was our cutoff for the evidence to be included in this evaluation; however, to include all 2022 year-end data collection efforts, additional data and evidence was accepted as late as July 2023. This analysis was supported by interviews with BII investment team members and BII DI specialists to better understand the DI aims of the investment strategies by sector and how these have developed over the years under evaluation. The Phase 2 in-depth studies of Phase 2 of the ITS evaluation (2024–25) will address some of the limitations by triangulating and verifying the DI theses with primary data collection and analysis.

In this section we outline our methodological approach to this portfolio evaluation. First, we detail our methodology for the portfolio composition analysis; second, we describe the approach to assessing the DI within each ITS sector; third, we outline the limitations that we faced and how we have mitigated these to the extent possible.

3.1 Methodology for portfolio composition analysis

The portfolio composition analysis describes the portfolio of ITS investments according to key characteristics, using BII's own commitments and disbursements data sets. Our analysis of the portfolio is informed by BII's 2022–26 Technical Strategy, using some of its key dimensions, such as its geographic segmentation, as characteristics by which to analyse the portfolio.

The analysis includes all direct and intermediated investments in the ITS portfolio, comprised of 188 commitments to unique companies and funds, and 889 unique investee companies, totalling $5.996 billion of commitments in ITS between 2012 and 2022.[18] It includes all underlying investments through sector-specific funds and through multi-sector funds where the underlying investment is in an ITS sector.

To analyse the different dimensions of these investments, we have used both a data set of 'commitments'[19] and a data set of 'disbursements'.[20] The data sets of commitments and disbursements each have their own usefulness and shortcomings for our analytical purposes and so we have used both in our analyses, based on which is most appropriate for the analysis that we were conducting.

We have included BII's direct and intermediated investments into technology infrastructure (for example, telecommunications networks, backbone fibre, data centres) in our portfolio analysis as part of the overall investment in technology. However, we have not included technology infrastructure in the DI analysis, because the DI of those investments is analysed through the FCDO–BII evaluation of the DI of the infrastructure portfolio.[21]

[18] We note that in the BII database on which we based our calculations, some commitments have been reduced or cancelled and are accounted for as negative commitment values. Our aggregate commitment value reflects this.
[19] The amount that the BII IC approves to invest into a company or fund
[20] The amount of capital that is deployed against a commitment.
[21] Itad (2022) *Evaluating the impact of British International Investment's infrastructure portfolio.* Visit assets.publishing.service.gov.uk/media/623b3cd08fa8f540f0895474/BII_Infrastructure_-_Formal_Evaluation_Report_-_Executive_Summary.pdf

Similarly, the DI of underlying investments into financial services by multi-sector funds is not analysed, as they are addressed through the scope of the FCDO–BII evaluation of the DI of the financial institutions portfolio.[22] There are 69 financial services investments via multi-sector funds, accounting for $203 million in disbursements in the C&BS portfolio.

Technology investments are included under 'technology' for the portfolio composition analysis, then analysed according to the most appropriate sector framework for the intended DI outcomes of the investment. Most technology investments align to the C&BS impact framework; however, some intend to generate outcomes that are specific to other sectors, such as driving agriculture or health outcomes. For example:

- BII's investment into BetterPlace – a tech-based workforce management platform[23] – has been counted as a technology investment in the portfolio analysis, but its DI has been included in our analysis of digital services using the C&BS.
- BII's investment into Cropin – a company using specialist technology such as satellite images, artificial intelligence (AI) and machine learning to monitor crop health remotely for improved livelihood outcomes for farmers[24] – has been counted as a technology investment for the portfolio analysis, but its DI has been included in our food and agriculture (F&A) analysis; and

We have opted not to use the technology sector framework, as the other frameworks were deemed more suitable. Venture capital (VC) funds have been classified as Technology sector-specific investments for the portfolio composition analysis, and the underlying investments in the sample have been assessed according to the most relevant sector impact framework.

Within the ITS portfolio, there are several 'legacy funds' which are deemed not to align with BII's strategy from 2017 onwards. BII has not yet exited these multi-sector funds,[25] despite them being no longer aligned with BII's impact intentionality. These funds have been included in the portfolio composition analysis but have not been included in the sample for DI analysis, as they are deemed not to have DI evidence that will help inform the analysis.

3.2 Methodology for analysis of development impact across the portfolio

3.2.1 Structure of analysis

The BII impact frameworks for each ITS sector structure and guide our assessment of the achievement of DI. We reviewed the documents for each investment that was in scope for the DI analysis (see Section 3.2.2). We extracted and mapped all evidence of DI intention and achievement against the relevant impact pathway, outcome or ultimate impact that is articulated in the relevant sector impact framework. For each sector, we synthesised the quantitative and qualitative evidence per result in the impact framework. We have presented the evidence in the relevant sector subsections of Section 5.2 (5.2.x) under 'Development impact across [sector] portfolio against the impact framework'.

We note that sector impact frameworks were developed in the period 2017–20, and many of

[22] Genesis Analytics and IPE Global (2020) *Evaluating CDC's Financial Institutions Portfolio.* Visit gov.uk/government/publications/evaluating-cdcs-financial-institutions-portfolio

[23] BII (2021) 'BetterPlace safety solutions private limited'. Visit bii.co.uk/en/our-impact/investment/betterplace-safety-solutions-private-limited/ (accessed 12 January 2024).

[24] BII (n.d.) 'Cropin Technology Solutions Private Limited'. Visit bii.co.uk/en/our-impact/direct-header/cropin-technology-solutions-private-limited/ (accessed 12 January 2024).

[25] These multi-sector funds have not been exited, because BII's capital is typically committed to fund managers for an extended period, often ten years or longer; cash contributions (referred to as "capital calls" or "drawdowns") are requested by the manager, and BII is obliged to meet the requests throughout the period committed to. In such cases, exit is only possible when the contract expires.

the investments in the portfolio pre-date these frameworks. However, many of the impact pathways and outcomes link to BII's overarching strategies (2012–16 and 2017–21) and are pathways and outcomes that are generally accepted (for example, natural resources management in agriculture) and inherent in terms of achieving DI in a given sector.

Our analysis of DI is also structured according to key cross-cutting themes in BII's Technical Strategy, namely gender and diversity, climate change and digital transformation, as well as value addition, low-income populations and jobs. For each sampled investment, we extracted quantitative and qualitative data on DI against each of these themes. We analysed the extracted data across each of these themes by sector to provide a summary on (i) the extent of the available evidence and (ii) achievements across the portfolio for each of these themes. This analysis is presented by theme under Section 5.2, under the subsection heading 'Development impact across the [sector] portfolio by most pertinent themes'.

We used several data fields from BII's DI metrics data, which is an annual collection of metrics, to present a 2022 snapshot (for example, jobs per sector in 2022). We analysed subsets of data where longitudinal data was available. Longitudinal assessments at an aggregate sector or portfolio level were not possible where there were investments that were new or exited, or where there were gaps in data.

To conduct our analysis of BII's emissions, we combined the data reported to BII in 2021 on companies' emissions and on total revenue of those companies in the same year. This has enabled a comparison of emissions across companies of different sizes. Our analysis includes BII's direct investments only, due to limitations in the data reported by underlying investees.

3.2.2 Sampling process and criteria

Our DI analysis includes 100 per cent of all direct investments in the ITS portfolio that are within scope of this evaluation (see Section 1.2), with the exception of investments into technology infrastructure (see Section 3.1). It includes 100 per cent of all sector-specific intermediated investments, except for technology-intermediated investments (VC funds), where we have selected a sample. We also selected a sample of multi-sector funds. The sampling methodology and funds selected for sampling were discussed with and agreed on with BII teams.

As there are too many underlying investments in the VC portfolio for us to include in the DI analysis (more than 265 VC underlying investments across 19 funds), we have analysed a sample of 126 underlying investments from eight funds. In drawing the sample, we ensured that it included an appropriate geographic spread, a focus on different stages (early stage, growth stage), a specialist focus vs a more generalist approach, and a variety of thematic foci.

Similarly, it was not possible within the scope of this evaluation to analyse all the underlying investments of the 67 multi-sector funds, and so we intentionally selected a sample that we deemed would have the most relevant DI to support our methodological approach and help us fill gaps in data.

We excluded from the multi-sector fund sample nine private equity 'legacy' funds, which are no longer managed within BII and have not aligned with its strategy post-2017. We also excluded sampling from the funds investing in Myanmar and Afghanistan as these funds face unique challenges in achieving DI, due to the political circumstances of these countries. We did not sample any funds that have more than 30 per cent of investments into financial services (as this subsector is covered by the FCDO–BII evaluation of the DI of financial institutions). We created sampling criteria ensuring a representation of diversity and balance of geographies, underrepresented sectors in ITS direct investments (for example, Manufacturing and Services), Catalyst and Growth approaches, and varying years

of commitments. We checked the number of active investments in each fund to ensure evidence. In our DI analysis we have included 103 underlying investments within 12 funds.

3.2.3 Use of external evidence

We have used external evidence to enhance our understanding of key trends within sectors and themes and to provide contextualisation of reported results. We have not used external evidence to fill gaps in monitoring data or to substantiate a particular investment's impact.[26]

We have used country-specific, region-specific, and sector-specific evidence to contextualise clusters of investments. We have drawn on studies referenced in the evidence reviews and in the BII ITS sector strategies. We have also taken evidence from the World Bank Development Indicators, reports by United Nations (UN) agencies, universities or those commissioned by bilateral organisations, and peer-reviewed articles from reputable journals. A full bibliography by sector is included in Annex A.

When reviewing external evidence, we ensured that the sources were specific to the BII target regions of Africa and South Asia and to the ITS sectors, and that they were published in the same period that the evaluation covers, with a preference for more recent data and insights. To be included, evidence from these sources would be expected to be of satisfactory quality. However, where necessary we reviewed the quality by assessing the study's conceptual framework, methodology, validity, clarity of results and clarity of limitations.

3.2.4 Investment health methodology

DI assumes that the investment meets its financial expectations over the investment period, so that it can achieve its intended DI thesis. Therefore, while financial health is a prerequisite for an investee to achieve its intended DI thesis over the investment period, it is not sufficient alone to generate impact. Although we were not able to assess each individual investment's financial performance, we examined and have presented the financial health and the DI risk of the portfolio. We used Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA) DI metrics to assess financial health. We also used BII's DI RAG ratings, which apply to BII's ITS direct and intermediated investments, to identify potential DI risk based on BII's internal DI RAG ratings.[27]

3.2.4.1 BII's methodology for DI RAG rating

The DI RAG rating reflects performance in achieving the investment's impact case to date and the risks to impact not being achieved.[28] According to BII, it also serves as an 'early warning signal' alongside five other RAG rating indicators to identify investments which require a more thorough performance and risk assessment and, potentially, interventions from both a financial and an impact perspective.

The DI RAG rating is intended to reflect the expected DI performance of an investment over the lifetime of the investment. These ratings are conducted quarterly. Each investment is scored in three areas: variance to DI target (using a quantitative analysis); a qualitative assessment of likely impact risk; and a qualitative assessment of risk in the broader context. The BII staff member reviewing the investment provides a point ranking for each of these areas according to the guidance provided. We relied on the Q1 2023 DI RAG ratings to reflect the status of the portfolio. For more information on DI RAG ratings, please refer to Annex B.

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[26] This is in line with the methodological approach agreed in the inception report.
[27] DI RAG ratings are an internal tool to identify risk, and intervene if necessary to mitigate, and are assessed by BII's DI team members. The team is urged to exercise caution to ensure investments are escalated rapidly if impact may be at risk.
[28] BII (2023) DI Portfolio Management: DI RAG rating guidance.

3.2.4.2 Financial health assessment

Financial health has been calculated using EBITDA metrics where they were reported to BII over a longitudinal horizon. The available data for this analysis comes from a subset of the total ITS investments. Data availability is limited for a number of reasons: (i) some investments are too recent (for example, 2022 commitments) to have been through sufficient reporting periods to allow for a compound annual growth rate (CAGR) analysis; (ii) some investments' reporting will have failed BII's quality control process, and therefore the data points are not included in the quality controlled data set; (iii) some investments have not reported because they are investees in funds that are liquidating, or they are not expected or required to report against these metrics, or they are investees in sectors in which financial data is not expected (for example, real estate, greenfield or early-stage VC or forestry investees that are not yet operational).

We calculated the CAGR for investments that had a positive EBITDA at the start and end points and for those that had a negative EBITDA at the start and end points. We also noted the proportion of investments that started with a positive EBITDA but ended with negative EBITDA, and vice versa. This analysis provides insights into the financial performance of BII's direct commitments in ITS and underlying investments over time. We used data mostly from 2019 to 2022. EBITDA calculations are based on local currencies that have been converted to US Dollar (USD) and are not adjusted for currency fluctuations. Therefore, the devaluation of any given currency is not considered.

3.3 Limitations

The evaluation team has identified some limitations in developing and implementing the described methodology. We have mitigated these limitations to the extent possible.

Table 4. Limitations and mitigations

Methodological limitation	Mitigation
For most investments, the impact information available is focused on the estimations of (future) impact resulting from BII's ITS investment, i.e. in the IC paper, with limited data available in monitoring reports of impact achieved. For example, the IC paper may include estimations of how many jobs an investment will support (based on growth projections) or plans on how an investment might reduce its waste; however, the data on the extent to which this is achieved following investment is not often captured in reporting documents. There are gaps in data for DI metrics, with no or limited quantitative data available for many investees.	We analysed both the anticipated and actual impact of investments in the DI analysis. We also indicated where impact data was estimated or predicted and where it was measured through monitoring following BII's ITS investment We have focused our analysis on the most complete data available to us.
We have found that quarterly impact reports for *direct* investments contain more information on impact achieved than the equivalent document for *intermediated* underlying investments.	We have extracted all relevant impact data from quarterly impact reports for direct and intermediated investments. Examples of intended or achieved DI in Section 5 are summarised from these sources and are therefore weighted towards investments that have more information on intended or achieved DI.

BII's long tenors for funds also mean that some investments that are within scope of this evaluation have invested into businesses that do not align with BII's more recent policies (such as on hospitals and private schools), which have been developed post-BII's commitment to the fund.	In undertaking our qualitative analysis of DI achievement, we have considered the vintage of investments to account for BII's impact intentionality – and restrictions – at the time of commitment.
There was a large and very varied sector portfolio to evaluate in the time and with the resources available.	To manage the scale and complexity of the portfolio, we prioritised including all direct investments and all sector-specific funds, but sampled from the VC funds and multi-sector funds (as outlined in Section 3.2). Furthermore, we only reviewed the IC paper and the most recent quarterly monitoring report for VC funds.
For some investees to which BII has exposure through multiple instruments, for example through a direct investment and through a fund, there are inconsistencies in the DI data reported.	We remove data marked as "duplicate" or "exclude" in BII's Quality Controlled data spreadsheet. Where conflicting data is reported for the same investee, in the first instance we use data reported by BII for their direct investments, where available.
Analysis for Phase 1 is dependent on secondary data, most of which has been provided by BII in several data sets. We found that these data sets are not entirely aligned with one another, include inconsistencies and omissions, and categorise investments differently to the scope of our work (in addition to the data gaps and duplicates described previously in this table).	We have taken steps to align data sets to the extent possible and to identify inconsistencies and omissions, as well as coming up with our own means to filter data according to the scope of work of the evaluation. We have done so with the support and feedback of BII stakeholders.

The quantitative analysis included in this desk-based evaluation report is dependent on data sets provided by BII. It includes all direct and intermediated investments in the ITS portfolio, comprised of 188 commitments to unique companies and funds and 889 unique investee companies. It includes all underlying investments through sector-specific funds and through multi-sector funds where the underlying investment is in an ITS sector. We have used both a data set of 'commitments'[29] and a data set of 'disbursements'.[30] The portfolio composition analysis includes BII's direct and intermediated investments into technology infrastructure as part of the overall investment in technology. However, we have not included technology infrastructure in the DI analysis.[31] Similarly, the DI of underlying investments into financial services by multi-sector funds is not analysed.[32]

Some of the BII data sets that the evaluation team have drawn on are assured or audited, as outlined in Annex C. Furthermore, we have taken our own steps to clean the data sets, as described in Annex D.

Although we took steps to ensure the accuracy of the analysed data and corrected any errors or omissions, there are still limitations to using collated BII data sets for this analysis.

[29] The amount that the BII IC approves to invest into a company or fund.
[30] The amount of capital that is deployed against a commitment.
[31] As these are covered by an existing evaluation: Itad (2022) '*Evaluating the impact of British International Investment's infrastructure portfolio'.* Visit gov.uk/government/publications/evaluating-the-impact-of-british-international-investments-infrastructure-portfolio
[32] These are included in an existing evaluation: Genesis Analytics and IPE Global (2020) *Evaluating CDC's Financial Institutions Portfolio.* Visit gov.uk/government/publications/evaluating-cdcs-financial-institutions-portfolio

However, using the available data, this evaluation report provides an interim assessment and helps identify priorities for further exploration through the in-depth studies of Phase 2.

Ethics

Itad Ethics Principles and the Code of Conduct set the frame for policy and process to ensure that we conform to high ethical and moral standards. Itad Ethics Principles align closely with *DFID Ethical Guidance for Research, Evaluation and Monitoring Activities* (2019), which sets out expectations on ethical principles and standards for FCDO-funded projects. In Phase 1 of this evaluation, we did not collect any primary data or engage with anyone outside BII and FCDO. Therefore, in Phase 1, we prioritise the inclusion of stakeholders, conflict of interest management, and protecting confidentiality through secure data storage and protocols for data sharing, use and archiving.[33] No conflicts of interest were identified.

Detailed ethics and inclusion considerations can be found in Annex D.

[33] The evaluation team adheres to nine Itad Ethical Principles: independence and impartiality of the researchers; avoiding harm; child protection; treatment of participants; voluntary participation; informed consent; ensuring confidentiality; data security; and sharing of findings. The final three are most applicable to the activities undertaken in Phase 1 of this evaluation, and therefore are the principles that are focused on within this section.

4. ITS portfolio composition

Summary of findings

- BII's ITS portfolio had committed $5.996 billion from 2012 to 2022, with 69 per cent of those commitments having been disbursed.[34]
- Technology is the largest sector, based on committed amounts (although this includes technology infrastructure commitments). After technology, health and F&A are the sectors with the largest committed amounts in aggregate across the time period.
- 21 per cent of BII's 188 ITS commitments are classified as Catalyst and represent committed capital of $665 million.
- 62 per cent of the ITS monetary commitments are in Africa and 32 per cent in South Asia. The remaining 6 per cent are in global investments.
- The investment instrument that represents the greatest committed sum is funds, which include both multi-sector and sector-specific funds (totalling $2.547 billion and forming 42.5 per cent of the ITS portfolio), followed by direct equity at $2.401 billion (40 per cent) and direct debt at $1.048 billion (17.5 per cent).
- Multi-sector funds are a sizeable proportion of ITS commitments (29.5 per cent of the total commitment amount), demonstrating their importance to the overall ITS investment strategy. They have been instrumental in increasing the number and breadth of investments into geographic areas where BII has no or few direct investments in ITS, for example Nepal, Cambodia, Côte d'Ivoire, Ghana, Ethiopia, Morocco and Zimbabwe.
- Multi-sector funds have invested 53 per cent of their funds in C&BS.

This section is comprised of three subsections. The first provides an overview of the full ITS portfolio in terms of commitments, disbursements, invested geographies and ticket sizes. The second presents an analysis of the portfolio by sector. The third offers a more detailed view of the multi-sector funds within the ITS portfolio.

4.1 Overview of ITS portfolio analysis

As mentioned in section 3, BII's ITS portfolio has made 188 commitments over the 2012–22 period.[35] This number reflects 82 direct commitments to companies, 39 sector-specific fund commitments and 67 multi-sector fund commitments. **These commitments total $5.996 billion, comprising $1.048 billion in direct debt, $2.401 billion in direct equity and $2.547 billion in funds.**

On aggregate, 889 companies have been invested in, either through BII's ITS portfolio's direct investments or through funds.[36] In total, $4.135 billion has been disbursed. The difference in the amount disbursed vs the amount committed (31 per cent) is due to the factors presented in Table 5.

[34] Reasons for the gap between commitments and disbursements include: 2022 commitments that have not been disbursed, cancelled commitments, smaller disbursement amounts than the original commitment, and funds that have not yet disbursed all their capital.
[35] This considers that there can be multiple commitments to the same company using the same or different instruments. For example, an equity and a debt commitment to the same company would be considered one commitment.
[36] As funds have subsequently invested in individual companies.

Table 5. Proportion of non-disbursed commitments

Reason	**Proportion of the commitments not disbursed** (as of 31 December 2022)
Funds that have not received full disbursement of their committed capital	44%
2022 commitments	30%
Reduced or pending disbursement	19%
Cancelled commitments	6%

When investing in funds, it is normal practice to commit to an agreed sum but to disburse those funds over time. Therefore, a commitment amount to an individual fund will exceed disbursement amounts to that fund until the fund has been fully deployed (into underlying investments). This creates differences between committed and disbursed figures for fund investments, represented in Table 5.

Table 6 shows the breakdown among the two primary investing regions for BII's strategy. 62 per cent of ITS commitments are focused in Africa and 32 per cent in South Asia.[37] In terms of actual capital disbursed as of December 2022, 68 per cent has been invested in Africa and 26 per cent in South Asia.[38] Globally focused investments tended to be in the health sector – vaccines, drug development, medical devices and apps – and were not specifically targeted to Africa and South Asia; however, the challenges faced in these two regions were the target of these global investments. Moreover, the regions would significantly benefit from the solutions coming from these investments.

Table 6. Commitments and disbursements by region[39]

Region	**Commitments ($ billion)**	**Disbursements ($ billion)**
Africa	3.75 (62.6%)	2.81 (68.4%)
South Asia	1.89 (31.6%)	1.01 (26.4%)
Global	0.35 (5.8%)	0.22 (5.8%)
Total	6.00	4.11

Initial individual investment commitments in the ITS portfolio range from $2 million to $244 million. The average amount is around $32 million. Smaller-sized investments tend to be co-investments. These types of smaller co-investments provide direct capital from BII's ITS portfolio to a company alongside a fund investment (into which BII has also invested), allowing for BII and the fund to provide greater sums of investment capital via funds to companies that have high DI potential.

4.2 ITS portfolio analysis by sector

Most of the graphs in this section (from Figure 2 to Figure 10) reflect commitments to an individual company or an individual fund. They also do not include underlying investments made by (sector-specific or multi-sector) funds. In the case of multiple funds committed to one fund manager, each individual fund is counted as a commitment. However, follow-on commitments made to an individual company are considered one commitment: all follow-on commitments and amounts are counted in that commitment to the company. Therefore, if an investee received three commitments, the commitment amount would include all three commitment amounts, but we would only count the company as a single investee.

[37] Four commitments have a global focus, making up 5.8 per cent of ITS commitments.
[38] There are also a few investments in countries that are in other regions of Asia included here.
[39] We note that there are few investments in Asia which fall outside of South Asia, hence the total figures of this table differ from the portfolio totals.

For this portfolio-level descriptive analysis, we have included direct and intermediated investments in technology and digital infrastructure (including telecoms towers, mobile network operators, and fibre). To show BII's total investment in technology, these investments have been included alongside investments in VC funds (which we have labelled as technology sector-specific funds) and BII's ITS portfolio's direct investments into digitally native, digitally enabled and disruptive technology businesses. The investments in telecom towers, mobile network operators and fibre tend to be larger than the typical ITS investments, and on aggregate reflect a commitment amount of $883.6 million. The DI of these infrastructure investments has not been included in our DI analysis, as this has been covered in an evaluation covering infrastructure investments.

In this section, we analyse the ITS portfolio by sector, based on all commitments made in the period under evaluation. Next, we analyse the commitments made by investment approach, by instrument and then by strategy period. The following sub-section analyses the commitments into each sector, year on year, throughout the evaluation period. We then analyse the commitments made into each sector by geography. Lastly, we analyse financial health variables of the portfolio and taxes paid.

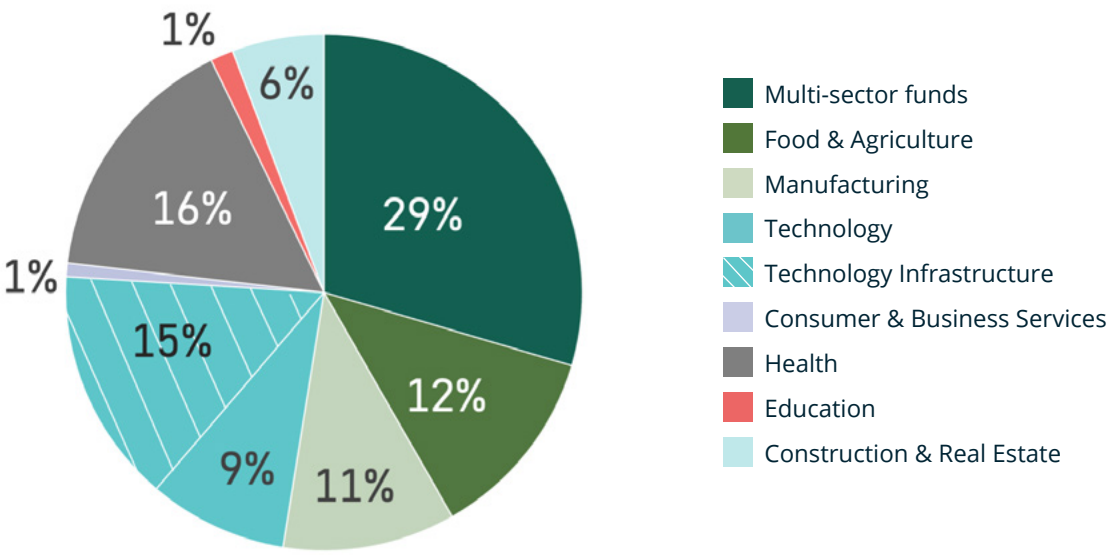
4.2.1 Commitments by sector across the portfolio

Figure 2 shows the distribution of commitments made by BII's ITS portfolio directly into companies and funds from 2012 to 2022. **Multi-sector funds represent nearly one-third of the total commitment amount. Technology is the sector that has the greatest monetary commitment amount, representing 24 per cent of the total ITS portfolio**, of which 15 per cent is technology infrastructure. Aside from technology, F&A (12 per cent of the portfolio) and health (16 per cent) are the two sectors that BII's ITS portfolio has committed the greatest number of investments and highest total amounts to, in aggregate, over the 11 years. Technology, health, and F&A collectively form 37 per cent of the total amount committed (excluding technology infrastructure commitments). Technology has 56 commitments, totalling $1,405 million; health has 19 commitments, totalling $958 million; and F&A has 24 commitments, totalling $729 million.

Manufacturing has few (six) commitments compared to the other ITS sectors; however, the individual commitments are large sums. The largest commitment in the ITS portfolio is in the manufacturing sector, in the amount of $244.6 million. Manufacturing commitments total $648 million and form 11 per cent of the ITS portfolio. CRE also has few (ten) commitments compared to other ITS sectors and makes up a smaller proportion of the monetary value of the ITS portfolio. CRE commitments total $345.9 million and form 6 per cent of the ITS portfolio.

Education and C&BS have the smallest number of commitments and amounts committed, together covering only 2 per cent of the total amount committed. Education has four commitments, totalling $86 million and forming 1 per cent of the ITS portfolio. C&BS has two commitments, totalling $51 million and forming 1 per cent of the ITS portfolio.

Figure 2. Proportion of total commitment amounts by sector



4.2.2 Investment approaches

BII's ITS portfolio predominantly uses two investment approaches: Catalyst and Growth (see Section 2.1.2 for an explanation of these terms). In terms of comparative ticket sizes, higher-risk Catalyst commitments (averaging around $15 million) are targeted towards emerging companies which may be unable to absorb larger ticket sizes or on which BII is not as willing to take a big risk in an initial commitment. Therefore, Catalyst commitment sizes tend to be smaller when compared with Growth commitments (with an average around $35 million).

Catalyst is the result of a 2012–13 UK Department for International Development (DFID) and BII pilot programme. They piloted a programme of high-impact, high-risk investments using both direct and intermediated instruments and TA. In 2017, BII brought this pilot in-house and formally established a Catalyst portfolio to complement the Growth portfolio. Catalyst commitments are intended to develop the market for impact investing in some of the most remote and challenging business environments in the world. Growth investments are larger investments that tend to support expansion and scale.

Of the 188 commitments, 40 are classified as Catalyst and total $665 million, 146 are Growth and total $5.323 billion, and two are Kinetic and total $7.5 million[40] (see Figure 3 and Figure 4).

Catalyst investments are most prevalent in Technology, followed by F&A, Health, and Education. Growth strategies dominate the CRE and Manufacturing portfolios. Multi-sector funds have proved to be an important vehicle for investing in Catalyst opportunities, especially with their ability to invest in smaller ticket sizes.

[40] The Kinetic portfolio is a pilot portfolio, launched in 2021.

Figure 3. Number of commitments by investment approach by sector

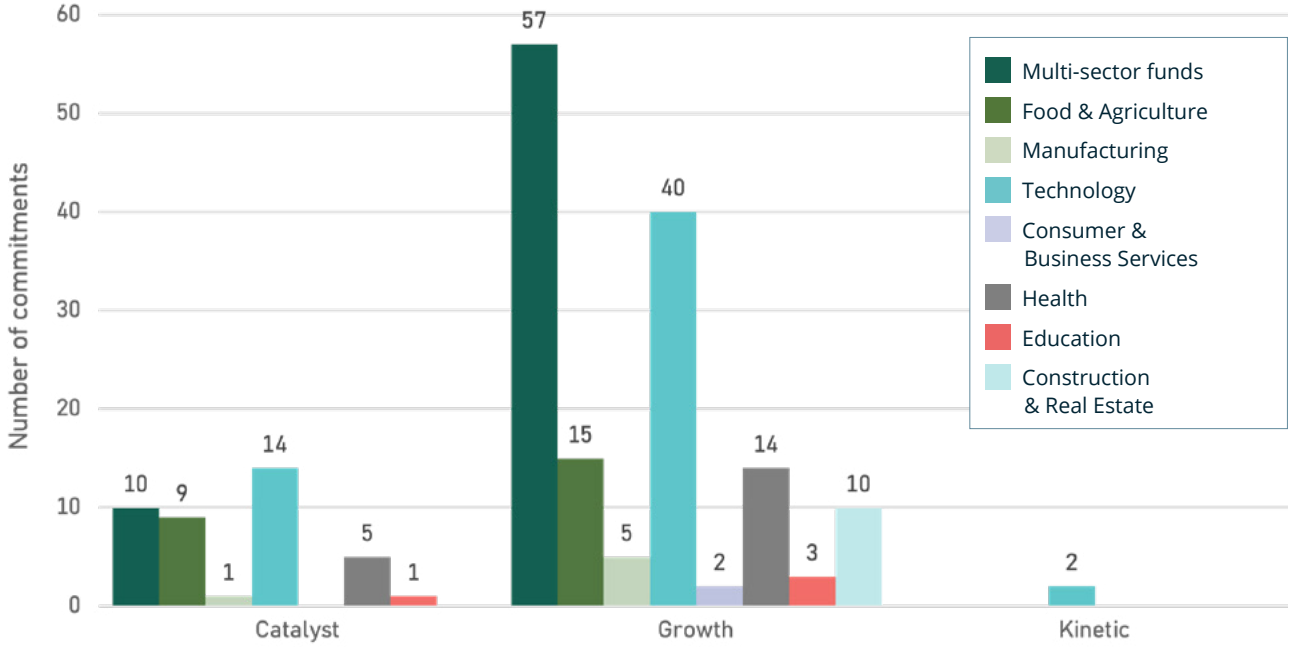
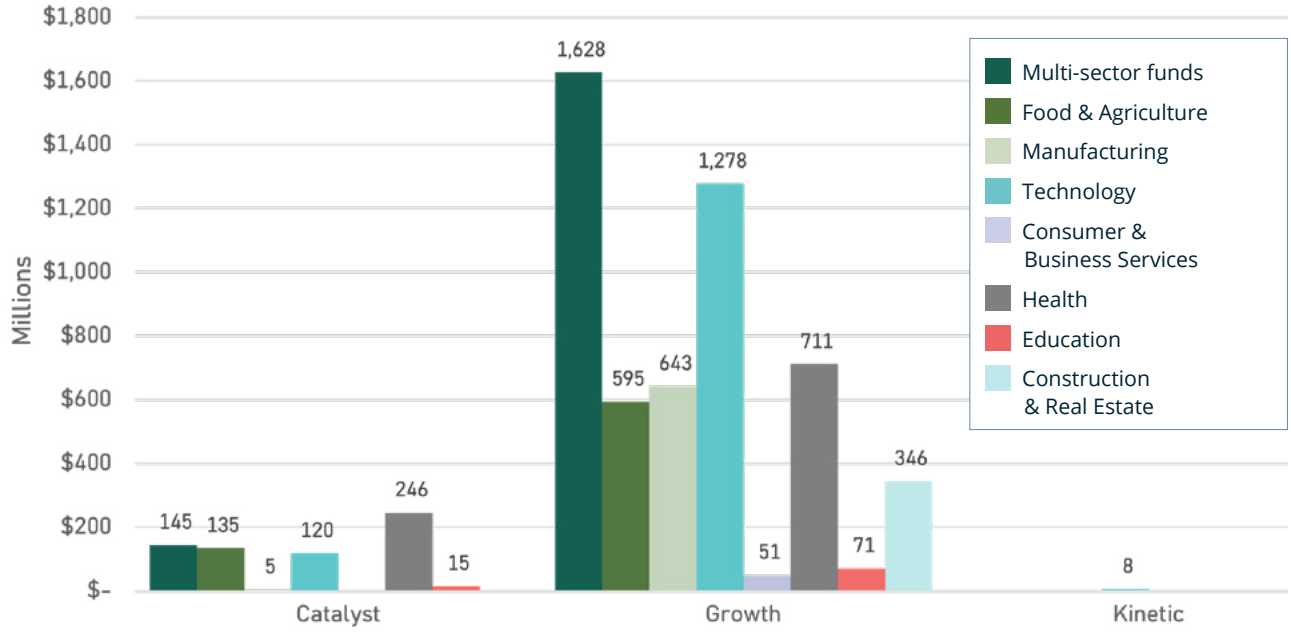


Figure 4. Commitment amounts by investment approach by sector



The number of Catalyst investments in technology is not surprising, as this is a sector characterised by disruption and high risk, but we also note that many technology investments are also targeted in the Growth portfolio. We assume that the large number of Catalyst investments in F&A reflects the fact that F&A can create economic opportunities for remote and often poor rural populations, but such investments have a high level of risk and require more patient capital. Specific Catalyst strategies for F&A have been developed and implemented in primary agriculture platforms and forestry, and Catalyst investments in F&A include agricultural technology (AgTech) and food technology innovation. Health has been a sector where Catalyst strategies have been used, such as investments in financing solutions and credit funds, investments in technology solutions, vaccine development, diagnostics, rural clinics and services, and innovative platforms and distribution models. There is one direct Catalyst investment in education and seven Catalyst investments made by multi-sector

funds, demonstrating the opportunity for investments in disruptive solutions, particularly in educational technology (EdTech).

Growth strategies have been used primarily in CRE, manufacturing and health (to fund hospitals and established clinics, diagnostic centres and research facilities), and in C&BS. These are primarily sectors that have asset-heavy investment propositions that require larger sums of capital and where high-risk, disruptive investment opportunities are fewer.

4.2.3 Instruments

The primary instruments that BII's ITS portfolio uses are direct equity and direct debt, as well as investment into funds. T**he investment instrument that represents the greatest committed sum is funds**, which include both multi-sector and sector-specific funds (totalling $2.547 billion and forming 42.5 per cent of the ITS portfolio), followed by direct equity at $2.401 billion (40 per cent) and direct debt at $1.048 billion (17.5 per cent).

Direct debt and direct equity

Figure 5 presents the breakdown of instrument type per sector. BII has invested more in direct debt than in direct equity into F&A. This reflects the need for many of the companies to access working capital, financing for projects (such as remedial works on an asset), and to strengthen their balance sheets. Direct debt has been an important instrument in providing CapEx (capital expenditure) for new assets in manufacturing. It reflects 40 per cent of the monetary amount of all manufacturing commitments. Less than 10 per cent of the commitment amount in health has been through direct debt; direct equity has been the overwhelmingly preferred instrument with both instruments being used to fund expansion. BII has primarily used direct equity in education, although one investment had follow-on debt issued. For CRE, 12 per cent of the total direct commitment amount is debt, making direct equity the dominant instrument for CRE investments. Some technology investments have required direct debt, and others have required direct equity.

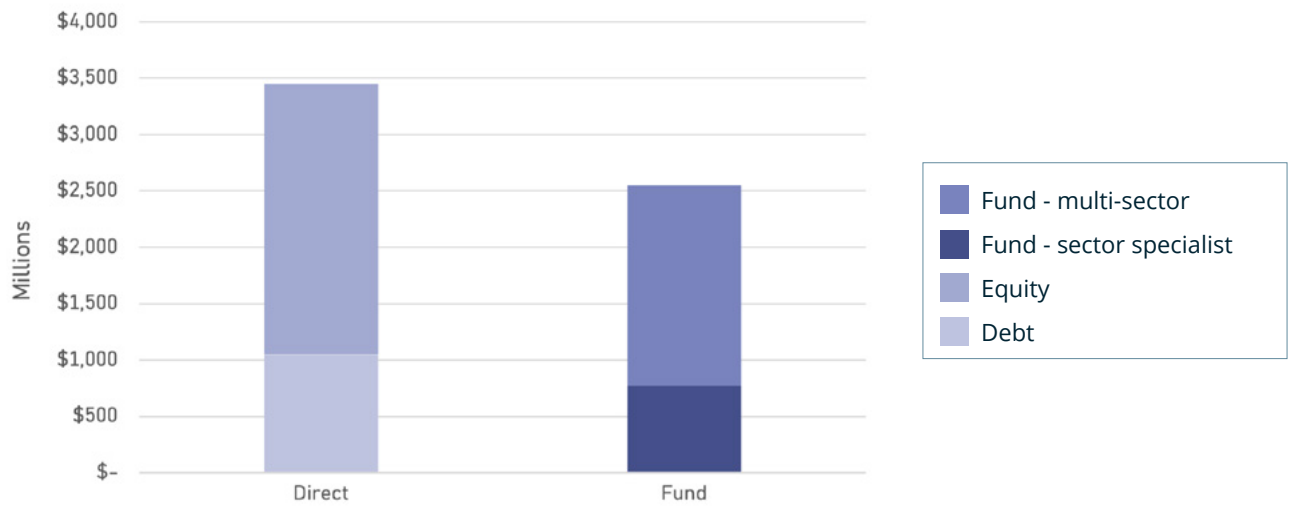
Figure 5. Number of commitments by instrument type by sector

Funds

As shown in Figure 6, across the ITS portfolio, $774 million is committed to sector-specific funds and $1.77 billion is committed to multi-sector funds. Sector-specific funds are found in F&A, health and CRE. In education, there is a fund that is unique in that it is an on-lending vehicle. In technology, VCs have been the primary intermediated investment strategy.

As there are no traditional intermediated investment vehicles that finance underlying investment in manufacturing, education, or C&BS, multi-sector funds have been a critical and effective way to target these sectors.

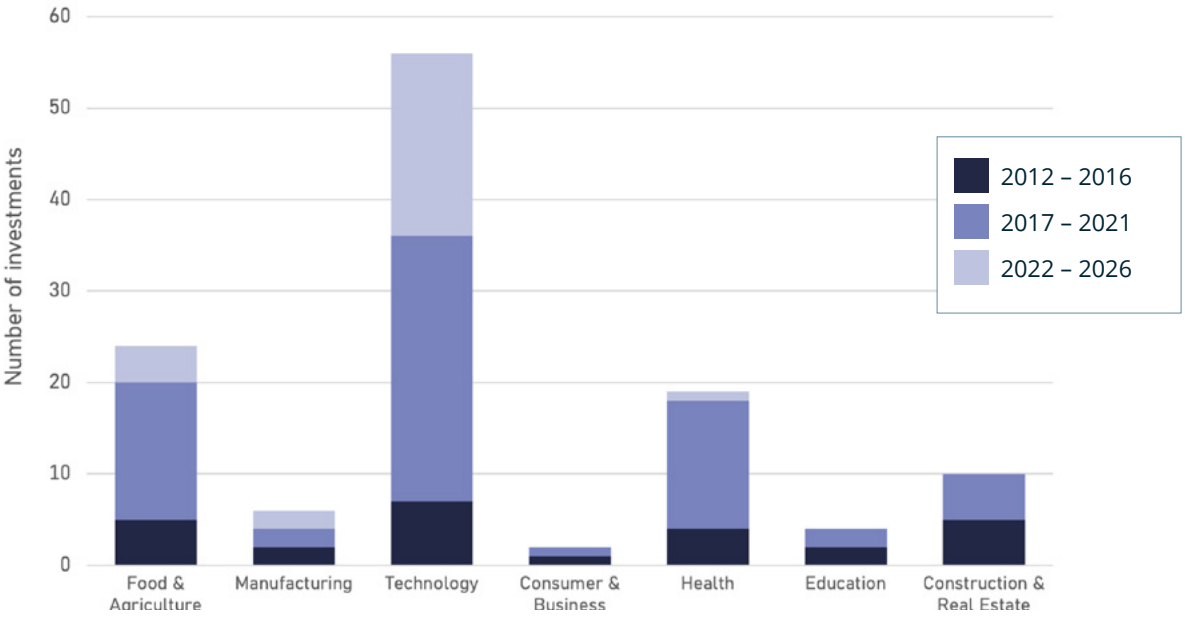
Figure 6. Monetary commitment amounts by instrument type



4.2.4 Commitments by strategy period

In our analysis of BII's investments during the three in-scope strategy periods, we found that 21 per cent of investments were made during the 2012–16 strategy period. 56 per cent of investments were in 2017–21, and finally, 22 per cent are in the current strategy period, which started in 2022. Figure 7 shows the distribution across strategy periods broken down by sector. We also found that ten investees from the 2012–16 period received a follow-on commitment in 2017–21. There were two investees from the 2012–16 period that received follow-on commitments in both 2017–21 and 2022–26. There are currently four investees from the 2017–21 period that received follow-on commitments in 2022.

Figure 7: Distribution of number of investments by strategy period per sector



4.2.5 Commitments by sector each year (2012–22)

Our analysis of the number and amounts of commitments by sector each year from 2012

to 2022 shows that there is an upsurge in technology investments starting in 2020 and in health investments committed to in the same period. Figure 8 shows the increase in the proportion of investments that were made into technology since 2020. 75 per cent of technology commitments were made between 2020 and 2022. This includes commitments to VC funds and investments in technology infrastructure. Although there are high numbers of commitments in technology during this period (42 commitments), many reflect small amounts of committed capital. There are, however, larger sums committed to technology infrastructure (Figure 9).

In 2020, BII made significant commitments into the health sector (24 per cent of the total amount committed to the Health portfolio). The number of investments into health in 2020, shown in Figure 8, does not look significantly different from the previous year (with three health investments in 2019 and two in 2020). However, the size of investments made was significantly higher in 2020 compared with 2019 (totalling $226.1 million in 2020, compared with $124.6 million in 2019). It seems likely that this increased investment into the health sector in 2020 was influenced by the onset of the Covid-19 pandemic.

Figure 8. Number of commitments per year by sector

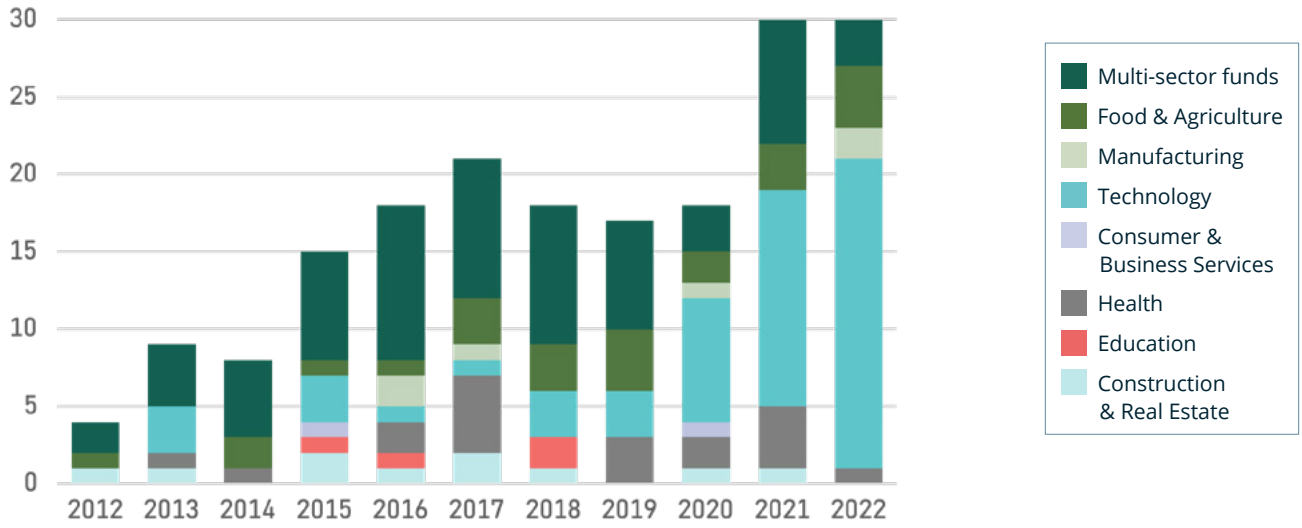
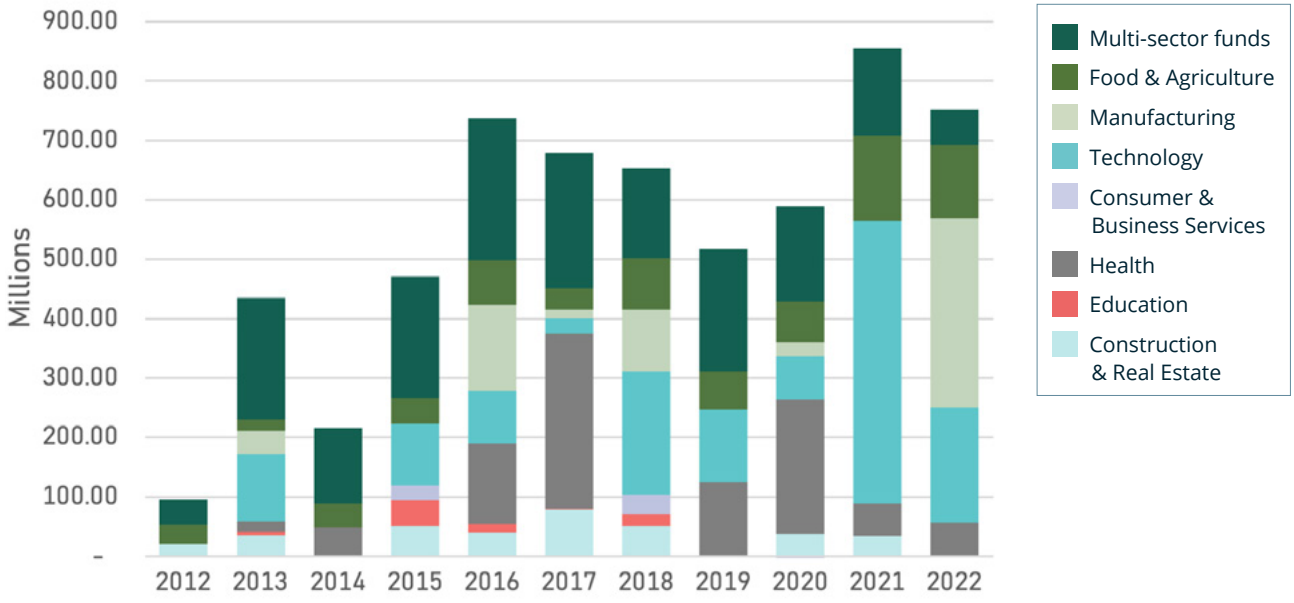


Figure 9. Commitment amount per year by sector



4.2.6 Geographic segmentation

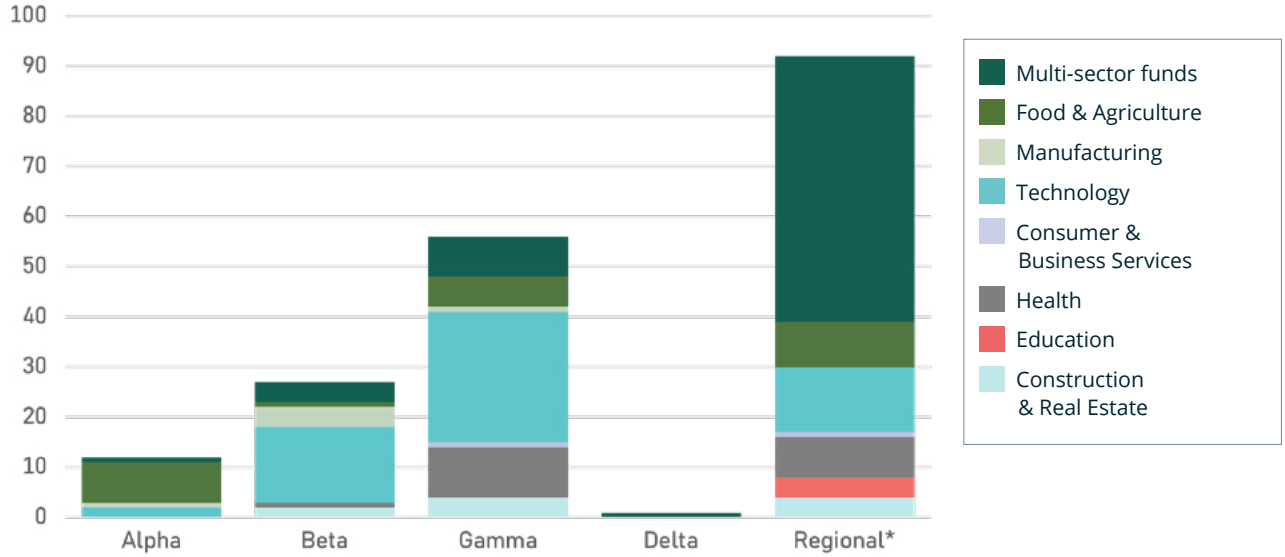
BII's Impact Score – which was introduced in January 2022 – applies a classification by country, using three indicators to determine a 'default' inclusion score: (i) poverty gap, at $5.50 per day per person;[41] (ii) GDP per capita (current PPP); and (iii) Organisation for Economic Co-operation and Development (OECD) Fragility classifications. Alpha represents the poorest and most fragile economies, followed by Beta, Gamma, and Delta (economies with the least poverty and that are not considered fragile).[42]

'Gamma-scored countries' is the most-invested country classification of inclusion based on commitments;[43] however, analysis of disbursements indicates that Beta countries are most invested in. This discrepancy is driven by the monetary value of underlying investees of funds that are invested into Beta countries (which are captured in disbursement data, but not commitment data).

The total amount and highest number of commitments are into Gamma-scored countries (totalling $1.401 billion through 56 commitments and forming 23 per cent of the monetary value of commitments in the ITS portfolio), as illustrated by Figure 10. Of all the commitments made into Gamma countries, 42 of them (79 per cent by count) are in India. This represents 71 per cent of the monetary commitment value to Gamma countries, indicating that India is a key driver of commitments to Gamma countries. However, the total amount of commitments in both Alpha and Beta countries (at $1.801 billion and 30 per cent of the monetary value of commitments in the ITS portfolio) exceeds the total amounts committed to Gamma countries.[44]

Figure 11 analyses the disbursements data, using this country classification of inclusion. **The total sum of disbursements to Beta countries ($1.422 billion) exceeds the total sum of disbursements to any other country classification**, which is driven by the monetary value of underlying investees of funds that are invested into Beta countries.

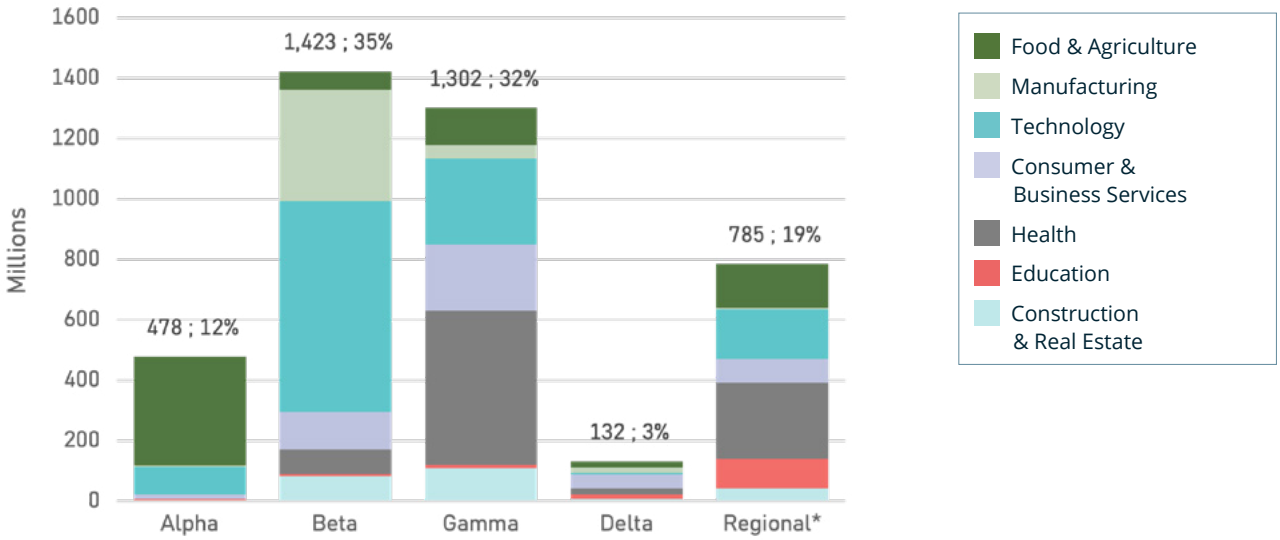
Figure 10. Number of commitments per country classification



* Regional investments are not part of one country classification category, as they span multiple countries.

[41] Updated to $6.85/day (2017 PPP dollars) during the evaluation period.
[42] BII ranks countries on inclusiveness based on the poverty gap, GDP per capita, and fragility, whereby countries classified as Alpha are countries where investments have the greatest potential to address inclusion. For more information, visit assets.bii.co.uk/wp-content/uploads/2022/02/02111950/BII-Impact-Score-2022-26.pdf
[43] BII ranks countries on inclusiveness based on the poverty gap, GDP per capita and fragility, whereby countries classified as Alpha are countries where investments have the greatest potential to address inclusion. Visit assets.bii.co.uk/wp-content/uploads/2022/02/02111950/BII-Impact-Score-2022-26.pdf
[44] According to the indicators by which a country is classified as Alpha, Beta, Gamma or Delta (as outlined at the beginning of this section), Gamma countries have fewer people living in poverty and a higher GDP per capita and are more stable than Alpha and Beta countries. As such, these tend to be larger markets with a greater number of possible investment opportunities for BII.

Figure 11. Disbursement amounts in US dollars by country classification



* Regional investments are not part of one country classification category, as they span multiple countries.

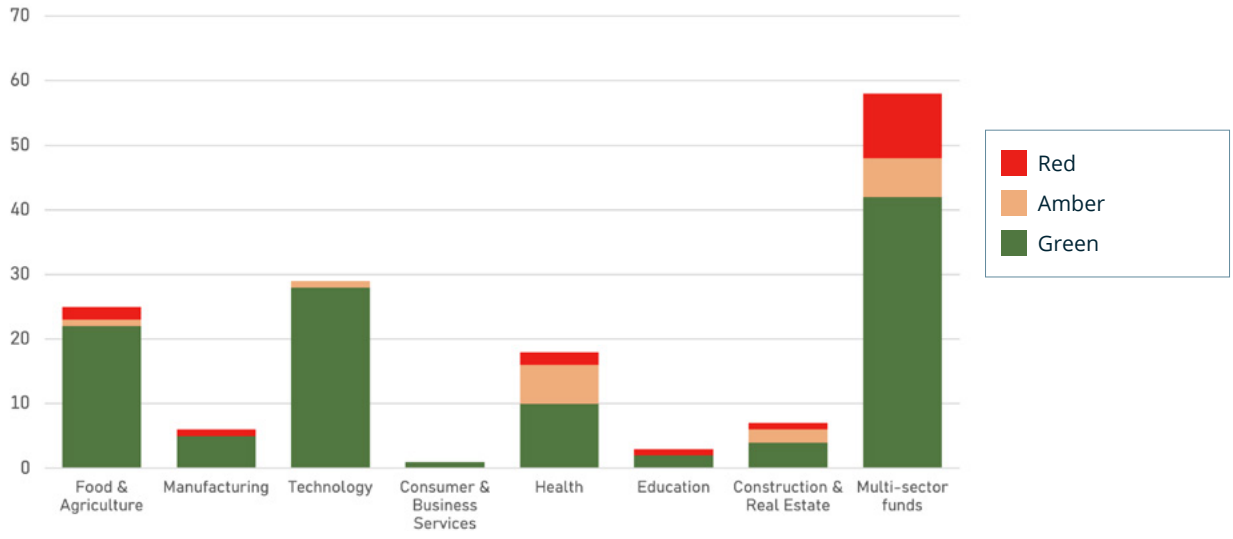
4.2.7 State of the portfolio

DI RAG ratings[45]

Figure 12 reflects DI performance of the portfolio commitments by sector as at Q1 2023 as rated by BII. It is important to note that DI RAG ratings are dynamic and are subject to fluctuations in operating contexts, investment performance and DI performance.

78 per cent of the ITS portfolio are deemed by BII to be on track to meet their DI investment thesis; 11 per cent are at medium risk and 11 per cent at high risk of not meeting their DI investment thesis. Figure 12 does not include exited investments or those where debt has been repaid or cancelled, nor does this include cancelled commitments. Legacy fund investments[46] have also not been included.

Figure 12. DI RAG ratings of active investments by sector



[45] These ratings are not directly comparable with assessments made by other independent evaluators in other sectors (specifically Financial Institutions and Infrastructure) due to different judgements made by the evaluators about what to include/exclude and because these are dynamic indicators, and the assessments were undertaken at different times.
[46] Deemed not to align with BII's strategy from 2017 onwards.

Exits

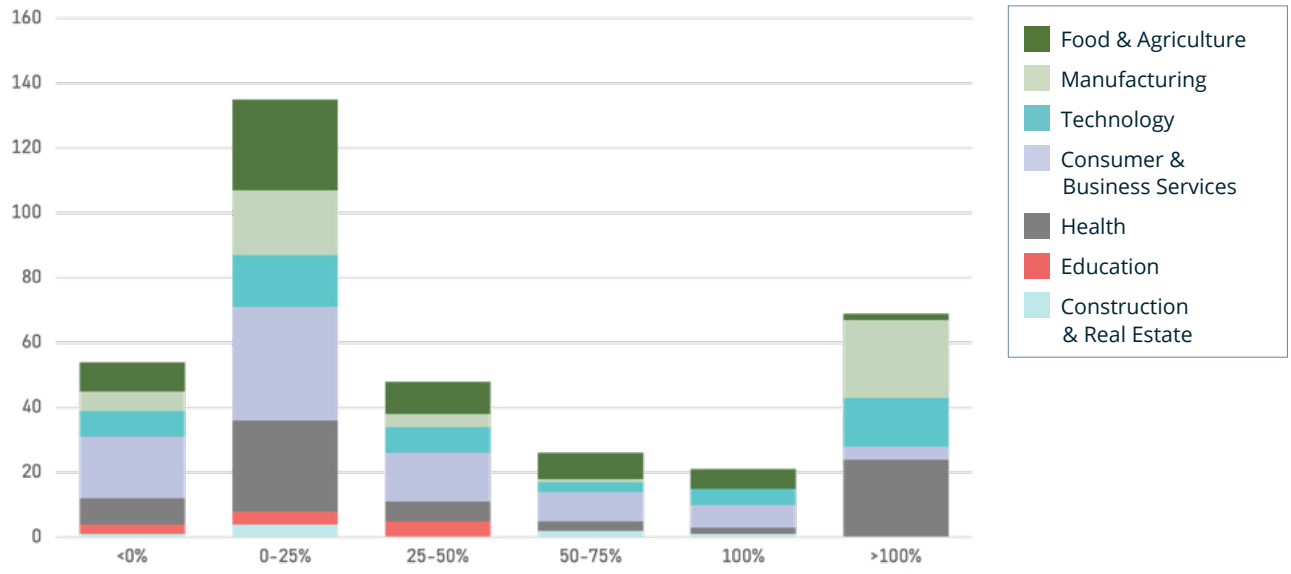
There have been 16 exits of BII's commitments as of the end of 2022. For this analysis, exits can be equity exits or the repayment or cancellation of debt. These exits represent 8.5 per cent of the total individual commitments in the portfolio. There have been five exits in F&A, three exits in technology, three in health, two in CRE, and one each in C&BS, education and multi-sector funds.

Revenue

We were able to analyse 336 investments (50 per cent of the entire portfolio)[47] based on available revenue information converted into USD (most of which is from 2019 to 2022). 84 per cent of those investments had a positive CAGR for revenue, and the other 16 per cent had a negative CAGR for revenue.

Figure 13 shows revenue growth across sectors for the data that was available.

Figure 13. Revenue compound annual growth per sector



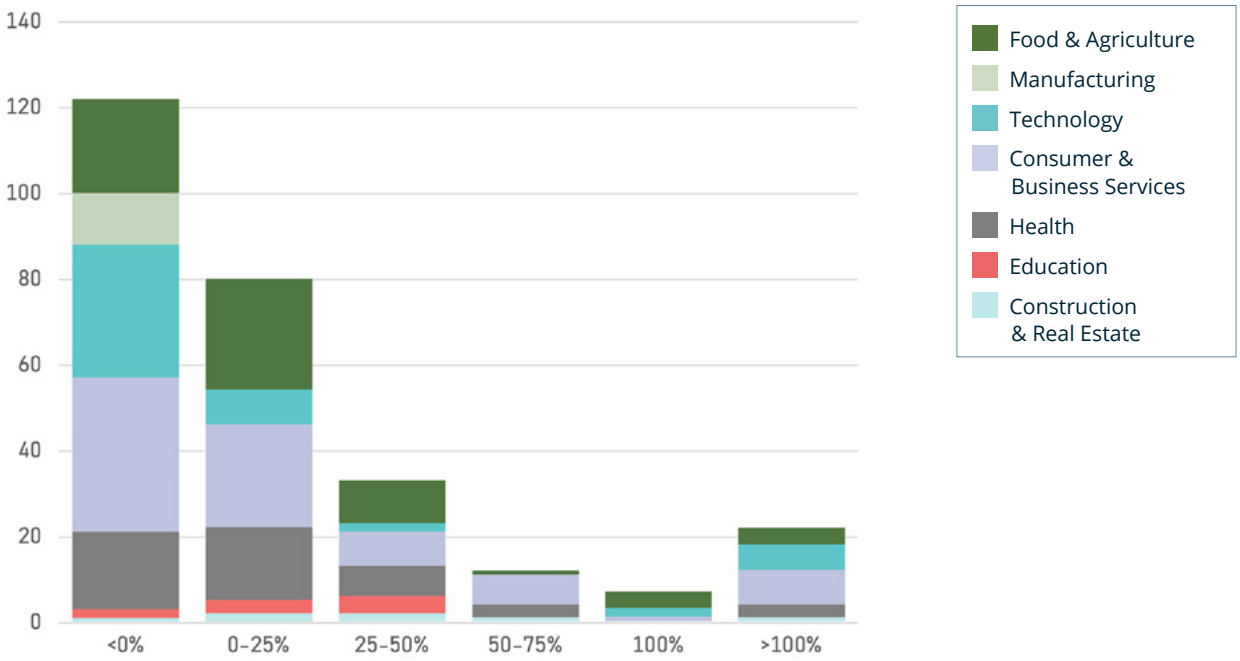
EBITDA

In our analysis of CAGR of EBITDA using numbers converted into USD, we found that 71 per cent of businesses that were profitable had a positive CAGR. Of the businesses that are pre-profitable, 28 per cent have improved their EBITDA but are still not profitable; while 72 per cent have a CAGR that shows that these investees are further from profitability in USD terms. In addition, there are an additional 24 investees that have become profitable (started with a negative EBITDA that is now positive) and 21 that have slipped into unprofitability (started with a positive EBITDA that is now negative). This is based on our analysis of CAGR of EBITDA as a proxy to assess profitability where data availability allowed, mostly using data from 2019 to 2022.[48] As these EBITDA calculations are based on local currencies that have been converted to USD at the annual exchange rate, they are not adjusted for currency fluctuations. Therefore, the devaluation of any given currency is not considered.

Figure 14 shows EBITDA growth across sectors for the data that was available.

[47] Please see Section 3.2.4.2 for more information on why an investment may not have been included in the CAGR analysis.
[48] There were 178 investees that were profitable at the first and last data point and 98 that were pre-profitable at the first and last data point. This includes underlying investments in funds. We were able to calculate CAGR where we had two different years of EBITDA reported that were both positive (i.e. investees that were profitable at both the earliest and latest point that data was available).

Figure 14. EBITDA compound annual growth distribution by sector



Financial losses and failed investments

Like all investment portfolios, there are challenges and financial losses (including write downs and write-offs) or a failure to realise the core proposition of the investment. For BII's ITS portfolio, we estimate these investments to reflect $373 million in commitments, representing 6.2 per cent of the portfolio (which do not include investments made in Afghanistan and Myanmar, where there are challenges related to political circumstances). In addition, there have been investments that have not delivered against their impact theses. As a result of financial losses and learning on DI, BII has over the course of this evaluation, strengthened its financial, BI, and environmental and social (E&S) due diligence processes. It has improved its monitoring and escalation processes and has introduced policies, including sector-specific policies. These are all to help inform its investment selection and mitigate any potential financial losses or unintended DI consequences.

Taxes paid

We were able to analyse tax data for a subset of investments, based on available longitudinal data, and only looking at investments made before 2019 to show change over time. Sixty-two investees have reported across all four years (2019-2022).[49] Thirty-two investees increased their tax payments, and twenty decreased their payments. Eight investees report zero taxes paid across the four-year period. It was not always clear why tax was not paid, but in several instances these investments showed negative EBITDA, which may be the reason why. Of the remainder, two reported zero tax paid in 2022 and 2019, but paid tax in the intervening years.

[49] We note that this is the number that reported tax data that passed BII's quality assurance (QA) process. Some investments reported tax data but were excluded from our analysis because they did not pass BII's internal QA process (sometimes due to challenges with currency exchange). Other reasons for why tax might not be reported include companies not being large enough to pay tax, not yet being profitable, and companies that received refunds.

4.3 Multi-sector funds

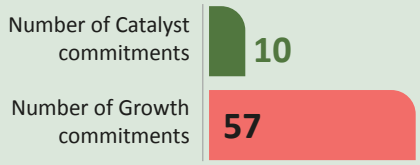
MULTI-SECTOR FUNDS

TOTAL NUMBER OF INVESTEES

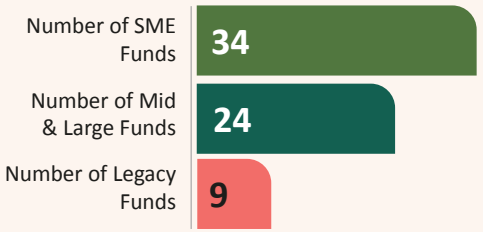
Direct commitments: 0

Underlying investees through funds: 387

NUMBER OF CATALYST VS. GROWTH COMMITMENTS

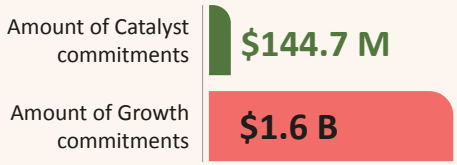


NUMBER OF INVESTMENTS BY INSTRUMENT

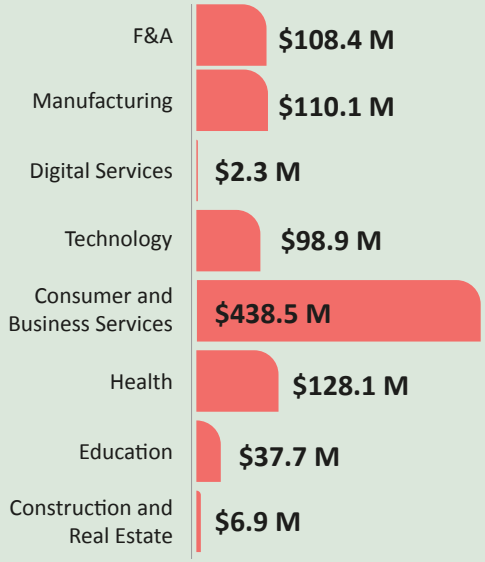


TOTAL AMOUNT OF SECTOR

AMOUNT OF CATALYST/GROWTH COMMITMENTS



MULTI-SECTOR FUND DISBURSEMENTS BY SECTOR

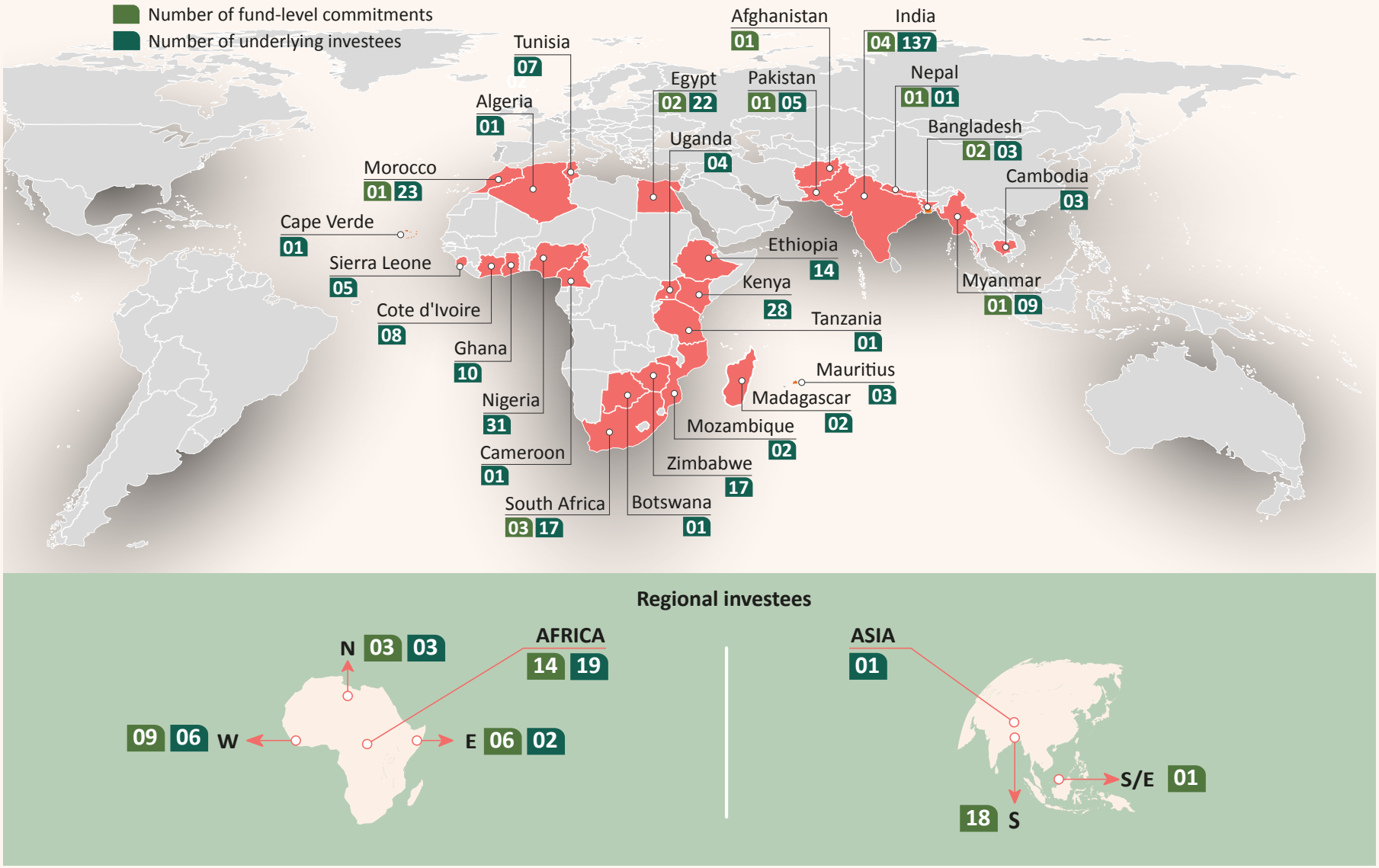


AMOUNT COMMITTED BY REGION

TOP 3 COUNTRIES BY AMOUNT

*Note: The DI of underlying investments into financial services by multi-sector funds is not analysed, as they are addressed through the scope of the FCDO–BII evaluation of the DI of the financial institutions portfolio.

MULTI-SECTOR FUNDS



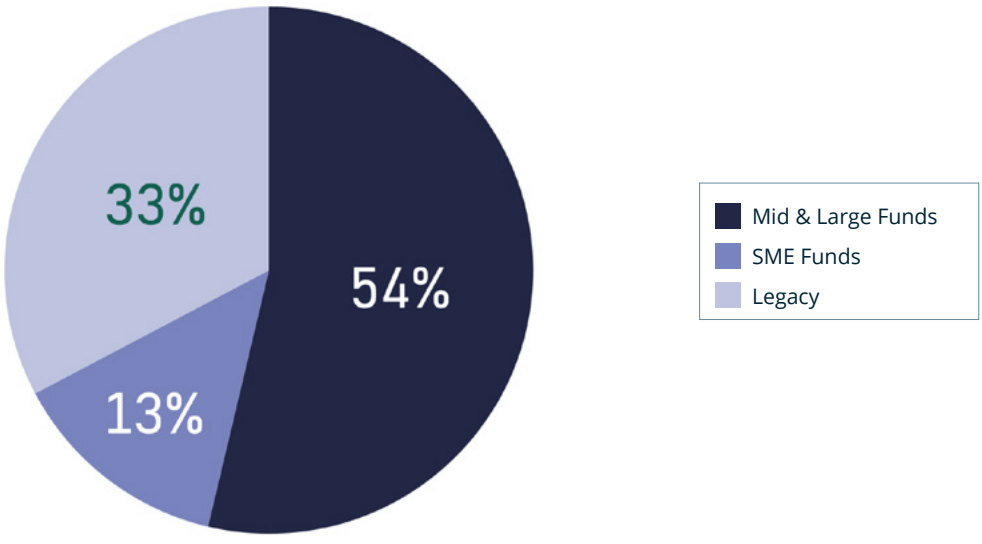
*Note: Investments at a regional level are shown on the two maps at the bottom, while country-specific investments are presented on the main map.

Multi-sector funds are a sizeable proportion of ITS commitments, making up 29.5 per cent of the 188 total ITS commitments,[50] demonstrating their importance to the overall ITS investment strategy. BII has committed $1.77 billion to 67 multi-sector funds. Nine of these funds are considered legacy funds and that do not completely align with BII's strategy from 2017 onwards.

BII invests in multi-sector funds to build and scale private equity markets, increase funds' DI principles and reporting capacity, extend BII's reach, and diversify its investments in the ITS portfolio. In many markets where BII invests, particularly in Africa, the depth and development of the market is such that there are not many sectors where the market opportunity is large enough to merit a sector-specific strategy. It is why many funds are multi-sector, albeit often focusing on a select few industry sectors, and particularly so in more fragile markets.

Figure 15 shows that most multi-sector fund commitment amounts (54 per cent)[51] are into mid and large funds, which are likely to invest in more established companies with growth or scale potential and are likely to have a larger transaction size. 33 per cent of the multi-sector fund portfolio is committed to investing in small and medium-sized enterprises (SMEs).[52] Speaking generally, not specifically to BII's SME fund portfolio, SME funds tend to have lower returns, require more patient capital, and are more likely to invest using a smaller transaction size; they typically make investments into early-stage companies with growth potential.[53] According to BII, SME fund managers often bolster and develop the executive teams of their investees, whereas mid and large fund investees typically have larger, more sophisticated management teams. BII's average investment into funds that target mid- and large-sized companies is $38.1 million. The median ticket size of these funds is around $2.5 million. BII's average investment into funds that target SMEs is $17.6 million. The median investment ticket size of these funds is around $1 million.

Figure 15. Multi-sector fund commitments by type of fund



68 per cent of the total multi-sector fund commitment amount has been targeted to Africa and 32 per cent to Asia. **Multi-sector funds have been instrumental in increasing the**

[50] Based on the monetary amount of commitments.
[51] Based on commitment value.
[52] The International Finance Corporation (IFC) defines SMEs as registered businesses with fewer than 300 employees. This category can be further narrowed by distinguishing SMEs from microenterprises by having a minimum number of employees (IFC 2012).
[53] Shell Foundation, Omidyar Network and Deloitte (2019) *'Insights on SME Fund Performance'*. Visit https://shellfoundation.org/app/uploads/2020/06/Insights-on-SME-fund-performance-ShellFoundationOmidyar.pdf

number and breadth of investments into geographic areas where BII has no or few direct investments in ITS. These include countries such as Nepal, Cambodia, Côte d'Ivoire, Ghana, Ethiopia, Morocco and Zimbabwe.

Multi-sector funds have also enabled BII to invest in high-risk, high DI potential contexts or companies. Within the multi-sector fund portfolio, BII has made ten commitments to funds that are focused on the Catalyst strategy (and therefore considered higher risk, with higher DI potential, compared with 57 multi-sector investments focused on Growth). All the Catalyst funds are SME funds (totalling $144.7 million). They have also targeted countries, such as Afghanistan and Myanmar, with high DI potential but which are proving difficult to operate in, and the DI intentions of those investments are potentially at risk.

Multi-sector funds have been important contributors to ITS in that they have filled gaps in investments in C&BS, manufacturing and education and have expanded the breadth of investments in F&A and health. This is illustrated by the number of investments by sector in Table 7. This has helped to diversify the portfolio in terms of the types of investments funds have pursued, i.e. a variety of locally manufactured goods for business-to-business (B2B) and business-to-customer (B2C) markets. They are, however, less likely to invest in CRE. We infer this to be due to the amount of capital required in CRE investments and the technical expertise required on due diligence, monitoring, and value addition for CRE companies.

Table 7. Number of multi-sector funds underlying investees by sector

Sector	# of investees by multi-sector funds
Consumer & Business Services	152
Digital Services	61
Health	55
Food & Agriculture	52
Manufacturing	42
Education	17
Construction & Real Estate	6

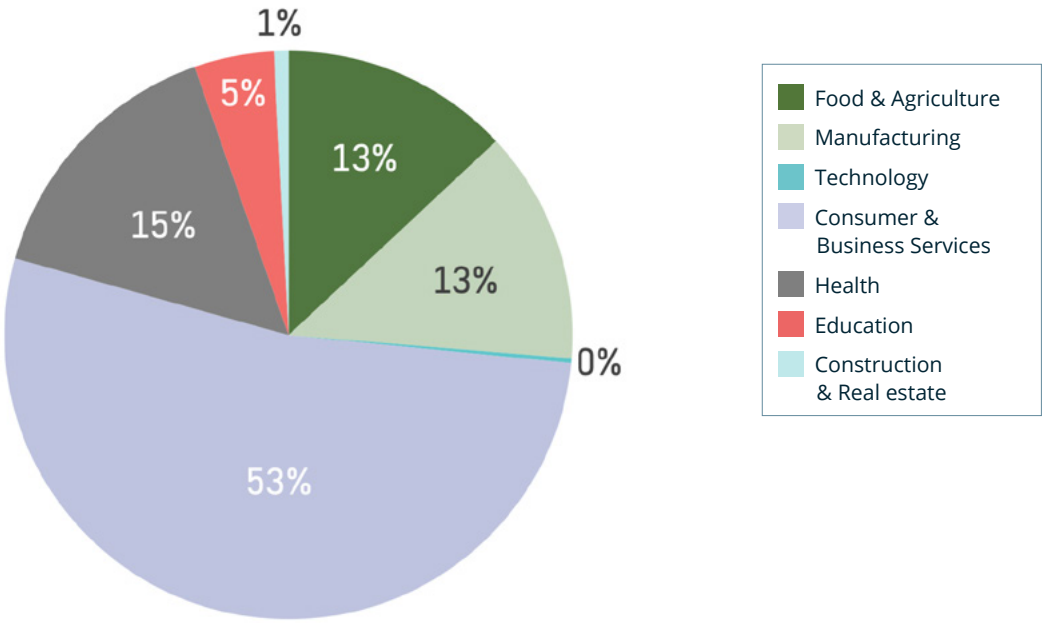
53 per cent of multi-sector funds invest into C&BS, as can be seen in Figure 16.[54] This is a sector where BII has made only two direct investments over the 11-year evaluation period. Multi-sector funds have invested in a variety of B2B and B2C services, which has helped to support jobs and access to goods and services (see more in Section 5.3.1).

$946.5 million (of the $1.77 billion of commitments) has been disbursed to 387 different companies through multi-sector funds. These multi-sector funds provide an opportunity for BII to cascade its priorities into fund strategies, reaching many companies. This includes priorities such as gender and diversity. There are eight multi-sector funds that are 2X qualified, a qualification that has been used since 2018.[55] These qualifications and commitments include funds that have been founded by and are led by women, have met the thresholds for women in leadership and on the Board/IC and/or are developing and embedding gender strategies within their investment portfolio. There are 23 multi-sector

[54] These figures are based on the sums of capital disbursed into companies rather than on commitment data. Using disbursement data for this analysis allows us to capture the relevant sector of underlying investments.
[55] BII introduced 2X qualifications in 2018.

funds that have at least one dimension of BOLD criteria, which represents 72 per cent of funds focused on Africa.[56]

Figure 16. Amount invested per sector through multi-sector funds



As of Q1 2023, there are ten funds with a red RAG rating and six with an amber rating, representing 27 per cent of the multi-sector fund portfolio rated as medium or high DI risk. For comparison, the entire ITS portfolio has 23 per cent of investments assessed as being at medium or high risk of not meeting their respective DI investment thesis (see Section 4.2.7).

Multi-sector funds' individual decisions on geographies, sectors and DI theses are critical to shaping the overall impact of the ITS portfolio based on the proportion of portfolio capital that they have at their disposal to disburse. The number of individual funds that BII supports reflects a desire to have a broad reach and mitigate against any DI risk. BII aspires to do more co-investments alongside multi-sector fund managers where investments have a high potential impact in line with BII's sector strategies. According to BII, multi-sector funds are a significant source of potential co-investment deal flow.

[56] BII introduced the BOLD initiative and framework in 2022. All commitments to multi-sector funds in Africa are pre-2022 and therefore were not assessed for BOLD. However, a retroactive analysis conducted by BII for commitments from 2012 to 2021 show that 23 funds met at least one BOLD criterion (Black African founder, owner, CEO, C-suite or Senior Management Team members, Board and/or IC members) at the fund manager level (the analysis did not assess underlying investments of funds). For this analysis, funds in North Africa are not included, as per the BOLD framework, which only applies to sub-Saharan Africa.

5. Development impact across the ITS portfolio

5.1 Summary of development impact across the full ITS portfolio

This section looks at the entirety of the ITS portfolio, considering various strategies and DI themes and summarising the achievement of DI at the portfolio level.

5.1.1 Geography

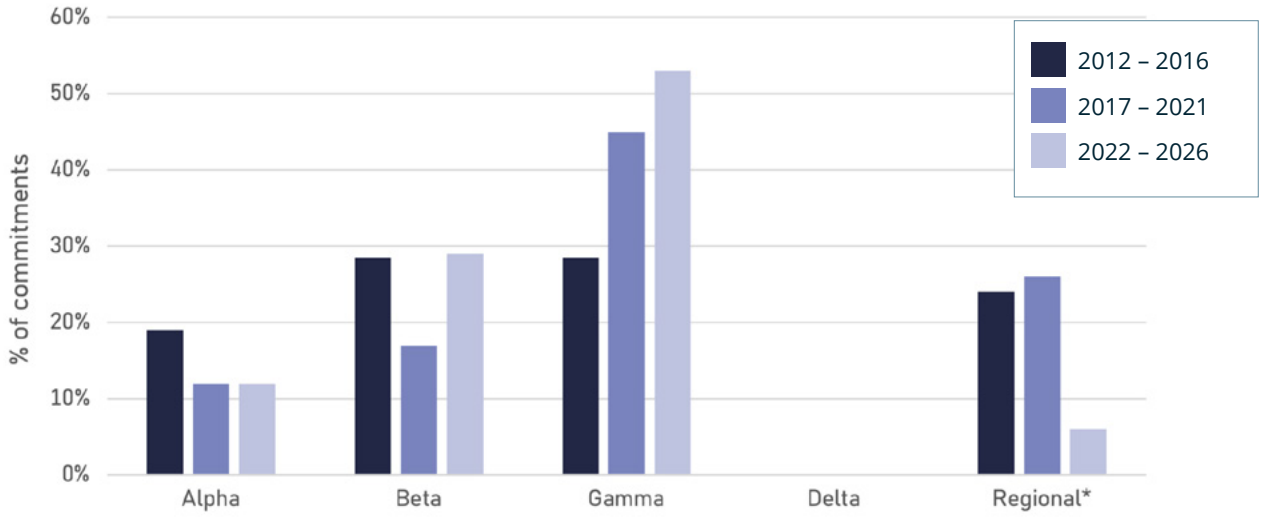
As mentioned in section 4.2.6, geographically, 'Gamma-scored countries' is the most-invested country classification of inclusion based on commitments;[57] however, analysis of disbursements indicates that Beta countries are most invested in. This discrepancy is driven by the monetary value of underlying investees of funds that are invested into Beta countries (which are captured in disbursement data, but not commitment data). This shows that penetration into higher-need geographies (within BII's target countries) is supported and further enabled by multi-sector funds. Multi-sector funds have been instrumental in increasing investment into geographic areas where BII has no or few direct investments in ITS.

Our analysis shows that the greatest proportion of F&A commitments, by total amount and by count, are into Alpha countries (totalling $362 million through eight commitments, representing 44 per cent of the F&A portfolio in terms of monetary commitment value). Furthermore, the greatest proportion of commitments in Alpha countries is through the F&A portfolio (8 per cent of the total ITS portfolio amount in terms of monetary commitment value). However, once underlying investments are considered, the country classification of inclusion that is most frequently represented in the F&A portfolio is Gamma, with 51 per cent of the number of investments.[58]

Over the strategy periods (under the period of evaluation), there has not been a significant shift in ITS direct commitments towards higher-need countries (of Alpha and Beta classification); however, changes in the portfolio may be masked by the high proportion of direct commitments into regional investments in the previous strategy periods. Since the 2012–16 strategy period, there has been an increase in the proportion of direct commitments made into countries classified as Gamma, from 29 per cent of commitments made between 2012 and 2016 to 53 per cent in the 2022–26 strategy period (see Figure 17).[59] From the 2012–16 strategy period to 2017–21, there was a significant decrease in the proportion of direct commitments into Beta countries (from 29 per cent to 17 per cent); however, this decrease has been reversed, so far, under the current strategy period to 29 per cent.[60] There has also been a notable decline in regional direct commitments (that do not fit a country classification), from 24 per cent in 2012–16 to 6 per cent in the current strategy period of 2022–26.[61]

[57] BII ranks countries on inclusiveness based on the poverty gap, GDP per capita and fragility, whereby countries classified as Alpha are countries where investments have the greatest potential to address inclusion. For more information, visit assets.bii.co.uk/wp-content/uploads/2022/02/02111950/BII-Impact-Score-2022-26.pdf
[58] This figure is based on the total number of direct investments and underlying investments through funds that are in the country classification.
[59] Based on number of commitments.
[60] Based on number of commitments.
[61] This analysis is based on direct commitment data (and corresponding commitment dates) and does not include fund-level investments or underlying investments.

Figure 17. Proportion of number of commitments in each country classification by strategy period[62]



Of the countries and regions in which BII has made the greatest number of investments in the ITS portfolio, there are three countries in which BII has invested across three or more ITS sectors (not including multi-sector funds as a sector of its own) – India, Bangladesh and Kenya (see Table 8). This is based on direct investments into different sectors, not including underlying fund investments. The clustering of investments in these geographies indicates the potential for BII to link across sectors strategically in some countries to create a country specific ITS portfolio that is more than the sum of its parts. We have not been able to find any evidence of cross-sector analysis that indicates this approach to DI intentionality within the ITS portfolio.

Table 8. Countries and regions with the greatest number of investments in the ITS portfolio

	Food & Agriculture	Manufacturing	Tech services	C&BS	Health	Education	Construction & Real Estate	Multi-sector funds	Total number of commitments	Total monetary amount of commitments
India	9	1	16	1	10		2	4	43	**USD 996 million**
Bangladesh	1	2			1			2	6	**USD 206 million**
Kenya	2	1					2		5	**USD 199 million**

According to BII's JIM calculations, in total BII's ITS investments have contributed $78.6 billion to GDP across all the relevant countries and regions between 2019 and 2022. Of this, $42 billion is 'direct' and $36.6 billion is through the 'supply chain'.[63]

[62] Regional investments are not part of one country classification category, as they span multiple countries.
[63] "Direct value add looks at impacts directly from the client company; and Supply chain value add looks at impacts at the client company/project's suppliers and their suppliers."

5.1.2 Digital transformation

The ITS portfolio is delivering tech-enabled solutions and investing in digitally native businesses to target DI. Digital solutions within services have the potential for significant indirect impacts, particularly through increased productivity of firms using the investee's digital platforms. However, evidence on whom these solutions are reaching and the extent to which this results in positive outcomes for low-income consumers is limited.

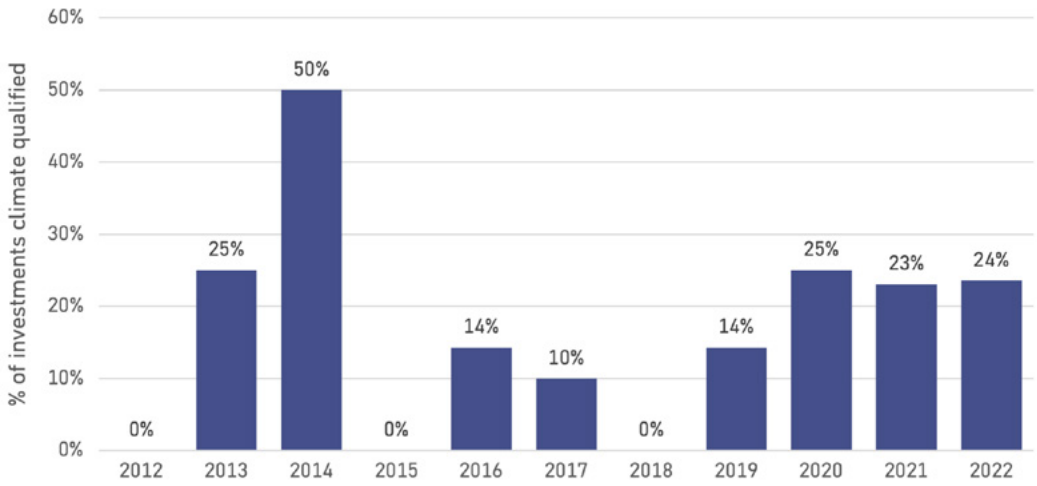
Some investments are achieving large-scale reach directly through digital solutions, particularly in F&A and health, where 11.1 million farmers and 8.6 million people were reached with digital health solutions in 2022.

5.1.3 Climate change performance and trends

The rate at which BII's ITS portfolio is investing into climate mitigation and adaptation investments has increased since its climate change strategy, *Investing for Clean and Inclusive Growth*,[64] was launched in 2020. Before 2020, five direct investments (representing 12.5 per cent of the ITS portfolio during that period)[65] were made into projects that were later deemed as climate finance eligible.[66] Since 2020, BII has invested directly in ten ITS climate finance qualified projects, forming 24 per cent of the number of direct investments in the ITS portfolio during this period. In 2021, BII introduced a climate finance target of at least 30 per cent of its total portfolio commitments qualifying as climate finance, although there is no specific target for ITS.

The proportion of BII ITS direct investments that are climate finance eligible or qualified (or partially climate finance qualified) has fluctuated over the period under evaluation (see Figure 18). For the analysis in Figure 18, we have included both investments that are climate finance qualified since the introduction of this qualification, and investments deemed climate finance eligible made before the introduction of the qualification. The percentage of climate finance investments in 2014 appears to be significantly higher due to few direct commitments made in the ITS portfolio in that year.

Figure 18. Proportion of number of commitments that are climate finance eligible by year[67]



[64] Visit assets.cdcgroup.com/wp-content/uploads/2020/07/01181554/CDC-climate-change-strategy_FINAL-FOR-PUBLICATION-1.pdf
[65] Within the period that is in scope for this evaluation.
[66] It should be noted that BII qualifies investments as climate finance at two time points. Firstly, and the one that is used for BII's annual climate finance reporting vs its climate finance target is the qualification of investments at the point of commitment. The results of this can be seen in BII's annual review and on BII's website investment database. In addition, every year as part of BII's annual reporting under the Taskforce for Climate Related Financial Disclosures (TCFD) BII reports the proportion of its portfolio by value in climate finance qualifying or carbon related assets. Included as part of this calculation are assets that became eligible since the point of commitment for example, where a building obtains green building certification during the period BII is invested.
[67] This graph does not include exited investments.

The ten highest carbon emitters across direct investments in the ITS portfolio are concentrated in the F&A and health sectors, with one investment in each of manufacturing, CRE and technology (see Table 9). The F&A investments in the table include two companies that produce animal protein (including the highest overall emitter, which is a climate finance qualified investment),[68] a food sourcing, retail and distribution business, and a food storage company. The highest-emitting health investments are primary healthcare providers and a pharmaceutical manufacturing company.

Table 9. Ten highest-emitting direct investments in BII's ITS portfolio based on emissions by revenue

Sector of individual investment	2021 emissions (MTCO2e) per $ of revenue (to a factor of 100,000)[69]
F&A	341.3
CRE	59.1
Manufacturing	55.6
Health	49.0
F&A	24.7
Health	20.5
Health	17.3
F&A	17.2
F&A	16.6
Tech	16.0

F&A, CRE, and manufacturing are highly emissive industries. BII is addressing climate through green building certification in its CRE portfolio. Isolated examples of climate considerations in other sectors also relate to green building certification, for example construction of school buildings and several health facilities. Manufacturing has some investments in green products, such as the production of climate-friendly building materials, but limited evidence of greening manufacturing processes, such as reducing energy and water consumption in manufacturing processes. One-third of direct commitments in the F&A portfolio (eight investments) are climate finance qualified or partially climate finance qualified, demonstrating BII's intention to deliver climate mitigation and adaptation solutions in this sector. However, significant investments have also been made into the highest-emitting subsectors within F&A. Given the significance of climate change to F&A, BII could do more to mainstream climate change considerations throughout the F&A portfolio.

BII has invested in companies that require physical buildings such as hospitals, schools, retail spaces or supermarkets for example, which contribute to BII's carbon footprint and where there may be opportunities to reduce emissions.

5.1.4 Gender and diversity

BII integrates gender and diversity considerations across all its sectors. **Across the ITS portfolio, 27 per cent of commitments are 2X qualified since the introduction of the qualification** in 2018. Each year since its introduction except for 2020, an increasing proportion of commitments made across the ITS portfolio are 2X qualified (see Figure 19).

[68] Climate finance can be used as an investment tool to help high emitters reduce their emissions over time. More information can be found in BII's climate strategy: visit assets.bii.co.uk/wp-content/uploads/2020/07/01181554/CDC-climate-change-strategy_FINAL-FOR-PUBLICATION-1.pdf

[69] MTCO2e' is the abbreviation for metric tonnes of carbon dioxide equivalent. The measure in this column has been multiplied by 100,000 to simplify the interpretation of the figures.

Figure 19. Percentage of number of ITS commitments that are 2X qualified by year since its introduction

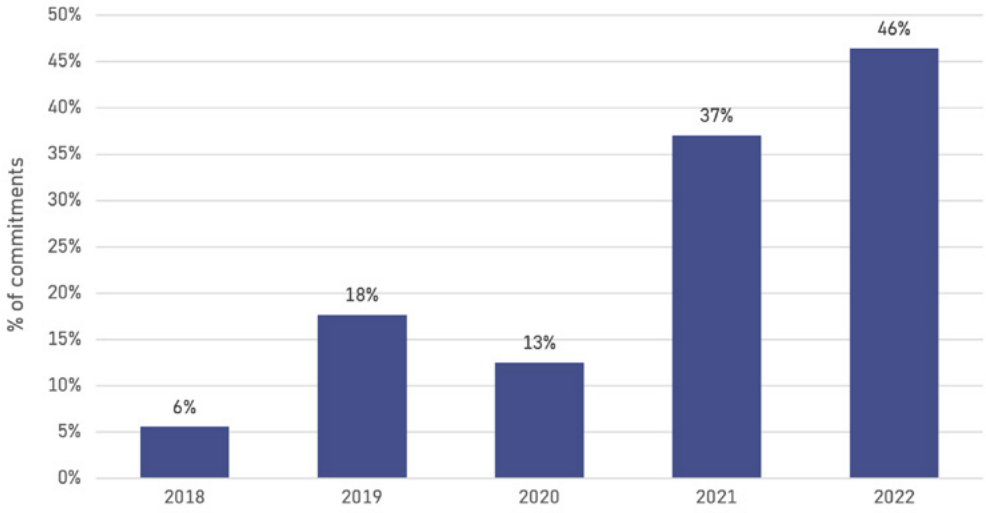
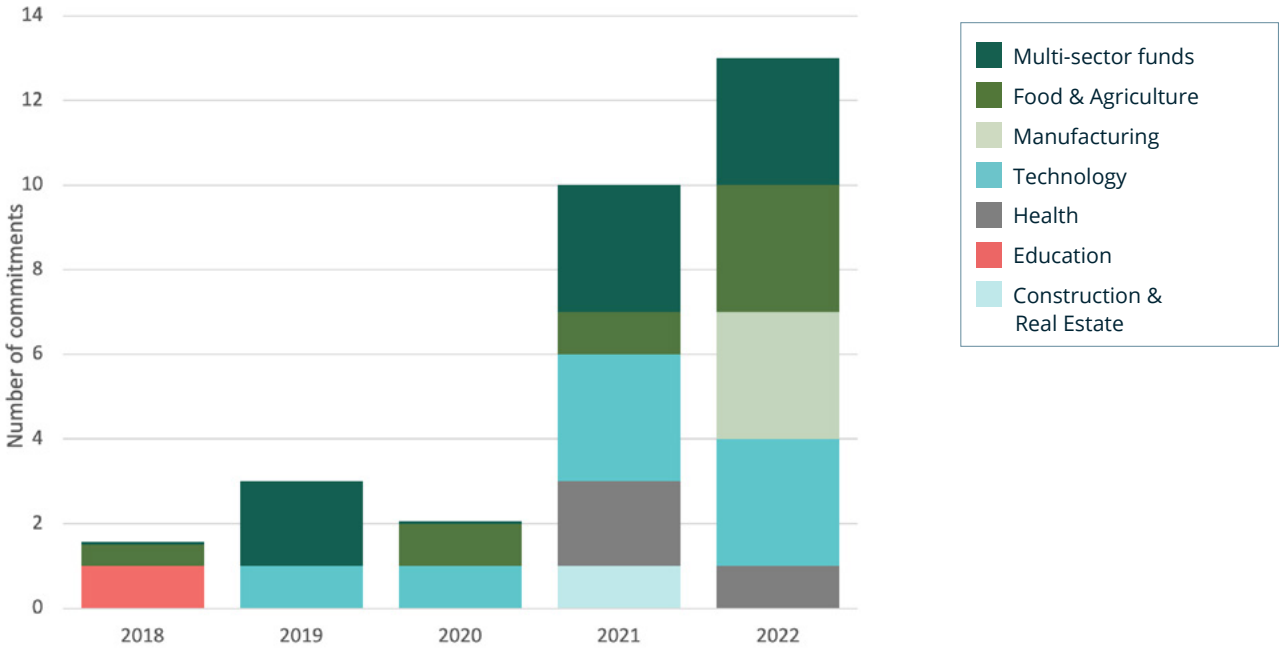


Figure 20. Number of 2X qualified commitments per year per sector



Through ITS investments, BII has supported 101,382 jobs for women in 2022 (where gender-disaggregated data was reported). Compared with the most relevant external evidence on jobs for women in each sector, the BII Health and Education portfolios are outperforming the sector benchmarks on the proportion of jobs for women. However, we found that the Manufacturing,[70] CRE[71] and C&BS[72] portfolios are not yet meeting the average sector benchmarks where available. The proportion of women employed in the F&A sector appears to be low (Table 10); however, it has not been possible to find a comparable benchmark for BII's support to female jobs in F&A.[73]

[70] 28 per cent of jobs are filled by women in the manufacturing sector globally.
[71] Varying country benchmarks across Asia show that a range of 10–40 per cent of labourers in this sector are women, in Africa this range is from 6 per cent to 30 per cent.
[72] The percentage of roles in wholesale and related trade, hotels and restaurants that are fulfilled by women is 45 per cent on average across low- and middle-income countries (LMICs).
[73] External data on jobs for women in agriculture includes both formal and informal work, whereas BII only invests in – and therefore measures – direct jobs supported in the formal sector. Unfortunately, it has not been possible to source external data on this indicator that is disaggregated for formal jobs only.

Table 10. Percentage of jobs for women in 2022 by sector

Sector	% of jobs for women in 2022 in BII ITS portfolio
F&A	13%
Manufacturing	21%
Tech	33%
C&BS	38%
Health	34%
Education	54%
CRE	9%

For context, the opportunities to achieve a high level of women's employment vary based on an investee's country of operation, given the large variability of women's participation in the labour force in countries where BII invests. For instance, for the top five countries where BII's ITS portfolio is invested, the rates are: India 24%; Egypt 15%; Nigeria 52%; Bangladesh 38%; and South Africa 51%.[74] Even within these national statistics, there are many different variables driving women's participation in the labour force (or lack thereof); for instance in Nigeria, a report commissioned by the Central Bank found that huge geographical variation exists in the rate of women's involvement in the labour force.[75]

Across all sectors there is limited data on gender and diversity achievements through quarterly impact reporting, with few good examples (most of which are 2X qualified investments).

The diversity aspect of BII's Gender & Diversity Finance – which, for this strategy period (2022–26), refers to BOLD, introduced in 2022 – **includes four BOLD qualified commitments accounting for $81.5 million and representing 33 per cent of the number of commitments made in sub-Saharan Africa[76]** in 2022. Three of these commitments are in technology (two direct commitments and one VC fund) and the other is a commitment in F&A. A retroactive analysis applying BOLD criteria[77] from 2012 to 2022 shows that 33 commitments meet at least one BOLD criterion (23 of which are funds and ten of which are direct investments), representing 43 per cent of commitments made in sub-Saharan Africa[78] from 2012 to 2021. Twenty-four of these investments meet more than one BOLD criterion.

5.1.5 Low-income populations

Each sector aims to reach low-income populations through affordable goods or services, jobs and economic opportunity. However, there is a distinction between 'affordable', which is often taken to mean 'lower than market pricing' and targeting low-income groups. **There is some evidence that BII's ITS portfolio investees are increasing access to services** (which BII defines as a dimension of affordability, for example, by reducing travel costs associated with accessing a good or services because these are available closer to home);[79] the degree to which this is achieved varies, for example, from a minority[80] to a majority of respondents reporting increased access.[81] Evidence of BII's ITS portfolio investees increasing affordability

[74] Source: International Labour Organization (ILO). Data retrieved from World Bank Gender Data Portal. Visit genderdata.worldbank.org/indicators/sl-tlf-acti-zs/

[75] Gayawan, E. and Adebayo, S.B. (2015) 'Spatial Analysis of Women Employment Status in Nigeria'. *CBN Journal of Applied Statistics* 6(2).

[76] This denominator excludes investments made in North Africa.

[77] BOLD criteria (Black African founder, Owner, CEO, C-suite or SMT members, Board and/or IC members in the case of funds).

[78] This denominator excludes commitments in North Africa.

[79] CDC (2018) *Affordability of Protein-Rich Foods: Evidence from Zambia.* Visit assets.bii.co.uk/wp-content/uploads/2018/12/14110951/Affordability-of-Protein-Rich-Foods-Evidence-from-Zambia.pdf

[80] 60 Decibels (2023) [Investee] Impact Performance report.

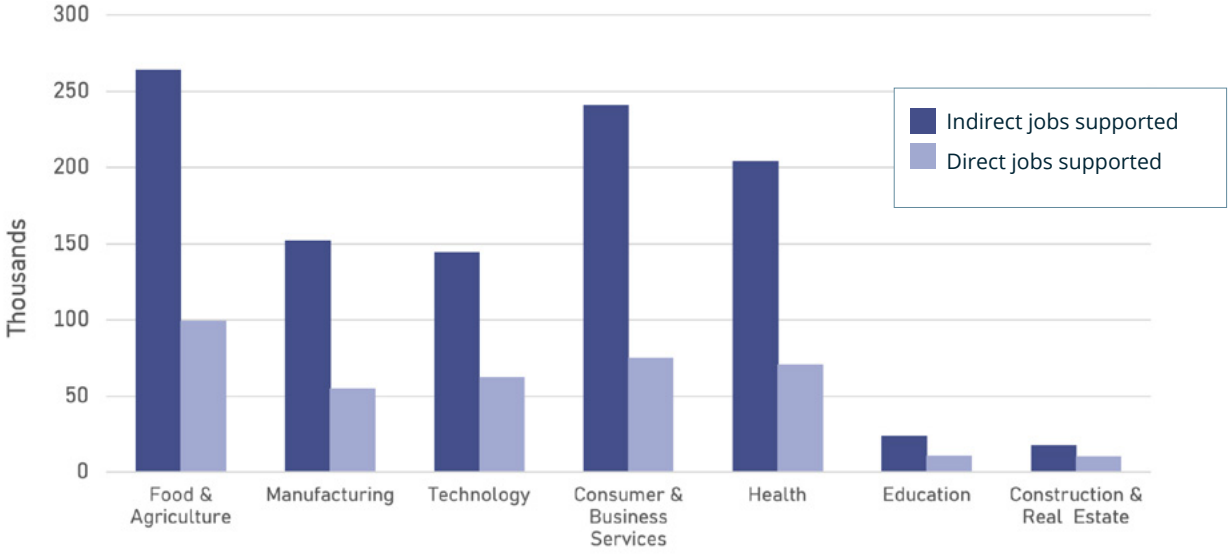
[81] BII (2023) *Insight: Understanding who we reach: a deep dive into our portfolio in India.* Visit assets.bii.co.uk/wp-content/uploads/2023/09/26095524/Understanding-who-we-reach-in-India-BII.pdf

through 'more affordable prices' is weaker.[82] There is some evidence that BII's ITS portfolio investees are serving low-income populations, but the degree of inclusion varies, for example, the 60 Decibels Research for a sample of investments in India found: "Results show F&A, manufacturing and C&BS investees are more inclusive than the selected healthcare and financial sector investees";[83] and in Africa, 60 Decibels found that the F&A companies are the most inclusive of those surveyed.[84]

5.1.6 Job creation

Across the ITS portfolio, 384,435 direct jobs were supported in 2022. F&A and health supported the greatest number of jobs directly in the same year (26 per cent and 18 per cent of total direct jobs respectively), in line with their higher proportions of total disbursement sum than other sectors. With reference to Figure 21, C&BS appears to have outperformed the other sectors on jobs, even though it forms only 1 per cent of the ITS commitments; however, the significant number of multi-sector fund investments into the C&BS sector, and the fact that this sector is a job generator are contributing factors to the high number of direct jobs supported.

Figure 21. Direct and indirect jobs supported in 2022 by sector[85]



BII has indirectly supported 1,048,032 jobs across the ITS portfolio in 2022 through supply chain jobs[86] and wage-induced jobs.[87] This is calculated using the JIM for the 28 per cent[88] of investees that reported the relevant data.[89] The highest average number of supply chain jobs by sector is in F&A (with an average of 5,753 supply chain jobs per investment), followed by manufacturing (with an average of 3,682) and health (with an average of 2,713). The highest average numbers of wage-induced jobs are in C&BS (with 3,070), followed by health (with 2,146).

82 60 Decibels (2023) [Investee] Impact Performance report.

83 BII (2023) *Insight: Understanding who we reach: a deep dive into our portfolio in India.* Visit https://assets.bii.co.uk/wp-content/uploads/2023/09/26095524/Understanding-who-we-reach-in-India-BII.pdf

84 BII (2023) *Africa Sprint – Egypt & Nigeria Findings.*

85 Based on data in BII's Quality Controlled Development Impact Dataset (2021 & 2022).

86 Defined as an estimate of supported jobs at the client company/project's suppliers and their suppliers.

87 Defined as an estimate of supported jobs associated with the spending of wages earned by employees of the client company/project, its suppliers, and their suppliers.

88 The JIM requires input of two years of high-quality data, limiting the number of investees we could use in the analysis.

89 This calculation has not been extrapolated to estimate achievement across the full ITS portfolio.

5.1.7 BII's value addition activities

Value addition activities are a diverse set of different interventions and support provided by BII's E&S, BI, Investment and BII Plus/TA teams. Some of these activities take a risk management approach and others maximise opportunities for DI. BII Plus was introduced in 2018, and since then BII has spent $10.5 million in overall TA in the ITS portfolio. Of this, $5.11 million has been for TA for companies and for initiatives to support companies, including the Covid-19 emergency response; $4.95 million has been spent on TA facilities for funds to provide support to their underlying investees; and the remainder ($460,000) has supported market-shaping activities.

E&S support has included support to improve investees' job quality, skills training, and health and safety measures. In CRE, for example, there is an emphasis on health and safety during construction. In the health and education sectors, E&S support has included a focus on safeguarding. BII's non-financial support happens through methods that might not result in the formal documents we reviewed,[90] such as investment managers influencing investees through conversations during trip visits, and/or in the cases where BII might have a seat on an investee's board. With respect to support to strengthen DI, within F&A BII Plus has provided support to investees to engage smallholder farmers effectively. For example, BII Plus supported one investee to set up an out-grower programme. Another example was market research to develop a new product. Covid response support included the manufacturing and purchasing of personal protective equipment (PPE).

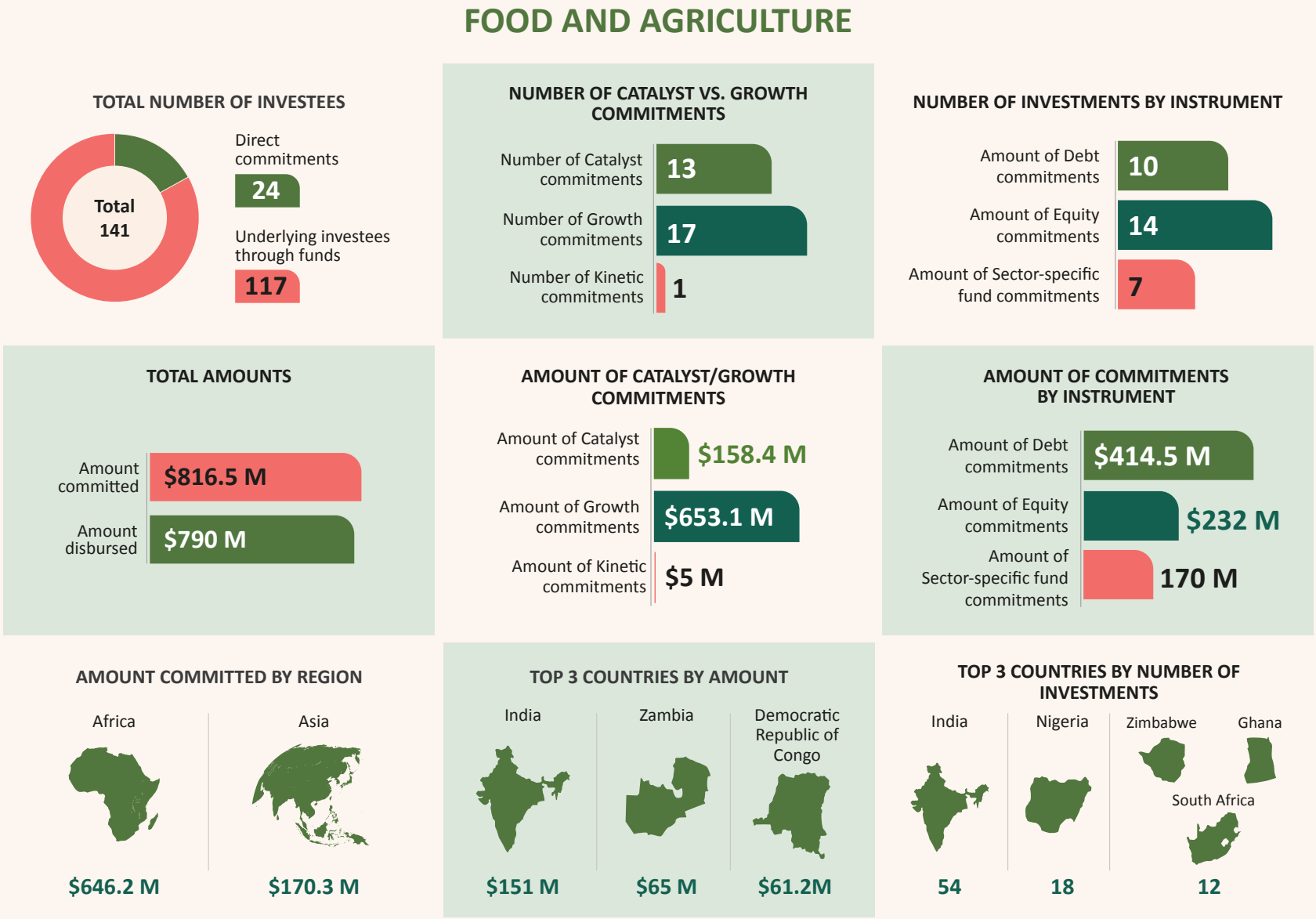
Looking at the cross-cutting themes, BII's support to climate change considerations has been particularly strong in the CRE sector, where many investee assets have achieved International Finance Corporation (IFC) Excellence in Design for Greater Efficiencies (EDGE) Certification. There has been a focus on support to improve resource efficiency in other sectors, including C&BS, health, education, and F&A. BII's value add support to some investees to improve gender and diversity within their operations has taken the form of Gender Action Plans and trainings in sexual harassment, self-defence, and diversity policies, especially in firms committed to 2X.

5.2 Sector Analysis: Industries

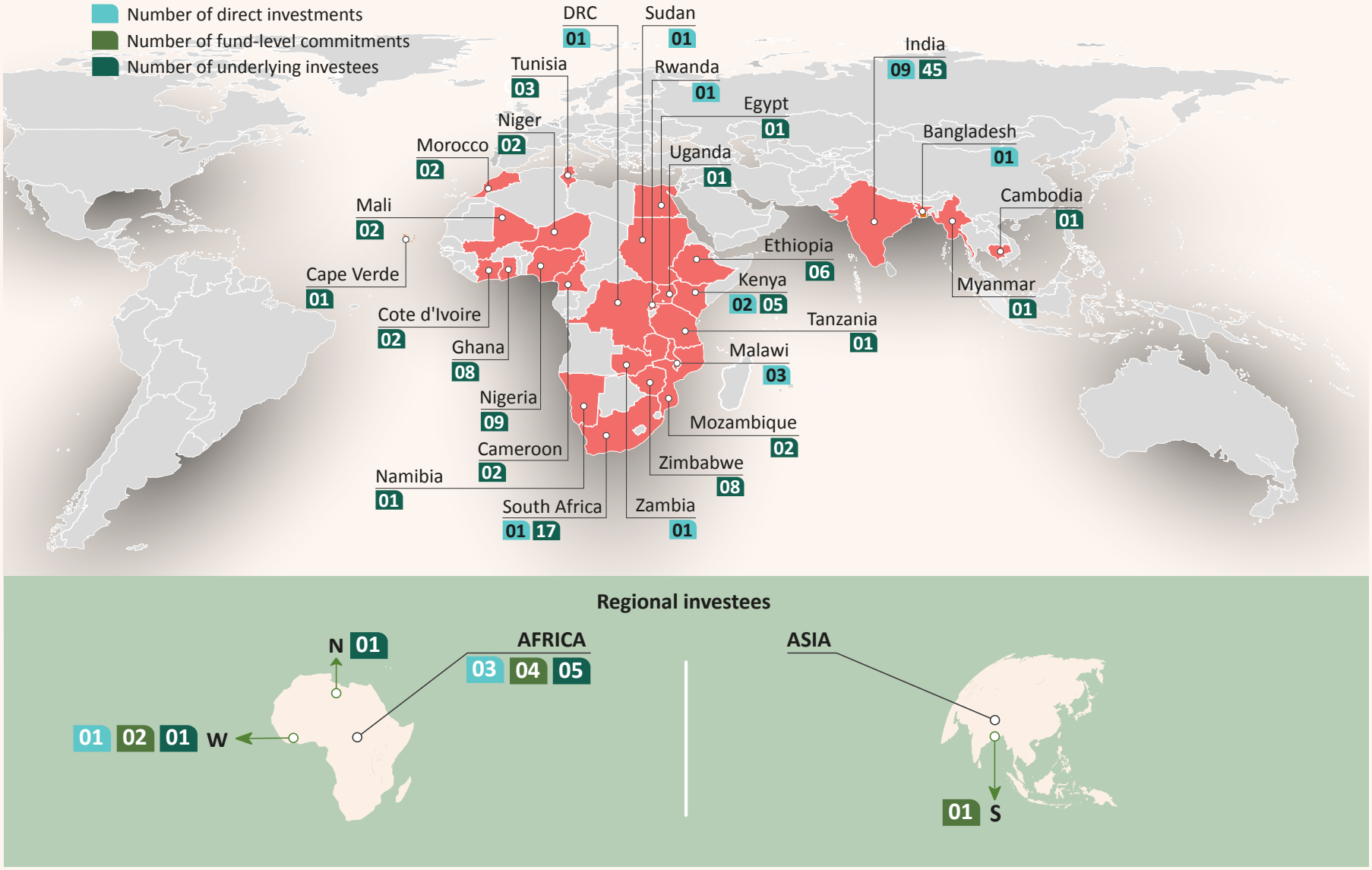
In this section we detail the DI intended and achieved in the Industries portfolio (i.e. F&A and manufacturing).

[90] This analysis of value addition is based primarily on data included in IC papers and quarterly monitoring reports (QMRs). We acknowledge that BII possesses more documents on value addition, but they were not reviewed comprehensively for this evaluation.

5.2.1 Food and Agriculture



FOOD AND AGRICULTURE



* Note: Investments at a regional level are shown on the two maps at the bottom; country-specific investments are presented on the main map.

Summary of findings

- BII published an F&A DI strategy in 2019 which lays out the importance of the sector in alleviating poverty because of its role in providing safe, nutritious products for consumption, in offering "more employment in African and South Asian countries than any other sector", in contributing "a material portion of GDP" and, in effect, raising the incomes of the poor. The strategy also indicates that low productivity in F&A is a significant contributor to poverty in Africa and South Asia. Before this date, the principal DI goal for the F&A sector was to create jobs.[91]
- F&A investees reached 1.4 million farmers in 2022 and supported low-income populations, either as employees or suppliers or as end-users of goods or services. An additional 11.1 million farmers were reached by technology solutions. In total, 12.5 million farmers were reached by BII investees.[92]
- The F&A portfolio supported more than 99,000 [93] direct jobs in 2022.[94] This is based on an aggregate of the jobs reported by the 64 per cent of the portfolio that shared data against this indicator in 2022. 28 per cent of these jobs are from just one investee.[95]
- Of the investees that reported gender-disaggregated data in 2022 (which reflects 40 per cent of investees), 13 per cent of the 87,251 jobs these investees reported were filled by women. [96] This is a low proportion. Furthermore, it is not known how many of the 12.5 million farmers reached by BII are women, limiting BII's insight into whether its F&A portfolio is supporting female workers and farmers in the sector.
- There is insufficient evidence to assess the extent to which BII's F&A portfolio is improving access, affordability and consumption of safe, nutritious products, as quantitative data is not available on which groups of people are accessing nutritious food because of a BII investment (or accessing it more frequently or as a higher proportion of their daily diet, etc.).
- BII needs to balance its intended impact of improved nutrition and food security, which implies increased sales on the domestic market, with its intention of contributing a material portion of GDP, which can also be achieved through the export of high-value agricultural products.
- According to the JIM calculations of BII's data, BII's F&A investments have contributed $23.8 billion to GDP in the relevant countries and regions, between 2019 and 2022. Some BII F&A investees have reported on productivity gains through increased yields or by introducing local processing. It is also expected that GDP gains would be made through increased exports, which is an explicit goal for 24 investees (22 per cent of the sampled portfolio), of which 16 focus on the export of food products.

[91] BII (n.d.) *Food and Agriculture: Sector Strategy.* Visit assets.bii.co.uk/wp-content/uploads/2020/11/18114720/Food-and-Agriculture-Sector-Strategy.pdf
[92] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). Reach metrics were introduced in 2017. Commitments before this date would therefore not be required to report on these metrics, and not all F&A investments will have engagement with farmers as a part of their business model.
[93] Number of full-time equivalent (FTE) workers, as per local definition, working for the investee company or investment project at the end of the reporting period unless there is seasonal variation.
[94] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.
[95] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. The drivers behind these discrepancies are as outlined above.
[96] Ibid.

- Eight direct investments within the F&A portfolio qualify as climate finance or partially climate finance, representing one-third of all F&A direct commitments. These investees aim to deliver on climate mitigation or adaptation, by greening their own operations, providing climate-friendly solutions to end-customers, or through providing insurance. BII has also supported forestry investees to increase the size of their forests. This shows BII's intention to invest in climate mitigation and adaptation; however, given the significant role that agriculture plays in adapting to and mitigating climate change, this is an area in which BII could leverage its investments further to achieve its climate change objectives.
- We did not find evidence of economy-level or system-level assessments and approaches to achieving "enhanced agricultural economies". To contribute to this ambitious outcome, BII needs to take an intentional approach to shifting systems through more complementary investments, as spillover and demonstration effects from stand-alone investments are unlikely to be sufficient to achieve this outcome.

State of the Food & Agriculture portfolio

Twenty-five F&A investments have been assessed by BII using their DI RAG rating system, assessed at Q1 2023. 88 per cent of the investments are on track to achieve their DI thesis, and 12 per cent of the rated investments are at risk of not achieving their intended impact. BII has exited five investments (three equity and two debt).

5.2.1.1 Overview of investment strategy for development impact for Food and Agriculture

BII's investment strategy for F&A lays out the importance of the sector in alleviating poverty because of its role in **feeding "hungry populations"**, in providing **"more employment** in African and South Asian countries than any other sector", in contributing "a material portion of **GDP**" and, in effect, raising the **incomes of the poor**. The strategy also states that low **productivity** in F&A is a significant contributor to poverty in Africa and South Asia.[97]

The strategy focuses on five themes to contribute to these DI aims – (i) lifting farm productivity, (ii) integrating value chains, (iii) improving access to nutritious food, (iv) supporting sustainable F&A business models, and (v) encouraging innovation.[98]

BII also has priority subsectors across the F&A value chain:

- agri-inputs (fertilisers, agricultural chemicals, seeds, distribution, micro-irrigation, farm mechanisation);
- animal protein (including animal feed and dairy);
- high-value crops ((HVC), select perennial crops, select cash crops, select fruits and vegetables);
- food processing; and
- forestry.

BII has developed subsector Catalyst strategies for HVC, forestry, and primary agriculture platforms.[99] BII also invests into F&A infrastructure, logistics, AgTech and select staple and traded commodities.

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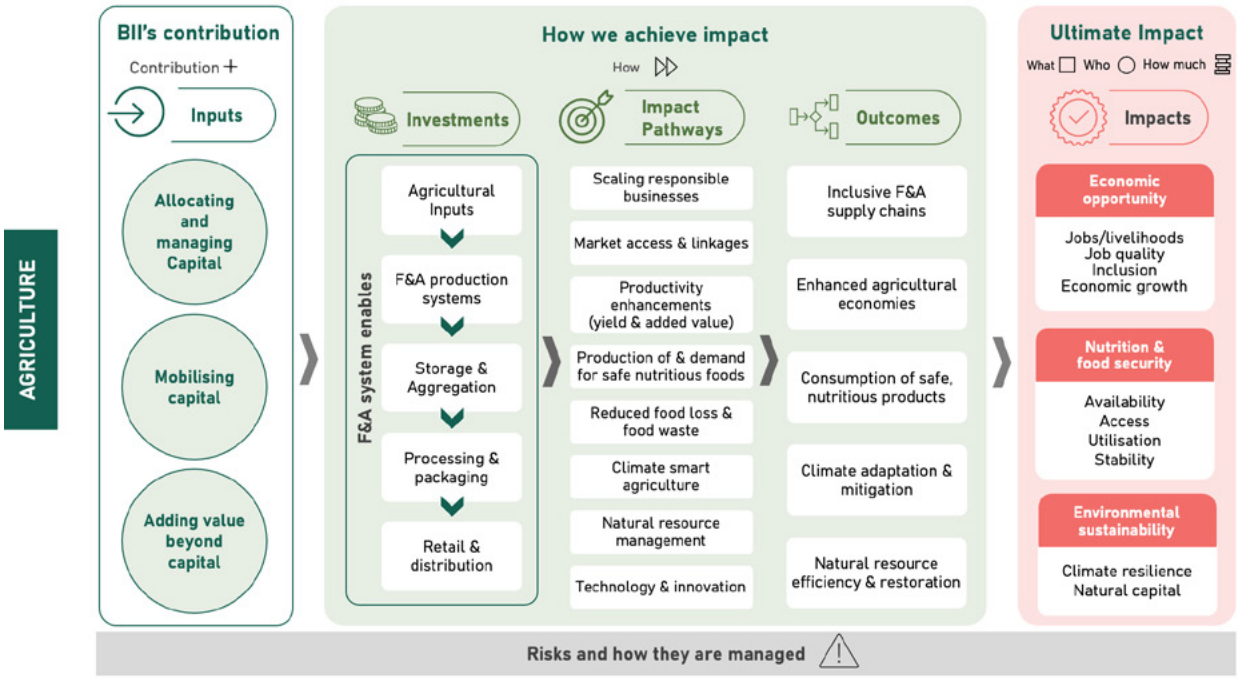
[97] BII (n.d.) *Food and Agriculture: Sector Strategy.* Visit assets.bii.co.uk/wp-content/uploads/2020/11/18114720/Food-and-Agriculture-Sector-Strategy.pdf

[98] Ibid.

[99] BII is pursuing its HVC strategy primarily through a sector-specific fund investment, although it will also consider select opportunities for direct investment.

This analysis[100] of the F&A portfolio includes an assessment of the DI of all 24 direct investments, seven sector-specific funds – including their 65 underlying investments – and a sample of 20 underlying investments from multi-sector funds and VC funds.

Figure 22. BII food and agriculture sector impact framework



The most prevalent intended investment type across the 109 investments is 'F&A production systems', with 47 relevant investments (43 per cent). 'Retail and distribution' were a focus for 22 investments (20 per cent) and 'processing and packaging' for 23 investees (21 per cent).

5.2.1.2 Development impact across the Food and Agriculture portfolio against the impact framework

In this subsection we analyse of the number of investees that target each of the impact pathways in the impact framework. Next, we summarise how investees are contributing to the outcomes identified in the impact framework, including data (where it exists) on results achieved since BII's investment. We also provide insights into examples of how investees are intending to contribute to these results.

Impact pathways

Of the impact pathways in the sector impact framework, the impact pathway targeted by the largest number of investments is 'technology and innovation', which is an intended impact pathway for several investees. This is largely due to the number of investments made through a fund which focuses specifically on AgTech. Of the 109 investees reviewed in the portfolio, some investees explicitly aim to improve market access and linkages and some explicitly intend to scale responsible business.

[100] This analysis refers to the DI analysis conducted on the F&A sector, looking at a sample of underlying investments in multi-sector and VC funds. The full F&A portfolio is described in the portfolio analysis section.

Outcomes

Inclusive food and agriculture supply chains

The BII review of inclusive supply chains quotes research by the Wageningen Centre for Development Innovation[101] noting four critical success factors namely (i) bundling services, (ii) connecting deeply with farmers, (iii) customising interventions and (iv) partnering with governments, civil society actors and peers. Among BII's F&A investees, there is some evidence of connecting with farmers and limited evidence of creating partnerships; we found one example of an investee bundling services, specifically financing and climate smart inputs, advisory and insurance.

Some investees specifically engage deeply with farmers as suppliers of their goods or end-users of their goods or services. One investee reports that farmers are its suppliers, of whom 54 per cent were women and 25 per cent were youths, according to reporting in 2022. BII's investment into this firm was, in part, specifically to expand its out-grower scheme, buying from smallholders. Additionally, the firm is planning to build and share irrigation infrastructure with nearly 700 smallholders. Another investee buys commodities from, and sells fertilisers to, farmers and small traders at farmgate. They have reported that 75 per cent of the farmers that they engage with have reported better prices (given by the investee) as the primary reason to sell to the company. The company reports that its farmers achieve three times higher profits, compared with farmers selling to middlemen, because of their fair market prices and the improved quality and quantity of their crop because of the investee's inputs and extension services.

One investee has reported an intention to create partnerships to improve supply chains within the cotton industry. They have created a network of farmers, yarn manufacturers, dyers and finishing plants, weavers, retailers, and customers to consolidate resources and collaborate for sector improvements.

Enhanced agricultural economies

To meet the challenges faced by communities in BII's priority geographies, it is essential to enhance agricultural economies. However, making progress on this is likely to require using a systems lens to assess what is required, and by which stakeholders, to ascertain how BII can best play a role in any particular system or economy as part of a set of "tailored strategies and solutions at national level".[102] Although there is evidence of value chain analysis for some investments, we did not find any systematic evidence of an analysis that would address enhancing agricultural economies.

BII does not have a specific definition of enhanced agricultural economies or specified indicators to assess achievement in this area. Proxy indicators for improvements in agricultural economies through BII's F&A investments are revenue growth, wages paid, and taxes paid. One investee reported adding $1.7 million to the local economy over a five-year period through out-grower schemes. Another investee expects to stimulate the local economy by sourcing all its maize and soya locally. However, several investees have missed revenue growth targets, as per quarterly impact reports, suggesting that their contribution to enhancing agricultural economies will also be less than had been expected at the investment decision-making stage.

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[101] CDC (2020) *Insight: Impact Study 015: Investing for impact in the food and agriculture sector in Africa and South Asia.* Visit assets.bii.co.uk/wp-content/uploads/2020/11/18115511/What-is-the-impact-of-investing-in-FA.pdf

[102] UN Sustainable Development: Thematic Group on Sustainable Agriculture and Food Systems (2015) *Transformative Changes of Agriculture and Food Systems.* Visit sustainabledevelopment.un.org/content/documents/6484106-Transformative%20changes%20of%20agriculture%20and%20food%20systems.pdf

Consumption of safe nutritious products

BII's F&A investments aim to improve the consumption of safe nutritious products by improving safety in production, developing technologies to improve safety, and producing organic foods. BII's own Evidence Review for F&A[103] quotes a Food and Agriculture Organization (FAO) statement that "there is no food security without food safety". For two investees, BII ensured due diligence and support to address food preparation and safety before deciding to invest in these companies. Another BII investee has specifically committed to a high-quality food management system by achieving the relevant International Organization for Standardization (ISO) certification. Another investee is a data platform that aims to improve traceability of products and intends to scale its work to relevant value chains, where traceability of products is essential from a food safety standpoint.

Very few investees produce or procure certified organic products. Organic food is considered safer due to reduced exposure to pesticides. Although there is some evidence associating organic food with better health outcomes, more research is required to establish causality.[104] One investee firm reports that 5 per cent of its purchases are organic fruit and vegetables and that it supported 290 farmers to enrol in an organic certification scheme in 2021. As a domestic retailer, it aims to double its offer of organic vegetables and convert over 300 farms into organic farming.

Climate adaptation and mitigation

Eight investments in the F&A portfolio qualify as climate finance or partially climate finance under BII's guidelines, aiming to adapt to or mitigate climate change. They aim to achieve this through access to insurance products, making their own operations greener or providing climate mitigation or adaptation products or services to customers. At least two investees offer smallholder farmers access to insurance, and another investee provides weather data to enable crop companies to settle farmers' insurance claims. In addition, one investee aims to share irrigation infrastructure with smallholders, as described above, to boost their resilience to volatile weather conditions. Another climate finance qualified investee aims to reduce greenhouse gas (GHG) emissions substantially through improved food storage.

Some investees aimed to improve the environmental impact of their own operations at the time of BII's decision to invest. One investee, which produces animal protein, qualified as a climate finance investment due to its commitment to more sustainable practices and technologies. One investee is transitioning its vehicle fleet to electric vehicles. As part of this transition, it has introduced 1,000 electric vehicles, resulting in 2,354 tonnes of CO2 emissions avoided annually. The same investee has also installed rooftop solar and has piloted the use of biomass power (with the support of another investor).

There are investments that are focused on providing climate adaptation products or services to customers. For instance, one investee intends to improve the resilience of smallholders by selling drought-resistant seed inputs, providing training on crop rotation, diversification, and post-harvest losses, and offering climate insurance for smallholders. It aims to provide these services for 2.3 million low-income farmers.

Natural resource efficiency and restoration

There are limited examples of investees aiming to improve natural resource efficiency and restoration or making achievements in this area. However, one investee aims to restore

[103] CDC (2020) *Insight: Impact Study 015: Investing for impact in the food and agriculture sector in Africa and South Asia.* Visit assets.bii.co.uk/wp-content/uploads/2020/11/18115511/What-is-the-impact-of-investing-in-FA.pdf

[104] Vigar, V. et al. (2020) 'A Systematic Review of Organic Versus Conventional Food Consumption: Is There a Measurable Benefit on Human Health?' *Nutrients* 12(1): 7.

forests by planting 19,000 hectares cumulatively between 2015 and 2021 and intends to plant 30,000 hectares by 2030. At least 10 per cent of the land that it manages is kept under permanent conservation.

5.2.1.3 Development impact across the Food and Agriculture portfolio by most pertinent themes

In this section we summarise the DI of the F&A portfolio according to the BII cross-cutting themes that are most pertinent to the sector. We consider the DI of the portfolio according to geography, then in terms of digital transformation, climate, gender and diversity, and low-income populations and job creation.

Geography

51 per cent of F&A investments have gone into Gamma category countries (75 per cent of which into India). 27 per cent of F&A investments are into Beta category countries.[105] However, when assessing commitments only (excluding underlying investments through funds), then our analysis shows that the greatest proportion of F&A commitments, by total amount and by count, are into Alpha countries (totalling $362 million through eight commitments, representing 44 per cent of the F&A portfolio in terms of monetary commitment value). These country classifications are taken directly from BII's inclusion ratings.[106]

The largest numbers of investments in the whole F&A portfolio are in India (38 per cent), Nigeria (6 per cent), South Africa (5 per cent), Zimbabwe (5 per cent) and Ghana (5 per cent). In terms of investment amounts, 35 per cent of money invested goes to regional investments in Africa. On a country level, India receives the highest amount of investment (21 per cent), followed by Zambia (9 per cent) and the Democratic Republic of the Congo (8 per cent).

Review of external evidence shows that BII invests in countries with low levels of nutrition and high food insecurity.[107] Table 11 presents indicators of nutrition and food security for selected countries where BII invests. This data generally shows significant levels of undernourishment and stunting of children, as well as high food insecurity, in the countries that BII has invested into most significantly within the F&A portfolio. The top country invested in through the F&A portfolio, India, ranks 129th out of 220 countries ranked for prevalence of undernourishment, and Nigeria ranks 120th. Although no data is available for undernourishment in Zambia, they rank 153rd out of 223 countries on the percentage of children stunted, indicates higher levels of malnutrition than both India (139th) and Nigeria (146th). These low rankings indicate high levels of malnutrition and, alongside the placement of all three countries in the lowest 50 per cent of countries on the Global Food Security Index ranking, suggest that F&A investments are well targeted in countries of need.

[105] These figures are based on the total number of direct investments and underlying investments through funds that are into each country classification.

[106] BII (2022) *Impact Score Implementation Manual, version 1.1.*

[107] Economist Impact (2022) 'Global Food Security Index 2022'. Visit impact.economist.com/sustainability/project/food-security-index/ (accessed 2 August 2023).

Table 11. Nutrition and food security indicators for key BII F&A countries

Country	% of BII F&A investment amounts	Prevalence of undernourishment (%)108	Percentage of children stunted (%)109	Food Security Index global ranking 110 (of 113 countries)111
India	21%	16.3 (129th)	31.7 (139th)	68
Zambia	9%	No data available	40.3 (153rd)	102
Nigeria	2%	12.7 (120th)	35.3 (146th)	107

Data Source: BII ITS data set; World Bank, World Development Indicators; The Economist's Global Food Security Index 2022.

According to the JIM calculations of BII's data, in total BII's F&A investments have contributed $23.8 billion to GDP in the relevant countries and regions, between 2019 and 2022. Of this, $6.3 billion is 'direct' and $17.6 billion is through the 'supply chain'.

Digital transformation

Across the F&A portfolio, technology has been leveraged to reach many farmers through digital solutions. 11.1 million farmers were reached through digital solutions in 2022.[112] Typically, these solutions aim to improve farmers' access to information, thereby allowing them to take actions to maximise crop health and yields. There are also investments within the portfolio that allow farmers to access services, such as agricultural insurance, that they might not otherwise be able to access.

One example of a disruptive digital investment[113] in the F&A portfolio is software as a service (SaaS) for agribusiness, leveraging satellite imaging, AI and machine learning to monitor crop health remotely and make yield predictions. The software then provides its users (i.e. farmers) with this information.

There are several digitally native businesses across F&A, particularly focused on precision farming and agri-inputs. "Digitally native" businesses have "digital technology at their core", i.e. they would not be able to deliver their product or service without the Internet.[114] Many of these technology solutions target rural small-scale farmers in BII's geographies, who may have connectivity issues, may be less educated[115] or may be uncomfortable navigating mobile apps and technology solutions, and this may pose a challenge to their access. This barrier was experienced by one investee that went on to develop a face-to-face alternative to its app. Another investee, which leverages an AI-powered Internet of Things (IoT) SaaS platform, has addressed this potential issue by providing actionable advisory services to farmers in vernacular languages, which is intended to facilitate easy understanding and transference of information to actions.

108 World Bank (2023) 'DataBank' (accessed 2 August 2023).
109 Ibid.
110 A country ranking 1 is the most food secure, and a country ranking 113 is the least secure.
111 Economist Impact (2022) 'Global Food Security Index 2022' Visit impact.economist.com/sustainability/project/food-security-index/ (accessed 2 August 2023).
112 There is no documented definition of what determines 'farmers reached' for technology companies. This figure has not been adjusted for double counting.
113 "Disruptive digital" investments are into "emerging, digital technologies with market-disrupting potential but underdeveloped real-world applications"; BII (n.d.) 'Digital Stack'.
114 BII (n.d.) 'Digital Stack'.
115 FAO (2015) *The economic lives of smallholder farmers: An analysis based on household data from nine countries.* Visit fao.org/3/i5251e/i5251e.pdf

The portfolio also includes some investments that are digitally enabled businesses,[116] such as an investment into an agricultural insurance company that uses digital solutions to improve the accessibility and effectiveness of its products.

Gender and diversity

FAO point to continual challenges in this area in F&A, stating that women make up 43 per cent of the global agricultural labour force but face significant discrimination when it comes to land and livestock ownership, equal pay, participation in decision-making entities and access to credit and financial services.[117] Women's role in agriculture is expected to increase as men migrate away from rural settings and women are more likely to stay and continue farming.[118] Women play a role in investee companies as employees, suppliers and end-user consumers for goods and services.

Of the 54 investees that reported gender-disaggregated data in 2022, 13 per cent of jobs supported by investees were for women. This figure represents 11,536 jobs for women. This is a low proportion.[119] Furthermore, of the 12.5 million farmers reached across the portfolio, it is not known how many are women, as the data is not gender-disaggregated at an organisational level. Gender-disaggregation of this data would mean that BII would have better insight into their reach to women within their F&A supply chains.

Despite this, two investees have reported their reach of female smallholder farmers through quarterly impact reporting. One fund reported an increase from more than 82,000 women smallholder farmers in its portfolio in 2020 to more than 133,000 in 2021; however, the proportion of smallholder farmers reached that were women decreased marginally (from 37 per cent to 34 per cent), as there was growth across male and female farmers reached. Another investee has reported that 54 per cent of the farmers that it engages with are women and 35 per cent of them are youths.

Some BII investments report a focus on improving job opportunities for women within their own companies. In 2021, one fund reported that for the first time it had more women in full-time jobs across its portfolio than in casual or part-time jobs. One direct investee reported that 40 per cent of its employees are women, and across all employees 88 per cent are mostly unskilled in farm and processing operations. Another investee had run a trial programme, at the time of BII investment, for female workers and people with disabilities, which they claimed increased retention and job satisfaction of employees and increased economic opportunities for women and people with disabilities.

There are five F&A investments that are 2X qualified. These investments have made various commitments to make their operations more gender-sensitive or gender-transformative, including committing to increasing the proportion of employees that are women and/or increasing the proportion of leadership positions that are filled by women. Two of the 2X investments are sector-specific funds, both of which aim to increase female representation on their ICs. One of the funds also aims to set a minimum proportion of portfolio business that are 2X eligible and to ensure that all investees have a gender policy. Some of the 2X qualified investments are already meeting their targets for proportion of leadership positions filled by women or proportion of employees that are women. These five investments represent 23 per

[116] These offer traditional products/services that are made more efficient and accessible by technology; BII (n.d.) 'Digital Stack'.
[117] FAO (n.d.) 'Women in Agriculture'. Visit fao.org/reduce-rural-poverty/our-work/women-in-agriculture/en/
[118] World Bank (2015) *Women in Agriculture: The Impact of Male Out-Migration on Women's Agency, Household Welfare, and Agricultural Productivity.* Visit hdl.handle.net/10986/22386
[119] It is not possible to find an appropriate benchmark against which to compare BII's proportion of jobs to women for the F&A sector as existing data sets (such as the World Bank and International Labour Organization (ILO) data sets) include both formal and informal workers, whereas BII figures on jobs supported include formal employment only.

cent of the total commitments made since 2018, when the 2X qualification started.

BII has also provided gender advisory services for F&A investees. BII was concerned about the gender performance of an investee and worked on a timebound Gender Action Plan. As a part of that plan, the investee established six all-female delivery centres, which have been shown to operate at a higher efficiency level than all-male or majority-male centres. The investee also rolled out sexual harassment trainings and self-defence trainings and set up a 24/7 helpline for female employees to log grievances.

Low-income populations and job creation

It is expected that BII investees in F&A have reached low-income populations, primarily due to their targeting of small-scale farmers and intended support to employment for low-skilled low-income people. In terms of targeting small-scale farmers, investees aim to reach this group as (i) suppliers of their goods or services, (ii) end-users of agricultural goods or services, and/or (iii) employees within their own businesses. Furthermore, some investees aim to generate positive impact indirectly, including for low-income populations, by increasing the availability of essential foods domestically. However, there is limited data on the extent to which investees have reached low-income groups.

Many of the investees are engaging with low-income groups as suppliers or end-users of their goods and services. **In 2022, 18 investees reported on the number of farmers that they had reached, which totalled 12,550,577.[120] Seven AgTech companies reached 11.1 million of these farmers; the remaining 1.4 million were reached by 11 companies that are either supplying or sourcing from farmers.** Another investment that was exited was reaching 45,000 farmers in 2021.

Although it is expected that many small-scale farmers could be considered low-income, there is limited evidence on the extent to which investees reach that segment of society. One direct investee reports that 78 per cent of its customers live in the bottom 60th percentile of India's population. Another has significantly reached some poorer segments of society, actively engaging more than 3,000 farmers as suppliers. However, its farmers tend to have larger landholdings than the average smallholder. 51 per cent of farmers engaged by this investee can be considered marginalised as smallholders with less than two hectares of land; however, this is a lower representation of this group than we find nationally as 86 per cent of farmers across the country have less than two hectares of land.

Four investees that participated in the 60 Decibels research, commissioned by BII, report that their customers have experienced an improved quality of life since accessing investee goods and services. One investee found that 60 per cent of farmers reported a 'very much improved' quality of life. The outcomes that were most frequently cited as experienced by customers were improved production, improved income, and ability to provide for their family. Another investee has reported that nearly two in three supported farmers have stated that their quality of life has improved because of using the investee's service. They report an improved ability to meet farming and household needs, improved income, and improved ability to pay bills.

Some investees specifically describe their products as 'affordable'; however, there is limited analysis of affordability or segmentation of customers reached for us to be able to validate the claim of affordability. AgTech solutions provide the opportunity for investees to reach many low-income farmers. For example, one investee aims to provide services to more than

[120] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). Reach metrics were introduced in 2017. Commitments before this date would therefore not be required to report on these metrics, and not all F&A investments will have engagement with farmers as a part of their business model.

2.3 million low-income farmers by 2026.

Across the F&A portfolio, BII supported 99,409 jobs via 88 investees in 2022, with 28 per cent of these jobs being supported by one company.[121] Forty-nine companies reported the number of jobs that they supported each year between 2019 and 2022. Over this four-year period, 35 per cent of the 49 companies reported either stagnant or declining numbers of jobs supported.

One investee has reported that 67 per cent of their employees are 'bottom of the pyramid', 32 per cent are women, and 22 per cent are women from the 'bottom of the pyramid'. BII invested in one particular investee with the specific intention of creating more jobs (among other DI goals). Of this investee's employees, 88 per cent are unskilled in farm and processing operations. This suggests that the investee will upskill these individuals while providing them with employment.

Some investments aimed to ensure job quality in terms of salary packages or primary earnings; there was very little evidence on other aspects of job quality, such as well-being and life quality. One fund reported a 6 per cent increase in the weighted average of pay across the active portfolio's employees between 2020 and 2021. Furthermore, two-thirds of full-time workers and one-third of casual/part-time workers earned more local currency from working with portfolio companies in 2021 in comparison to 2020. In both 2020 and 2021, almost half of the portfolio companies (representing 900 full-time employees) paid their full-time staff (on average) more than the local living wage. Another investee reports paying an average annual salary that is almost 150 per cent of the national minimum wage and includes access to subsidised maize. The investee also reports alignment to BII's E&S standards for quality jobs. One investee reported in 2019 that its farmers received an average weekly income that was twice the 2018 average. 97 per cent of its farmers also reported improvements in their quality of life from working with the company. Another investee employs more than 2,000 staff directly and has committed to paying low-skilled staff approximately 30 per cent more than the national minimum wage.

5.1.1.4 Conclusions on achievement of DI within food and agriculture

BII's F&A sector strategy outlines the importance of the sector to broader DI in terms of providing safe, nutritious products for consumption, offering more employment in target regions than any other sector, contributing a material portion of GDP and, in effect, raising the incomes of the poor. The strategy also states that low productivity in F&A is a significant contributor to poverty in Africa and South Asia.[122]

There is insufficient evidence to assess the extent to which BII's F&A portfolio is improving access, affordability and consumption of safe, nutritious products as quantitative data is not available on which groups of people are accessing nutritious food because of a BII investment (or accessing it more frequently or as a higher proportion of their daily diet, etc.). There are, however, indications that BII investments may be making contributions to this objective. First, some investees target food security as the primary need that they aim to address, and therefore seek to improve accessibility of staple food products in their domestic market. Second, there is evidence of a few investees producing safe, nutritious products. Third, analysis of the most-invested countries in the portfolio indicates that these countries are in high need in terms of food security, suggesting that BII investment is being channelled to relevant countries that need safe, nutritious products for consumption. It is also noteworthy that BII needs to balance its intended impact of improved nutrition and food security, which implies sales on the domestic market, with its intention of contributing a

[121] This is an aggregate figure of reporting from all investees that reported jobs supported figures to BII for 2022 (64 per cent of the total portfolio reported). The reported figures have not been extrapolated to estimate jobs across the full F&A portfolio.

[122] BII (n.d.) *Food and Agriculture: Sector Strategy.* Visit assets.bii.co.uk/wp-content/uploads/2020/11/18114720/Food-and-Agriculture-Sector-Strategy.pdf

material portion of GDP, which can also be achieved through export of high-value agricultural products.

According to the JIM calculations of BII's data, in total BII's F&A investments have contributed $23.8 billion to GDP in the relevant countries and regions between 2019 and 2022. Some investees produce food outputs for the export market, thereby aiming to contribute to GDP and productivity impact goals. In addition, we expect productivity gains to contribute to GDP. Many BII investees aim to improve productivity for farmers through increased yields (because of improved inputs, better access to information, extension services and training) or by adding value locally, such as through local processing. Despite this, quantitative data evidencing investees' achievements in these areas and the implications for productivity is limited. Given the importance of productivity gains in enabling follow-on DI results, this could be a valuable area to focus on for improvements in impact monitoring for BII investees.

BII's F&A portfolio supported more than 99,000 jobs in the F&A sector in 2022. In addition to supporting these jobs, it is expected that BII's F&A portfolio has reached low-income groups and unskilled workers with an (unknown) proportion of these jobs, based on the information gathered from some investees. Some BII investees have complemented the figures on 'jobs supported' with a focus on improving job quality for employees as well, particularly through improved pay compared with national average pay or employees' previous pay.

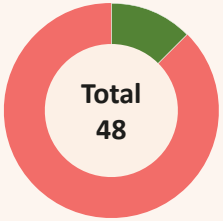
However, only 13 per cent of the supported jobs were filled by women. Although few investees are focusing particularly on improving the number of women in their workforce and in senior positions within their companies, the overall low percentage of women in supported jobs indicates that the F&A portfolio could benefit from a mainstreamed approach to improving gender equality in investees' own firms. **BII investees reached 12.5 million farmers in total in 2022**, although the percentage of women included in this number is unknown. Investees have supported low-income populations, either as employees (as described above) or suppliers, or as end-users of goods and services. AgTech investments have the scope to reach many farmers as users of digital solutions, reaching 11.1 million farmers (via seven investments) in 2022. Other investees have reached a smaller number of farmers, but have been more intentional in targeting (and, in some cases, tracking) farmers from particular income groups.

Eight direct investments within the F&A portfolio are qualified as climate finance or partially climate finance, aiming to deliver on climate mitigation or adaptation. They intend to do this by greening their own operations, providing climate-friendly solutions to end-customers, or through provision of insurance. This represents one-third of the F&A portfolio's direct commitments, demonstrating BII's intention to deliver against climate mitigation and adaptation within the portfolio. However, some investments are made into subsectors that produce some of the highest levels of GHG emissions. Given the significant role that agriculture plays in adapting to and mitigating climate change, this is an area in which BII could leverage its investments further to achieve its climate change objectives.

One of the five outcomes in the F&A impact framework is 'enhanced agricultural economies'. **We did not find evidence of BII's F&A portfolio systematically identifying and targeting agricultural economies that it aimed to enhance.** Enhancing economies requires building on such an analysis by assessing the market failures and systems within the economies to identify the most effective way to provide support, which could be directly to an investee, through sector-level TA (for example, through BII Plus) or through partnerships. We did not find evidence of these assessments and approaches having been undertaken across the portfolio. To contribute to the ambitious outcome of 'enhanced agricultural economies', BII will need to take a similarly comprehensive and intentional approach to shifting systems, as spillover and demonstration effects from stand-alone investments are unlikely to be sufficient to achieve this outcome.

MANUFACTURING

TOTAL NUMBER OF INVESTEES



Direct commitments: **6**

Underlying investees through multi-sector funds: **42**

NUMBER OF CATALYST VS. GROWTH COMMITMENTS

Number of Catalyst commitments	1
Number of Growth commitments	5

NUMBER OF INVESTMENTS BY INSTRUMENT

Amount of Debt commitments	3
Amount of Equity commitments	3
Amount of Sector-specific fund commitments	0

TOTAL AMOUNTS

Amount committed	$648.2 M
Amount disbursed	$441.1 M

AMOUNT OF CATALYST/GROWTH COMMITMENTS

Amount of Catalyst commitments	$5.1 M
Amount of Growth commitments	$643.2 M

AMOUNT OF COMMITMENTS BY INSTRUMENT

Amount of Debt commitments	$258.6 M
Amount of Equity commitments	$389.7 M
Amount of Sector-specific fund commitments	$0

AMOUNT COMMITTED BY REGION

Africa

$314 M

Asia

$334.2 M

TOP 3 COUNTRIES BY AMOUNT

Nigeria

$170 M

Kenya

$151.3 M

Bangladesh

$27.8 M

TOP 3 COUNTRIES BY NUMBER OF INVESTMENTS

India

9

Kenya

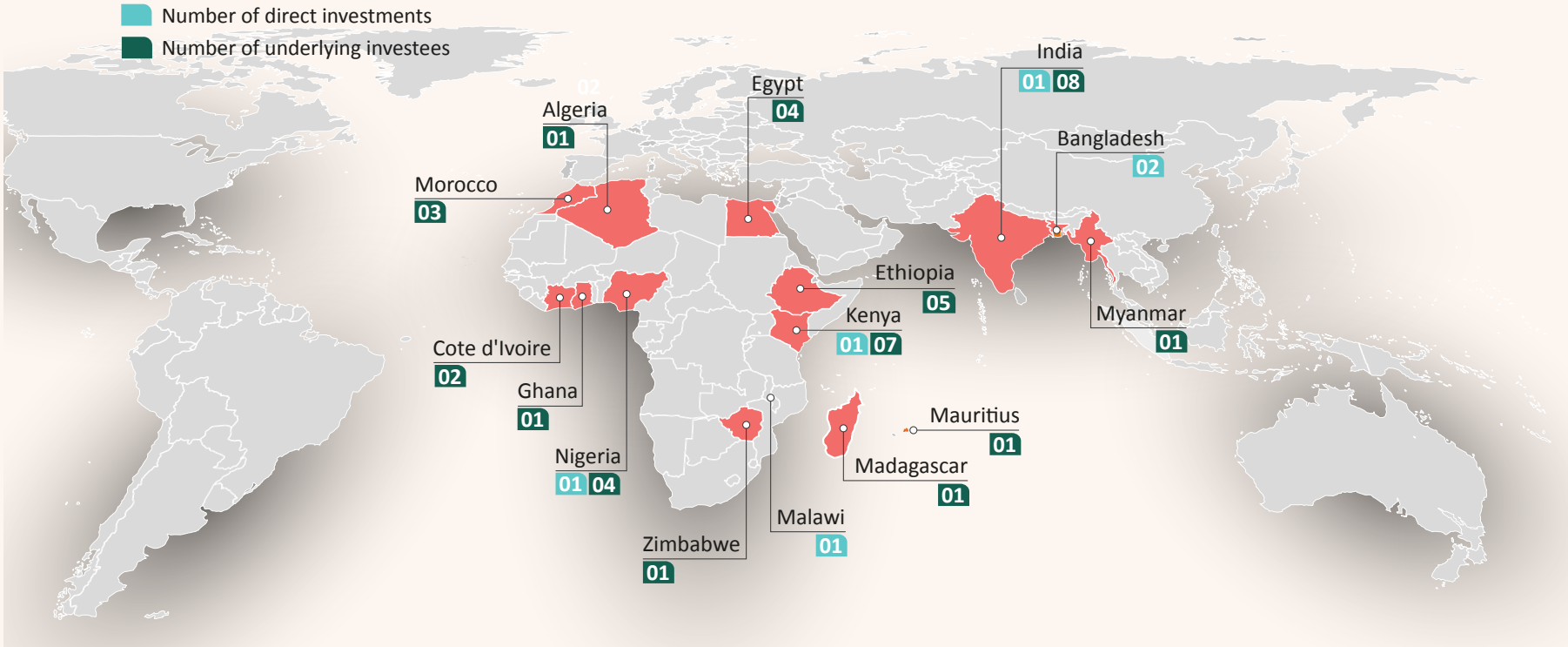
8

Nigeria

Ethiopia

5

MANUFACTURING



* Note: Investments at a regional level are shown on the map at the bottom, while country-specific investments are presented on the main map.

5.2.2 Manufacturing

Summary of findings

- In 2019, BII developed a new strategy[123] to achieve DI through manufacturing, focusing on improving manufactured product availability, accelerating manufacturing ecosystem development, and promoting more responsible production and consumption. This marks a shift from the previous emphasis on job creation. In 2020, BII published a fossil fuel policy, prohibiting investments in companies that "exclusively produce goods for and/or provide goods to excluded fossil fuel activities".
- In 2022, the portfolio supported 55,344 direct jobs, and where gender-disaggregated jobs were reported by investees, 21 per cent of those jobs were filled by women. [124] 75 per cent of the portfolio reported to BII on direct jobs supported, with one automotive component manufacturer (investee) accounting for 30 per cent of these jobs.
- Overall, the portfolio aims to balance the objective of improving the availability of essential manufactured products domestically with the objective of boosting economic development through increased exports of manufactured products across the portfolio.
- So far, there is no evidence that BII investments have intentionally accelerated the development of manufacturing ecosystems through concentrated investments or value-added activities in any specific manufacturing ecosystem. However, investments in heavy industries (such as chemicals, cement, and fertiliser) are likely to generate spillover effects within the manufacturing sector.
- The portfolio is aligned more with promoting responsible consumption than production. Some investments focused on manufacturing green products such as electric vehicles. There are also some examples of investments that are seeking to green their own operations; however, several investments are in heavy industry, with no explicit goal to decarbonise these energy-intensive production processes.
- More recent investments are 2X qualified, indicating a possible shift towards applying a gender lens more consistently across the portfolio. These investments show great potential for achieving DI for women; although results are yet to be realised, as they are new investments. The rest of the portfolio offers limited or no gender-disaggregated reporting on key indicators in regular investee reports.
- BII's Manufacturing portfolio could foster the introduction of new production technologies to boost production and profits more intentionally across the portfolio, thereby achieving greater DI.

State of the Manufacturing portfolio

At Q1 2023, BII assessed six investments using their DI RAG rating system, showing that 83 per cent of the investments are on track and one investment is high-risk.

5.2.2.1 Overview of investment strategy for development impact for Manufacturing

BII recognises that there is insufficient local manufacturing capability in most African and South Asian countries, which limits economic development and constrains growth in other

[123] BII (n.d.) *Manufacturing: Sector Strategy.* Visit https://assets.bii.co.uk/wp-content/uploads/2020/12/16114602/CDC-manufacturing-sector-strategy.pdf

[124] Based on BII's Quality Controlled Development Impact Dataset (2021 & 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.

economic sectors. This limits a country's progress towards inclusively improving people's standards of living.[125]

BII therefore understands the availability of manufactured products as "foundational to alleviating poverty and enabling broader economic development", as all infrastructure, services and products in an economy rely on manufactured inputs (for example, cement, bricks, medicines, pipes). It also provides the opportunity to employ and upskill low-skilled workers in the extended manufacturing value chain. On this basis, the strategy has three broad themes:

- improving manufactured product availability;
- accelerating manufacturing ecosystem development; and
- promoting more responsible production and consumption.[126]

BII's priority focus sectors for manufacturing are chemicals, healthcare products, building materials, packaging, and textiles and garments, but BII can make opportunistic investments in other subsectors. BII also has an interest in 'circular economy' enterprises, including those that reduce plastic waste, green technology solutions, and cost-effective distribution or micro-manufacturing.[127]

In terms of investment products, BII's Manufacturing investments of over $10 million are usually made through direct equity or direct debt, with smaller ticket sizes managed through funds or financial institutions which receive capital from BII.[128] The large direct investment ticket sizes pose a challenge for the BII Investment team to identify suitable potential investees, especially those that meet the required E&S standards, in target markets where BII's market additionality is assured.[129]

In 2020, BII published its fossil fuel policy, affirming its commitment to emission reduction through its investments. The policy outlines exclusions prohibiting new commitments (direct, via funds, co-investments or direct lending) from the time of publication. In manufacturing, the key exclusion applies to companies or projects that exclusively produce and or provide goods for excluded fossil fuel activities (such as a company that exclusively produces machine parts for coal-fired power plants). However, BII may continue to invest in the following:[130]

- "Industries that need high temperatures that can only be achieved through burning fossil fuels (such as cement, ceramics, glass and paper).
- Industries that use fossil fuels as feedstock but that do not produce fuels (such as steel, detergents and paint).
- Investments in economic activities outside heavy industries (for example, commercial activities or farms) that use fossil fuels as source of energy (captive fossil fuel energy), while ensuring that they are encouraged to transition to renewables. Where the investment is associated with an increase in energy use, that additional use should be met by renewables, unless it is shown that this would not be technically or commercially viable.
- For industrial use of fossil fuels, we [BII] will consider whether the cleanest and most efficient technology is being used, and that provisions for technological switching to lower-emission options (including CCUS)[131] are considered in future."[132]

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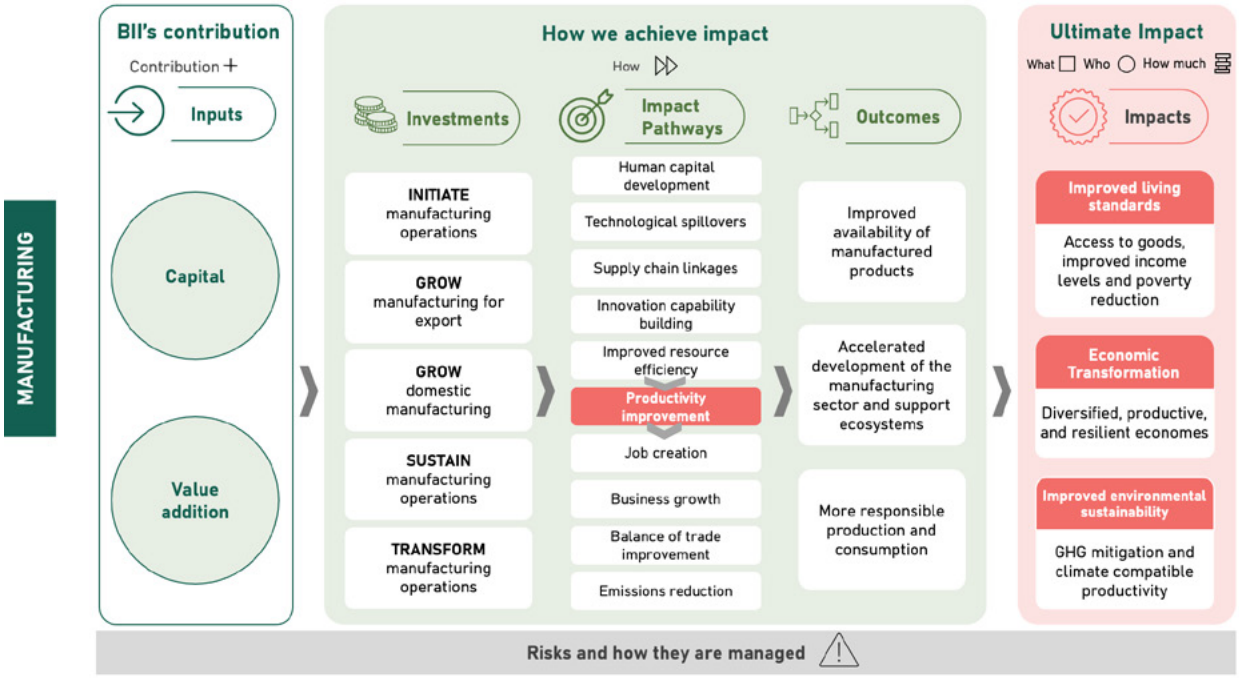
125 BII (n.d.) *Manufacturing: Sector Strategy.* Visit https://assets.bii.co.uk/wp-content/uploads/2020/12/16114602/CDC-manufacturing-sector-strategy.pdf
126 Ibid.
127 Ibid.
128 Ibid.
129 Discussion with BII Manufacturing team.
130 The examples provided are those most relevant to the manufacturing sector and are not comprehensive of all considerations and examples covered by the Fossil Fuel Policy.
131 CCUS = Carbon Capture Use and Storage.
132 BII (2020) *Our fossil fuel policy.* Visit https://assets.bii.co.uk/wp-content/uploads/2022/03/22173318/Fossil-Fuel-Policy-1.pdf

This analysis of the Manufacturing portfolio reviews the DI of all six direct investments and a sample of 22 underlying investments from multi-sector funds. It does not include investments that result in manufactured products that are used to create change in one of the other sectors covered by this evaluation (apart from one fertiliser manufacturing company investment). For example, the production of pharmaceuticals is covered in the section on the DI of the Health portfolio, and food production is covered in the section on the DI of the F&A portfolio.

Figure 23. BII Manufacturing sector impact framework



Investees produce products such as electric vehicles and a range of heavy building materials, including cement and bricks, concrete pipes, power (cables, etc.), and plumbing equipment used for farms, infrastructure, and buildings. Investees also produce several simple household goods, such as mattresses, furniture, electronics, safe bottled water, paint, and personal care products.

All categories of investment types[133] are represented in the current Manufacturing portfolio, except for 'Sustain manufacturing operations'. The most targeted investment types are 'Grow manufacturing for export' and 'Grow domestic manufacturing', represented by 57 per cent (16 out of 28 firms) and 54 per cent (15 out of 28 firms) respectively.

5.2.2.2 Development impact across Manufacturing portfolio against the impact framework

In this section we summarise how the investees analysed in the Manufacturing portfolio target the impact pathways and outcomes in the impact framework. We also highlight key evidence of the investees' achievements.

As shown in Figure 23, the Manufacturing impact framework outlines two sets of impact pathways: one contributing to 'productivity improvement' and the other resulting from it. The following analysis addresses each set of impact pathways in turn.

[133] Refers to the categories of investment type outlined in the Manufacturing Sector Impact Framework.

Impact pathways that aim to contribute to productivity improvement

The impact pathways that contribute to productivity improvement are seldom explicitly targeted in BII IC papers, which guide investment decisions. Several investees explicitly target innovation capability building, supply chain linkages and improved resource efficiency.[134] Technological spillovers and human capital development are the least fulfilled pathways. One investee offers dedicated digital skills training and certification, according to its IC paper; however, follow-up reports lack details on the scale or nature of this training and certification.

Impact pathways that are intended to result from productivity improvement

The most frequently targeted impact pathway in the sector impact framework is 'balance of trade improvement', intended by most investees, followed by 'business growth'. Furthermore, several investees have reported creating jobs and/or emissions reduction goals.

Outcomes

Improved availability of manufactured products

All 28 investments aimed to improve the availability of manufactured products domestically at the time of investment decision-making. Most investments also aimed to increase the manufactured goods availability in neighbouring African and South Asian countries. However, investees do not have specific targets on improved availability of products against which they systematically report, making it difficult for us to assess realised impact.

At least 18 investees are large firms, manufacturing products that are either typically sold by small retailers or used as industrial inputs by SMEs. For example, SMEs buy materials from large manufacturers for furniture, or auto repair shops buy parts for vehicle repairs. One investee has exceeded its manufacturing target for a construction input but has significantly missed targets on two other products, despite multiple price cuts. It has made very few sales of its high-value products and has not completed production for sales it had made. Therefore, this investee's products have very limited availability, possibly due to affordability issues.

A few BII investees are large firms whose customers are also large firms using their products as inputs, potentially increasing product availability as the large-firm customers in turn manufacture their own products. Examples include two yarn producers selling to large garment exporters, an electric vehicle company selling to large car dealers, and firms supplying inputs to chemical and IT companies.

Some investees report that the increased product availability has led to price reductions in some industries. For example, one investee is producing cheaper fertiliser than imported alternatives, exceeding demand expectations. Similarly, an affordable furniture and mattress producer launched a new bed at half the original price, generating more revenue in one month than all the other original products combined. A household appliance investee was expected to increase productivity and reduce the cost of its domestically produced appliances due to economies of scale at the time of investment.

Accelerated development of the manufacturing sector and support ecosystem

BII has made significant commitments to individual investments, expecting to shift a specific manufacturing sector. However, we have not found evidence of investment clustering or concentrated value addition activities within a single manufacturing ecosystem to intentionally accelerate sector development. Nevertheless, one early-stage investee intends to increase localisation and job support in the investee's ecosystem by the end of the investment period.

[134] 'Investees' refers to all direct investments in the sector plus all underlying investments of sector-specific funds and all underlying investments of sampled multi-sector and VC funds.

Single, significant investments into a specific manufacturing ecosystem may create spillover effects, and BII has invested with this intention. Examples include intermediated BII investments into heavy industries that are likely to support manufacturing system development through spillover effects. Taking advantage of the shift towards modern retail channels and the country's emerging middle class's rising disposable income, one investee manufactures corrugated cardboard for the country's manufacturing firms and operates three factories, holding an estimated 60 per cent market share.

Another investee is a leading plastic crate manufacturer, with an estimated 55 per cent market share and a large captive market and is diversifying into jerry cans for use by various industry manufacturing firms. A similar investee in another country produces crates, preforms, containers, jerry cans and water storage tanks, aspiring to become Africa's preferred plastic and packaging supplier.

BII investment via a multi-sector fund enabled an investee to operate midstream and downstream petrochemical projects, supplying the manufacturing, mining and construction sectors with the key basic petrochemical building blocks, intermediates and derivatives for the packaging, film, injection moulding, textiles, carpets and automotive industries. One investee, holding 60 per cent of the market share, has established its position as the leader by manufacturing precast concrete products targeting three essential end markets for all manufacturing industries: electrification (electric poles), infrastructure (culverts, concrete pipes, pavers, gutters) and building (agglomerates).

According to the JIM calculations of BII's data, BII's Manufacturing investments have contributed a total of $9.4 billion to GDP in the relevant countries and regions between 2019 and 2022. Of this, $6.1 billion is 'direct' (comparable to F&A's direct contribution), and $3.3 billion is through the 'supply chain'.

More responsible production and consumption

Several investees focus on climate smart and sustainable development, including the production of electric vehicles, fertilisers, plastics, Durabrics, fibreboards, and bricks. Among these, there are some innovative examples of investees improving their sustainability. For example, BII invests in a firm producing sun-cured stabilised soil bricks (SSBs), reducing the need for fuel wood. The investee aspires to make SSBs the preferred choice at the village level in the long term. Another investee, a yarn factory, plans to sell 8.5 tonnes per day of rotor yarn daily to local denim producers at spot price, reducing waste and supporting sustainability. Notably, some investees are committing to embedding circular economy principles in their corrugated fibreboard or plastics manufacturing, reusing waste to reduce pollution and the use of natural resources.

Several investees are fostering more responsible production and consumption standards. Achievements include firms greening their own production processes. One investee became the first plastic packaging manufacturer in Africa to join the Ellen MacArthur Foundation and commits globally towards a circular economy. Another investee, awarded for being the best manufacturing unit (out of more than 90 factories) in its region, installed the Spin Flash Drier to dry sludge. This will significantly reduce environmental pollution, and the dried sludge can still be sold to washing powder manufacturers.

BII's historic and current investments in this sector cover cement, chemicals, and metal products. These industries, together with glass, are the four biggest industrial energy consumers and are responsible for 20 per cent of today's global direct CO2 emissions. Oil, gas and coal remain their principal energy sources. Globally, cement has the highest emissions per revenue dollar among similar, hard-to-abate sectors, producing 6.9kg of CO2 per dollar, compared to 1.4kg for iron and steel and 0.8kg for oil and gas. Decarbonising these heavy

industries will require 4–9 times more clean energy than the status quo and it is estimated that it will cost over $21 trillion by 2050.[135] BII has a strategic commitment to identifying and supporting opportunities for more environmentally sustainable manufacturing processes.[136] However, this is not fully reflected in its portfolio, with 32 per cent of investments targeting climate smart processes and/or products. Out of the six direct manufacturing investments, two qualify for climate finance.

5.2.2.3 Development impact across Manufacturing portfolio by most pertinent themes

In this section we summarise the Manufacturing portfolio's DI based on BII's cross-cutting themes that are most pertinent to the sector. We examine the portfolio's DI in terms of gender and diversity, followed by low-income populations and job creation.

Gender and diversity

The ratio of male-to-female employment in the manufacturing sector globally is 2.6:1, equating to 72 per cent of jobs being filled by men and 28 per cent by women.[137] Women can play an invaluable role in progressing the manufacturing sector, including by contributing to closing the gaps in skills shortages as change within manufacturing requires new skills. Ensuring women's job quality and safety in the workplace is fundamental to retaining women in their jobs and is becoming increasingly important to international consumers, sourcing companies and investors.[138]

In 2022, 21 per cent of direct jobs supported were filled by women, based on reporting by 34 companies (71 per cent of the portfolio).[139] This proportion of jobs filled by women across BII Manufacturing investees is lower (21 per cent) than the average proportion within the sector globally (28 per cent). However, countries where BII has invested in manufacturing have low female labour participation rates, such as India, which according to the World Bank, had a female labour force participation rate of 24 per cent in 2022.[140]

Five investments in manufacturing have reported on their efforts to employ women. Three of these are direct investments that are 2X qualified and aim to increase women's employment. The remaining two investees have reported on women employed. Two of the five are in Bangladesh, where low-skilled, labour-intensive manufacturing plays a critical role in creating many jobs for Bangladeshi women, despite manufacturing accounting for only around 15 per cent of all employment in the country. Among working women under the age of 25 in urban areas, almost half are in manufacturing.[141] One of the three 2X qualified investees has aimed for 50 per cent of employees to be women, but being a recent investment, it is too early to achieve and report on this DI intention. The other is also a new investment, not yet reporting, which plans to train its recruiters in gender-sensitive hiring practices. The third 2X direct investment aims for at least 15 per cent women among its primary supplier workforce; however, this is also a new investment, so no results data is available yet. Therefore, all BII's three direct investments in manufacturing, since the 2X qualification was introduced, have met the criteria.

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135 IFC (2020) *Strengthening Sustainability: Decarbonising Manufacturing Industries.* Visit https://www.ifc.org/en/insights-reports/2022/strengthening-sustainability-decarbonizing-manufacturing-industries; McKinsey Sustainability (n.d.) 'Decarbonising the world's industries: A net-zero guide for nine key sectors'.

136 BII (n.d.) *Manufacturing: Sector Strategy.* Visit https://assets.bii.co.uk/wp-content/uploads/2020/12/16114602/CDC-manufacturing-sector-strategy.pdf

137 Ostry, J.D. et al. (2018) *Economic Gains from Gender Inclusion: New Mechanisms, New Evidence.*

138 BII (n.d.) 'Sector profiles: Manufacturing'. Visit gendertoolkit.bii.co.uk/sector-profiles/manufacturing/ (accessed 28 July 2023).

139 Based on BII's Quality Controlled Development Impact Dataset (2021 & 2022).

140 Visit genderdata.worldbank.org/indicators/sl-tlf-acti-zs/

141 Bangladesh Bureau of Statistics (2018) *Report of Labour Force Survey, 2016-17.*

One investee employed 53 per cent women in 2021 (with a total of 4,610 employees), most of whom were hi-tech employees trained and certified for the firm's ICT equipment and services. This was achieved in two countries in which the unemployment rate was close to 30 per cent.

The 2X initiative also looks to increase the number of women in senior management positions. Two of the 2X qualified investments plan to support this goal: one aims for 30 per cent women in senior leadership or management, and the other will run an in-house training programme for female workers to advance to managerial positions. However, these are recent investments, and therefore it is too soon for the investees to have achieved and reported on results against these goals. Another investment made by a fund has reported 65 per cent women in management in 2021.

Low-income populations and job creation

Some investees aimed to target low-income consumers with their manufactured products. However, none of these investments has reported positive results against this intended outcome. One has been liquidated, and another hasn't yet reached low-income consumers directly. The other investees have not yet reported against the intended outcome.

Some investees have reported reaching low-income groups as producers or small businesses by selling industrial inputs. One investee has reached more than 2,000 small-scale entrepreneurs who bought products for their own small businesses. Another investee has targeted the general trade channel for its furniture and home furnishings and so, has established a total customer base of more than 10 million people, of whom 90 per cent are low-income customers. Another investee, whose product specifically targets low-income producers, recorded high sales rates indicating that target customers have been reached. One investee initially aimed to reach small local construction businesses, but having reworked its business model, no longer intends to reach this market segment.

In 2022, the portfolio supported 55,344 direct jobs.[142] This is based on the 75 per cent of the portfolio that reported this data to BII. 30 per cent of these jobs were reported by one investee manufacturing automotive components.

One very recent investment has not yet reported any results; however, it is expected to create more than 8,000 factory jobs directly, which is the largest (expected) job creation figure in the Manufacturing portfolio. Another investment has supported 4,610 jobs through direct employment across two North African countries. Yet another, has supported 7,735 jobs (514 of which were new jobs), as reported in 2022. Another two investments have directly supported – or aimed to support – more than 1,000 jobs. An investee was expected to support 1,500 total jobs, 50 per cent earmarked for women. However, it only supported 805 jobs, and only 167 (21 per cent) went to women. The reporting specifically states that no further job creation is expected through this initial investment. BII has made a follow-on investment into this firm with the expectation of 600 semi-skilled new jobs.

Across the manufacturing sector, BII supported 151,921 indirect jobs in 2022.[143] For example, one paint products investee sells both directly and indirectly through a network of more than 1,000 regional hardware stores. By 2020, this investee had captured over 50 per cent of the national paint industry market share. As paint is an input for large building firms and SMEs, the investee's products presumably supported thousands of indirect jobs for painters and entrepreneurs in hardware stores selling paint.

[142] Based on BII's Quality Controlled Development Impact Dataset (2021 & 2022).
[143] Based on BII's Quality Controlled Development Impact Dataset (2021 & 2022); indirect jobs include estimates of supply chain jobs and wage-induced jobs, using the JIM methodology.

5.2.2.4 Conclusions on achievement of DI within manufacturing

The portfolio balances two different impact objectives: improving the availability of manufactured products domestically and supporting economic development through the increased export of manufactured products. As such, not all investments contribute to the outcome of improving the availability of products. There is some evidence of investees' products reaching local consumers, including people with low incomes; however, there is limited evidence across the portfolio of the extent to which investments have improved "the availability of goods that satisfy basic needs".[144] Other investments are focused on export and therefore do not aim to make manufactured products more available in domestic markets; the impact intentionality of these investments is focused on economic development through trade.

There is some evidence that BII's Manufacturing investments have improved the standard of living of local employees, consumers, and producers. This is being achieved through (i) direct jobs supported, (ii) indirect jobs created, (iii) higher wages and better working conditions, and/or (iv) greater availability of manufactured products.

There is evidence of investees contributing to economic development by supporting diversification from a locally available or imported lower-value substance/raw material to a higher value-added product. As many of the investees use domestically available raw materials to produce for domestic or export markets, they are expected to directly reduce the country's dependence on imports, thus improving the trade balance and promoting an economy that is more resilient to external shocks. Examples include turning low-value clay into low-carbon bricks (countering deforestation) and using locally produced petroleum gas to manufacture fertiliser.

The portfolio is more aligned with promoting responsible consumption than with responsible production. Some investments focus on manufacturing green products such as electric vehicles. There are also some examples of investments that look to green their own operations. However, several investments are in heavy industry and are therefore both energy-intensive and skills-intensive. To offset the energy-intensity of heavy industry, and given its strategy commitments, BII investments **could focus more on decarbonising production processes;** this is currently limited across the portfolio.

More recent investments are 2X qualified, indicating a possible shift towards applying a gender lens more consistently across the portfolio. These investments show great potential for achieving DI for women; however, results are yet to be realised, as they are new investments. The rest of the portfolio has very limited (or no) gender-disaggregated reporting (by investees to BII) against key indicators, such as jobs supported.

BII's Manufacturing portfolio has not delivered significantly on fostering the introduction of innovative production technologies to boost production and profits across the portfolio. This is shown by the few investees targeting impact pathways of technological spillovers, innovation capacity building and resource efficiency. Typically, foreign direct investment in developing countries comes with new production technologies.[145] This is an area that BII could maximise to achieve greater DI.

[144] BII (n.d.) *Manufacturing: Sector Strategy.* Visit https://assets.bii.co.uk/wp-content/uploads/2020/12/16114602/CDC-

5.3 Sector Analysis: Technology

Technology in the ITS portfolio is multifaceted. To understand BII's investment in the technology sector, we have considered three ways in which BII invests in the sector.

The first is investing in technology and digital infrastructure (including telco towers, mobile network operators, fibre, financial payments infrastructure, and digital identity). These investments are included in our portfolio-level descriptive analysis but are not included in the DI analysis below, as these investments' DI are covered in the FCDO–BII evaluations of the DI of infrastructure. This infrastructure is a critical foundation layer on which digital services and solutions can be built.

The second form of investing in the technology sector is through VC funds. BII considers VC as a "market-shaping" opportunity, recognising it can support nascent VC markets in geographies like South Asia and Africa. According to BII, VC funds play a key role in driving innovation and forming new companies, providing early-stage financial and non-financial support, and creating jobs. VC investments span a broad array of sectors, including a combination of technology (for example, software, online marketplaces, and fintech) and tech-enabled businesses (for example, energy, health, and mobility). BII believes that technology will accelerate the pace and scale of impact, creating lower-cost solutions that can extend the reach of services and drive inclusion.

The third form of investing is leveraging the VC portfolio to identify co-investments to be made with BII's VC investment managers in companies where there is particularly high DI potential. BII invests into what it calls a "Scale Up Portfolio", which includes enabling micro, small and medium-sized enterprise (MSME) businesses to digitise and formalise trade and commerce to improve productivity, increasing accessibility and affordability of essential goods and services – including in healthcare, education and consumer essentials – and enhancing agri-value chains. There is also a component of accelerating climate innovation, although this typically focuses on investments in early-stage business models and technology to replace, reduce, and remove carbon emissions.

Using the C&BS impact framework, which covers investments in digital retail and consumer services and digital business services (including B2B marketplaces), under the heading of "Digital Services" below, we present the investments that are most closely aligned. Some investments into digital solutions are aligned with different sector impact frameworks, such as AgTech investments that aim to generate outcomes in line with the F&A impact framework or HealthTech investments that target health outcomes as per the health impact framework. These investments are analysed against the relevant impact frameworks and included in the relevant sector subsections. We also note that the C&BS impact framework is in draft form, but it serves well for analysis of these investments, although it was not used by BII to guide the investments.

Financial services are an important part of the DI narrative for the Digital Services portfolio, when they are embedded into larger solutions,[146] and we have included the DI of fintechs in the cases whereby BII has made a direct co-investment in a fintech solution, but have not included the DI of fintechs when the investment has been made solely by a VC or multi-sector fund. The evaluation of the DI of financial institutions covers them.[147]

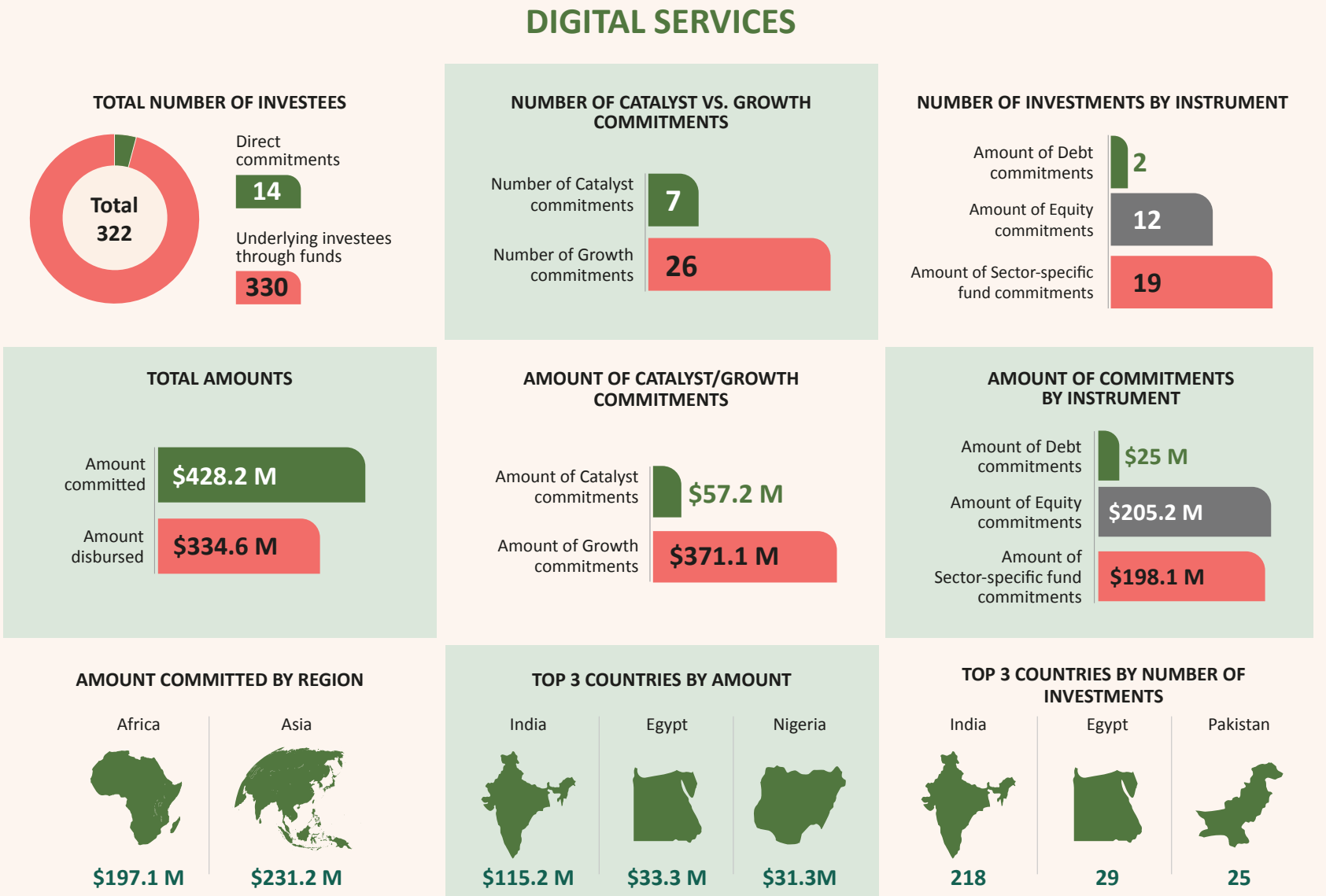
It should be noted that only ten VC and direct investments precede 2021. Most investments were made in 2021 (10 investments) and in 2022 (13 investments), so there is a limited

[146] External evidence shows that digital finance by improving the financial inclusion, has a positive effect on economic growth. See Khera, P. et al. (2021) 'Is Digital Financial Inclusion Unlocking Growth?' IMF Working Paper.

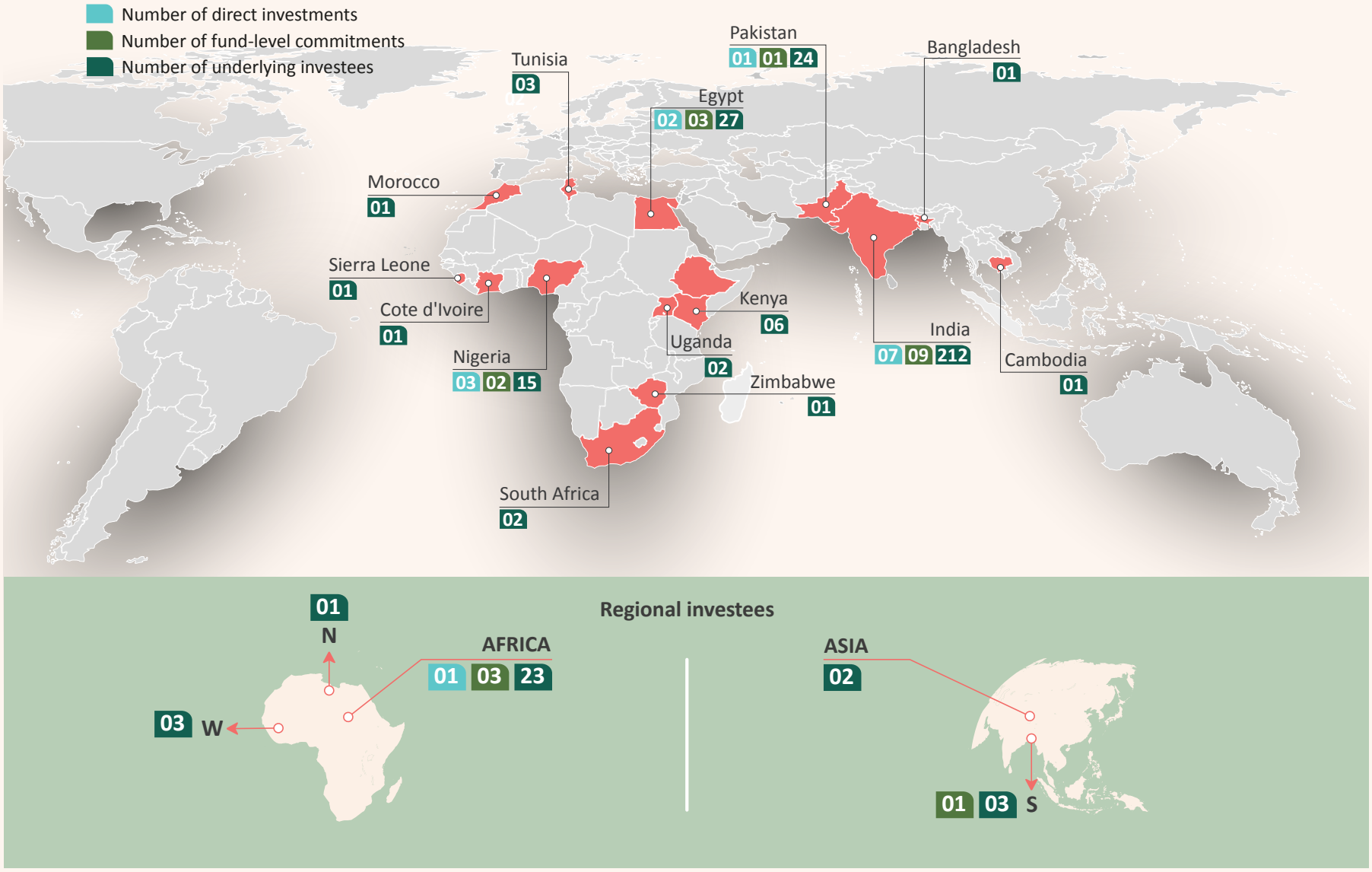
[147] Genesis Analytics and IPE Global (2020) *Evaluating CDC's Financial Institutions Portfolio.* Visit gov.uk/government/publications/evaluating-cdcs-financial-institutions-portfolio

amount of longitudinal evidence to review.

5.3.1 Digital Services



DIGITAL SERVICES



*Note: Investments at a regional level are shown on the map at the bottom, while country-specific investments are presented on the main map.

Summary of findings

- Investment in digital services is intended to deliver on five outcomes: direct job creation; improved access to affordable consumer goods and services; indirect job creation and lower prices via firms and markets; more responsible production and consumption; and accelerated development of the services sector and support ecosystem.
- BII supported 62,795 direct jobs across the Digital Services portfolio (jobs supported by VC and BII co-investments into Digital Services businesses) in 2022.[148] This is based on only 38 per cent of the investees reporting this data; we would therefore estimate that the actual number of jobs supported would be significantly higher.
- Where investees are providing B2B services, the growth in the number of businesses using the service and the growth in those businesses themselves are strong indicators of improved access to goods and services for end-customers.
- There is some evidence that investees in digital services have improved access for customers and that these services are reaching low-income groups, but the degree of inclusivity is less when compared to benchmarks.
- There is evidence that BII investee companies can stimulate job growth indirectly. For instance, digital platforms can enable businesses to access markets that they might not otherwise be able to, leading to business growth and (indirectly) job creation.
- Four VC and four digital services investments are 2X qualified. However, considerations of the digital gender divide [149] have not been referenced in evidence across the portfolio of investments.

State of the Digital Services portfolio

Ten digital services investments have been assessed by BII using the DI RAG rating system as of Q1 2023. All but one investment are on track to deliver DI; that one investment has been rated medium risk. Three investments have been exited and one commitment has been cancelled. According to BII, all VC funds are on track to deliver DI.

5.3.1.1 Overview of investment strategy for development impact for digital services

Digital services are intended to deliver the following impacts:

- Inclusive economic transformation, which includes improved income levels and, ultimately, poverty reduction.
- Improved living standards through access to affordable goods and services and improved income.
- Improved environmental sustainability through GHG mitigation and climate compatible productivity.

The investment in these businesses is intended to deliver on five outcomes: direct job creation; improved access to affordable consumer goods and services; indirect job creation

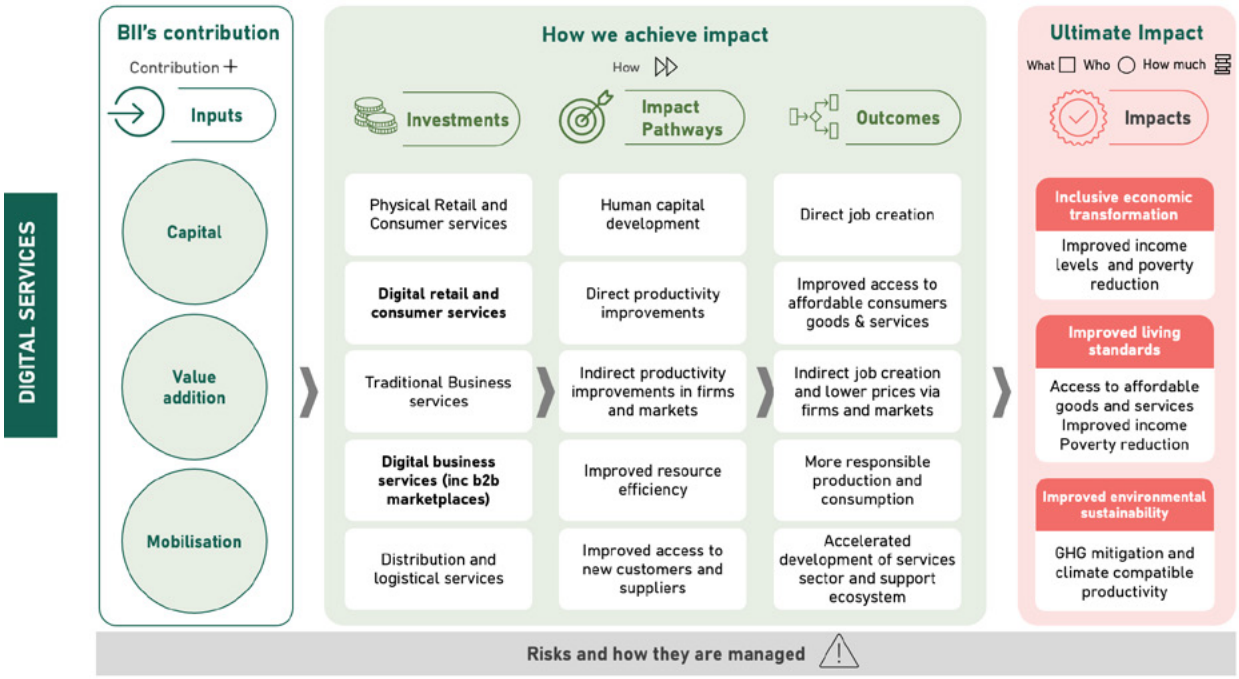
[148] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.

[149] This is the gap in women and girls' compared to men and boys' digital adoption and use. UNICEF (n.d.) *What we Know about the Gender Digital Divide for Girls: A Literature Review.* The digital gender divide considers not only coverage but also usage.

and lower prices via firms and markets; more responsible production and consumption; and accelerated development of the services sector and support ecosystem.

BII views the digitalisation of services as having high DI potential.[150] In the C&BS sector impact framework supplementary documentation, BII notes that digitalisation of services allows the sector to become more like the manufacturing sector in terms of growing export potential, scaling, enabling workers to move to higher-skilled jobs, and creating spillover effects, thereby contributing to increased productivity and indirect job creation (especially by supporting enabling services).[151]

Figure 24. BII digital services sector impact framework[152]



Digital services include digital retail and consumer services (such as online retailing and consumer financial services), digital business services (including B2B marketplaces, financial services, and digital workforce) and digitalised distribution and logistical services (such as digital platforms connecting retailers and delivery partners).

5.3.1.2 Development impact across Digital Services portfolio against the impact framework

In this subsection we outline the evidence of investees' achievements against the impact pathways and outcomes in the impact framework. We present quantitative data on the extent to which these results have been aimed for or realised, where possible. The quantitative proportion of investments reported relates to direct investments only, as the reporting on underlying investments through VC funds was very limited. We also provide qualitative examples of the types of results being achieved or targeted.

[150] BII (2021) *Productive, Sustainable and Inclusive Investment: 2022 – 26 Technical Strategy.* Visit https://assets.bii.co.uk/wp-content/uploads/2022/01/06170001/2022-2026-technical-strategy-2.pdf

[151] BII (n.d.) *Consumer and Business Services Impact Framework.*

[152] This is the draft Consumer & Business Services Impact Framework, which has pathways for digital services and thus is being applied in this context as the "Digital Services Impact Framework".

Impact pathways

Many investees target 'human capital development' through the training and upskilling of their workers. 'Indirect productivity improvements in firms and markets', 'improved resource efficiency' and 'improved access to new customers and suppliers' are all targeted by several digital services investees. Only one investee specifically aims for 'direct productivity improvements'.

Outcomes

Direct job creation

A recent study by the World Bank[153] shows that Internet use significantly increases inclusive jobs in Africa. Digital transformation can lead to faster job growth, more inclusive jobs, and improved household welfare, primarily through (a) jobs and labour income and (b) entrepreneurship and capital income. Likewise, the evaluation of the achievements made of the India BPO Promotion Scheme (IBPS) and the North East BPO Promotion Scheme (NEBPS) launched under the Digital India Programme[154] states that over 50,000 direct jobs were generated since the programme was launched in 2018–19.

BII supported 62,795 direct jobs across the Digital Services portfolio (jobs supported by VC and BII co-investments) in 2022.[155] As only 38 per cent of the investees reported this data, the actual number of jobs supported is likely significantly higher. At the time of making the decision to invest, most investees intended to create more direct jobs, and so increase their number of employees.

During BII's investments decision-making, an investee in India had already made specific commitments to job quality prior to BII's investment. They already met international job quality standards, with progressive employment policies, such as maternity and paternity leave, 30-day paid leave, medical insurance, free health check-ups, and pensions for its employees. Furthermore, entry level wages are double the on-entry average household income and their average year-on-year wage increases outpace the 5 per cent income growth rate in other companies. For instance, a 2014 joiner saw their income increase by around 160 per cent over the five years to 2019. 92 per cent of this investee's employees report that their work at the investee firm has raised their income status and brought positive changes to their lives.

An impact study commissioned by BII of investees in India, found that "companies like (this investee) reached people who were previously more likely to be poor; however, after providing them with a job and increased income, their employees have a lower likelihood of being poor."[156]

Improved access to affordable goods and services

Evidence suggests that digital services investees have improved customer access, (which BII defines as a dimension of affordability, for example, by reducing travel costs associated with accessing a good or services because these are available closer to home),[157] with performance varying compared to benchmarks.[158] Evidence of these investees increasing affordability

[153] Begazo, T., Dutz, M.A. and Blimpo, M. (2023) *Digital Africa: Technological Transformation for Jobs.* Visit hdl.handle.net/10986/39491

[154] Ministry of Electronics & IT (2022). Visit pib.gov.in/PressReleaseIframePage.aspx?PRID=1885962

[155] BII's Quality Controlled Development Impact Dataset (2021 & 2022).

[156] BII (Sept 2023) *Insight: Understanding who we reach: a deep dive into our portfolio in India.* Visit assets.bii.co.uk/wp-content/uploads/2023/09/26095524/Understanding-who-we-reach-in-India-BII.pdf

[157] CDC (n.d.) *Affordability of Protein-Rich Foods: Evidence from Zambia.* Visit assets.bii.co.uk/wp-content/uploads/2018/12/14110951/Affordability-of-Protein-Rich-Foods-Evidence-from-Zambia.pdf

[158] 60 Decibels (2023) [Investee] Impact Performance report; 60 Decibels (2020) [Investee] Supplier Insights; BII (2023) *Insight: Understanding who we reach: a deep dive into our portfolio in India.* Visit assets.bii.co.uk/wp-content/uploads/2023/09/26095524/

through more affordable prices is weaker.[159] There is evidence of investees in digital services reaching low-income groups, but the degree of inclusivity varies from a minority to a majority as a percentage of a company's stakeholders,[160] and is less when compared to benchmarks.[161]

Where investees are providing B2B services, the growth in the number of businesses using the service and the growth in those businesses themselves strongly indicate improved access to goods and services for end-customers.

A B2B investee reported, at investment decision-making stage, that 65 per cent of its service-users reported improved growth in customers and sales due to their use of the service and that 48 per cent of active suppliers had grown revenue from the platform by 76 per cent on average per quarter since being onboarded. This platform also started to supply PPE and sanitisers in response to growing demand during the Covid-19 pandemic. Another example is an online marketplace which reported connecting approximately 6,000 active vendors with over 1.3 million customers.

Another investee aimed (at investment decision-making stage) to reach 450,000 SMEs over three years with their digital payment services, with the expectation that 90 per cent of these would not previously have had access to digital payment infrastructure. As this is a new investment, no reporting is available yet on achievement against this target.

Indirect job creation and lower prices via firms and markets

Evidence suggests that BII investee companies can indirectly stimulate job growth. This is particularly true for platform-based solutions as they can enable businesses, especially MSMEs, to access markets that they might not otherwise be able to, leading to business growth and indirect job creation. One investee, a B2B online marketplace, serves as a good example of how companies can stimulate job growth indirectly. By aggregating MSMEs on its online platform, the investee enables these businesses to access a broader market, find additional demand and improve their operational efficiencies. This leads to business growth, which in turn results in job creation. At the time of BII's investment decision-making, this investee estimated that its target growth, expanding from 1,000 to 5,600 suppliers, would have supported 140,000 jobs, including for low-skilled workers, many of whom were expected to be living on less than $5.50/day.

In addition, external evidence[162] shows that digitalisation for the private sector is developing countries in Africa. We expect digitalisation to boost firms' organisational and production capacities, generate positive spillover effects on their productivity, innovation, and market outreach, and thereby spur job creation.

More responsible production and consumption

The C&BS impact framework intends more responsible production and consumption as an outcome, to which Digital Services investments contribute. However, there is limited evidence of impact intentionality or achievement against this outcome among Digital Services investments.

Two investees provide evidence of their contributions to responsible production and consumption. A B2B marketplace encourages responsible practices by connecting buyers with efficient, productive suppliers. This ensures that businesses buy from more efficient sources,

Understanding-who-we-reach-in-India-BII.pdf; BII (2023) *Africa Sprint – Egypt & Nigeria Findings.*

159 60 Decibels (2023) [Investee] Impact Performance report.

160 BII (2023) *Africa Sprint – Egypt & Nigeria Findings.*

161 60 Decibels (2023) [Investee] Impact Performance report; BII (2023) *Insight: Understanding who we reach: a deep dive into our portfolio in India.* Visit assets.bii.co.uk/wp-content/uploads/2023/09/26095524/Understanding-who-we-reach-in-India-BII.pdf

162 Cariolle, J. (2020) *Digital spillovers and SMEs' performance in sub-Saharan Africa*. FERDI Policy Brief, No. B210.

promoting sustainable and responsible production processes. The focus on efficiency aligns with the broader goals of driving investment and productivity growth, which are fundamental to raising wages and alleviating poverty in the long term. As such, this investee shows how responsible production can contribute to broader economic and societal benefits.

Another investee shows responsible production through commitment to minimising environmental impact. One investee's core business of 'cut and sew' finishing operations typically has low environmental impact, due to negligible air emissions and effluents. In addition, their careful storage provisions for wood, metal treatment chemicals and adhesives at their furniture manufacturing locations further underline their commitment to responsible practices.

Accelerated development of services sector and support ecosystem

Online platforms and marketplaces accelerate the development of the services sector and support ecosystem. According to IC papers, we expect these types of businesses to improve logistics and open up new business opportunities for suppliers. In doing so, they are expected to have positive spillover onto the productivity and efficiency of other firms. Three investees target these results with their core business model, using technology to improve traditional services, making them more efficient and accessible, thereby indirectly benefiting other businesses in their service-using businesses' ecosystems.

According to the JIM calculations of BII's data, in total BII's Digital Services investments have contributed $4.5 billion to GDP in the relevant countries and regions between 2019 and 2022. Of this, $2.3 billion is 'direct' and a similar amount, $2.2 billion, is through the 'supply chain'.

5.3.1.3 Development Impact across Digital Services portfolio by most pertinent themes

In this section we summarise the DI of the Digital Services portfolio according to the most relevant BII cross-cutting themes for this sector. We consider the DI of the portfolio in terms of gender and diversity, then in terms of low-income populations.

Gender and diversity

The transformative power of Internet access is not equally distributed. The digital gender gap continues expanding in many developing countries, creating a specific need to support digital gender equality. Globally, in 2022 62 per cent of men are using the Internet, compared with 57 per cent of women. 30 per cent of women in least developed countries (LDCs) used the Internet in 2023, compared to 41 per cent of men in the same countries in 2023.[163] It is essential to assess how women are going to access digital solutions within the context of these constraints and to assess how and how many women can access the digital services that BII is investing in.

In terms of women as direct employees of investees, across the full Digital Services portfolio 106 companies reported gender-disaggregated data. As reported in this data, 33 per cent of supported jobs in 2022 are filled by women, with seven companies reporting more than 50 per cent of supported jobs filled by women, although 16 reported less than 10 per cent of supported jobs filled by women.[164]

Four digital services investments[165] are 2X qualified. In terms of women as service-users of investee digital solutions, one 2X qualified company has set a target of reaching at least

[163] International Telecommunication Union (ITU) (2023) 'Facts and Figures 2023'.
[164] BII's Quality Controlled Development Impact Dataset (2021 & 2022).
[165] This refers to the four direct (co-invested) Digital Services investments. There are four VC investments that are 2X qualified.

50 per cent female retailers by 2025 and giving them the possibility to avoid dealing with male 'middlemen'. In addition, they run one all-women's centre. Another provides a platform for blue-collar workers, with approximately 21 million active users, of whom one-third are women, with BII Plus co-funding a project to bring even more women onto their platform, with content and services targeted to women. Most gender analyses and intended activities to address gender equality are focused on actions within the businesses' own operations (such as leadership and employees). The disparities in female representation across the portfolio highlight both the progress made and the challenges still to be faced in enhancing women's economic participation across these investments.

Low-income populations

BII's investments in the Digital Services portfolio have aimed to contribute to poverty reduction, predominantly in India, Egypt, Pakistan, and Nigeria. Low-income populations can be targeted by digital services investments as suppliers, customers and/or employees. Two investees (of the 14 direct investments; 14 per cent) intend to target specific income groups – one as employees and the other as customers.

One investee reported at the time of investment decision-making that over 80 per cent of its employees come from low-income backgrounds – defined as a family income below $140 per month. This income benchmark corresponds to the bottom 40 per cent of the Indian population and is lower than the $5.50 per day[166] that is used by BII as the poverty line in its Impact Score for inclusion. However, it is a higher income benchmark than the World Bank's poverty line for India, which is $3.20 per day or $100 per month.

The other investee to specify income status is a financial services platform, which aims to increase credit access for underbanked, low-income families residing in urban outskirts. At the time of investment decision-making, this investee aimed to maintain that a minimum of 50 per cent of its customer base would have an average monthly household income of 20,800 INR per month or less. This equates to approximately $250 per month (or $8 per day). This income benchmark is higher than the BII poverty line for its Impact Score.[167] This investment was made in 2022, so BII had not received any reporting from the investee (within the timelines of the evaluation's scope).

5.3.1.4 Conclusions on achievement of DI within digital services

Evidence suggests that technology and innovation can create scalable solutions for social and economic challenges in emerging markets for low-income populations. However, it is important that low income is indeed the focus of BII investments and that the context and limitations for accessing technology businesses and technology-enabled services are considered. There is more work that could be done in terms of focusing on job quality, gender diversity, final population actually reached and other social outcomes in investments to promote inclusive economic growth and poverty reduction. It is also important that VC investments have a strong focus on social and economic challenges.

Digital marketplaces are particularly demonstrating the DI and potential for supporting and empowering SMEs and MSMEs to create jobs and drive economic growth with positive spillover effects and strengthening interconnectivity of the ecosystem, providing inclusion for both MSMEs/SMEs and their customers. Financial services are also an important part of

[166] The line was updated to reflect changes in the PPP index to $6.85/day (2017 PPP dollars) during the evaluation period.
[167] Previously, BII used a poverty line of daily individual consumption of $5.50/day, as defined by the World Bank, based on 2011 purchasing power parities (PPPs); during the evaluation period this was updated to $6.85/day[167], based on 2017 PPPs.

the DI narrative when they are embedded into larger solutions;[168] although we didn't find much evidence of this as many of the financial services within the Digital Services portfolio are outside scope for this evaluation within the VC portfolio, as the evaluation of the DI of financial institutions covers them.[169]

[168] External evidence shows that digital finance by improving the financial inclusion, has a positive effect on economic growth. See Khera, P. et al. (2021) 'Is Digital Financial Inclusion Unlocking Growth?' IMF Working Paper. Visit imf.org/en/Publications/WP/Issues/2021/06/11/Is-Digital-Financial-Inclusion-Unlocking-Growth-460738#:~:text=Using%20cross%2Dsectional%20instrument%20variable,inclusion%20can%20accelerate%20economic%20growth.

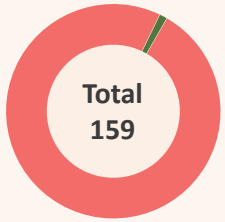
[169] Genesis Analytics and IPE Global (2020) Evaluating CDC's Financial Institutions Portfolio. Visit gov.uk/government/publications/evaluating-cdcs-financial-institutions-portfolio

5.4 Sector Analysis: Services

5.4.1 Consumer and business services

CONSUMER AND BUSINESS SERVICES

TOTAL NUMBER OF INVESTEES



Direct commitments: **2**

Underlying investees through multi-sector funds: **157**

NUMBER OF CATALYST VS. GROWTH COMMITMENTS

Number of Catalyst commitments	0
Number of Growth commitments	2

NUMBER OF INVESTMENTS BY INSTRUMENT

Amount of Debt commitments	1
Amount of Equity commitments	1
Amount of Sector-specific fund commitments	0

TOTAL AMOUNTS

Amount committed	$50.9 M
*Amount disbursed	$480.4 M

*Amount disbursed looks at underlying investee disbursements while amounts committed considers commitments at the fund level

AMOUNT OF CATALYST/GROWTH COMMITMENTS

Amount of Catalyst commitments	$0
Amount of Growth commitments	$50.9 M

AMOUNT OF COMMITMENTS BY INSTRUMENT

Amount of Debt commitments	$26.5 M
Amount of Equity commitments	$24.4 M
Amount of Sector-specific fund commitments	$0

AMOUNT COMMITTED BY REGION

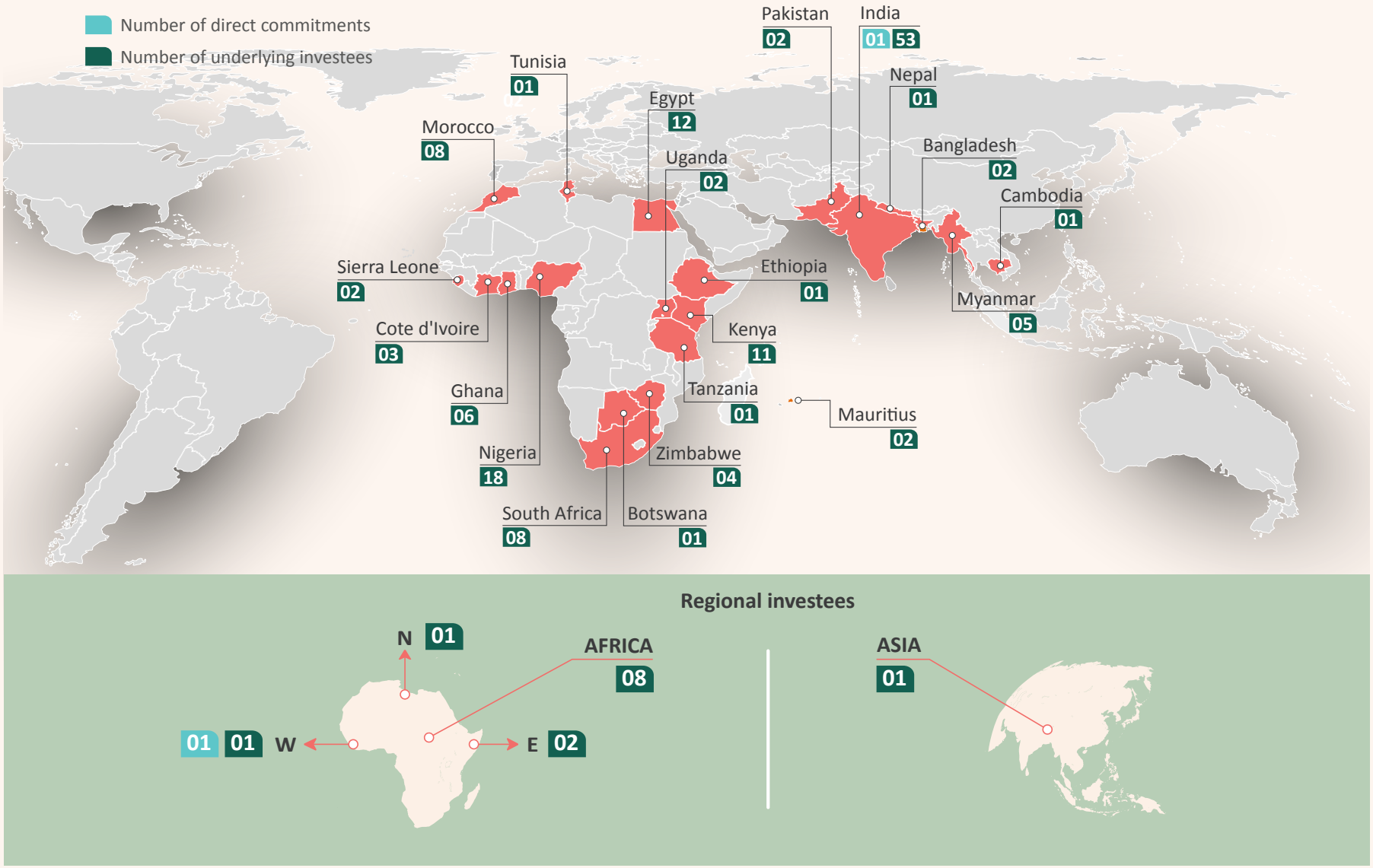
Africa	Asia
	
$26.5 M	$24.4 M

India	Nigeria	Morocco
		
$122 M	$60.8 M	$38.6 M

TOP 3 COUNTRIES BY NUMBER OF INVESTMENTS

India	Nigeria	Egypt
		
54	18	12

CONSUMER AND BUSINESS SERVICES



* Note: Investments at a regional level are shown on the two maps at the bottom; country-specific investments are presented on the main map.

Summary of findings

- Investments into C&BS are expected to contribute to: (i) direct job creation; (ii) improved access to affordable consumer goods and services; (iii) indirect job creation and lower prices via firms and markets; (iv) more responsible production and consumption; and (v) accelerated development of the services sector and support ecosystem.
- Across the full portfolio, C&BS investees supported 75,090 jobs in 2022,[170] based on reporting from 68 per cent of the investees in this sector.[171] Nineteen of these investees reported more than 1,000 jobs. These investees are primarily in retail, including supermarkets and convenience shops, food services and hospitality.
- The outcome that is most targeted and best evidenced across C&BS is direct job creation. Direct jobs are supported through the expansion of services, including new offerings and/or new sites. However, it is unclear whether people from low-income groups are being recruited into these new jobs.
- 38 per cent of C&BS jobs are filled by women where gender-disaggregated data was reported, which is a low proportion given that 69 per cent of people employed in the accommodation or food services in Africa were women in 2018,[172] but is high against a comparative benchmark for women in logistics in India.[173]
- Given investees' scale-up intentions and some evidence of growth, they likely expand access to their goods and services through new offers or increased outlets (thereby also creating growth opportunities for firms in their supply chains).
- Affordability of investees' goods and services is not covered in the accessed evidence. Furthermore, some investees explicitly target middle-income groups with their goods or services. Without the intentionality of targeting low-income groups as service-users, it is hard to determine whether this segment is benefiting from the investees' increased availability of goods and services.
- There is some evidence of sustainable production and consumption among investees, in particular reducing energy and water consumption and improving waste management. However, more could be done to green investee operations, particularly for those involved in logistics and transportation.

State of the Consumer & Business Services portfolio

BII assessed one investment using their DI RAG rating system as of Q1 2023, and that investment is assessed to be on track to deliver DI. The other has been exited.

5.4.1.1 Overview of investment strategy for development impact for Consumer and Business Services

The C&BS sector – or 'services sector' – is a diverse portfolio. Investees in this sector can have B2C or B2B models. Examples of these services include distributors, retailers, supermarkets, restaurants, hospitality and catering, logistics, facilities management, and professional services.

[170] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.

[171] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022).

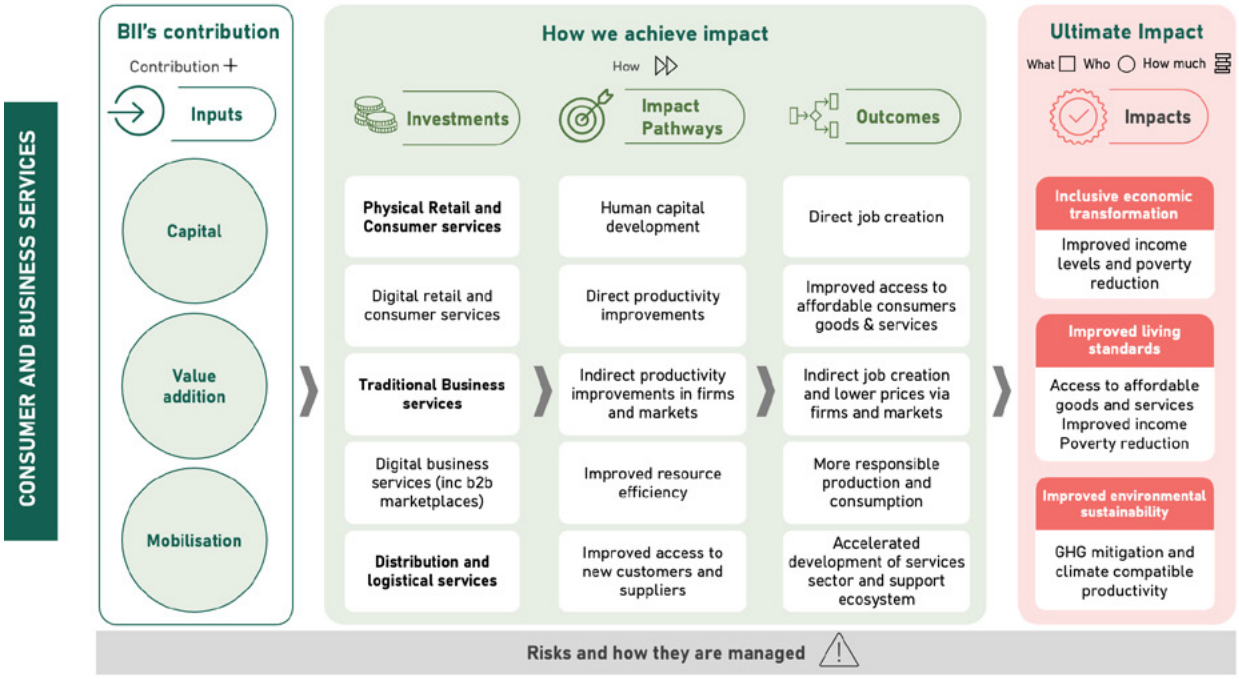
[172] UNWTO (2019) *Global Report on Women and Tourism, Second Edition.*

[173] Agarwal, M. (2023) 'Future of Women in Logistics Industry in India'. Visit hr.economictimes.indiatimes.com/news/workplace-4-0/diversity-and-inclusion/future-of-women-in-logistics-industry-in-india/96861337?redirect=1

Investments into C&BS are expected to contribute to: (i) direct job creation; (ii) improved access to affordable consumer goods and services; (iii) indirect job creation and lower prices via firms and markets; (iv) more responsible production and consumption; and (v) accelerated development of the services sector and support ecosystem.[174]

C&BS's contribution to job creation includes the hiring of marginalised or disadvantaged groups, supporting the transition of workers to formal employment (with better access to regular wages and benefits), and the upskilling of the workforce.[175]

Figure 25. BII consumer and business services sector impact framework



BII has two direct investments (and no sector-specific funds)[176] in the C&BS sector that fall within the scope of this evaluation; one of these has been exited. Most of BII's C&BS investments are made through multi-sector funds. Some of the multi-sector fund investments within the C&BS portfolio are into small-scale infrastructure and financial services companies and are therefore out of scope, as they are covered in other FCDO–BII evaluations. Digital services businesses are included in the Technology section of this report.

5.4.1.2 Development impact across Consumer and Business Services portfolio against the impact framework

In this section we outline the evidence available of intended or achieved impact by investees, according to the impact pathways and outcomes laid out in the impact framework.

Impact pathways

The most targeted impact pathways are 'human capital development' and 'improved access to new suppliers and customers'. Only few investments targeted 'indirect productivity improvements in firms and markets' and 'improved resource efficiency'. We could not find any investments that aimed to make 'direct productivity improvements.'

174 Ibid.
175 Ibid.
176 C&BS sector-specific funds do not currently exist in the market.

Outcomes

Direct job creation

Across the full portfolio, C&BS investees supported 75,090 jobs in 2022, based on reporting for 68 per cent of the investees.[177] Nineteen of these investees reported more than 1,000 jobs. These investees are primarily in retail, including supermarkets and convenience shops, food services and hospitality.

Of the C&BS sampled investments, several investees report on the number of direct jobs supported since BII's investment in quarterly impact reporting. One investee had the intention of creating a significant number of direct permanent and temporary jobs; however, the number of direct jobs supported to date has been significantly lower than intended. It aimed to create between 1,100 and 1,300 jobs directly across five of its sites once they were operational, creating 400 temporary construction jobs in the meantime. At an additional site, it targeted creating 1,800 new jobs. In the investee's most recent report, two sites became operational, supporting 100 full-time staff. The investee noted that they employ many casual labourers, depending on seasonal need. The investee has not reported on construction jobs, or the number of direct jobs supported at the additional site.

Another investee estimated, at investment decision-making stage, that it would create between 890 and 1,100 direct jobs of decent quality following investment. The investee projected that between 460 and 670 of these jobs would be filled by women. A later document indicates that the job creation target for this investee was 1,000 more than the baseline (of 517 FTE in operations). The most recent reporting before the Covid-19 pandemic indicated that the investee had 753 employees (i.e. directly supported 236 new jobs), which is significantly lower than both targets set. The Covid-19 pandemic significantly affected this investee in the hospitality sector. It faced the risk of job losses due to a downturn in the hospitality sector brought about by the pandemic. Efforts were made to mitigate this, including discussions on job preservation, and offering reduced salaries to retain employees.

Improved access to affordable consumer goods and services

Although we could not find any reported data on improved access to affordable consumer goods and services among C&BS investees, some have undertaken activities that suggest that they would have improved access to goods and services. For instance, one investee is a supermarket chain, with 250 shops located across the country. It is expected that this investee will have made goods more accessible to their customers.

Another investee is a logistics delivery network that specialises in providing last-mile access to remote non-urban areas. Its increase in districts served (as covered under 'improved access to new customers and suppliers') indicates that it is improving its customers' access to its services, potentially to goods and services that they might have previously been able to obtain. It operates across 16 states and in more than 200 locations in India.

A third investee aimed to improve trade flows across the country that they operate in, thereby contributing to productivity gains for businesses in its ecosystem. It is operating temperature-controlled consolidation and storage logistics in an area that produces large volumes of fruit, vegetables, and dairy, but where there is a lack of reliable, temperature-controlled logistics limiting the ability to reach good markets with this produce. The investee's new operations are expected to make it possible for this fresh produce to reach better markets and thereby improve access for consumers.

Another investee's business model improves its business clients' productivity by providing

[177] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022).

outsourced business services, including customer relationship management through contact centres, business process outsourcing, digital services, marketing studies, and medical report management.

Another investee buys all its products and produce through companies in its own country, ensuring that all its expenditure goes to suppliers within the country and therefore stays within the national economy. Furthermore, this investee is committed to supporting grassroots entrepreneurs as suppliers, supporting them to improve and refine their products and services to meet the investee's quality standards.

Indirect job creation and lower prices via firms and markets

Across the full C&BS portfolio, BII supported 240,978 indirect jobs. Two investees report an increase in the number of indirect jobs that their operations support. One of these investees, a logistics company, expanded its collaboration with partner truck drivers from 255 to 405 to support its scaling operations. For another investee, at the investment decision-making stage, we estimated that each direct job that it directly supported would result in ten indirect jobs, targeting a direct job creation figure of 1,100 to 1,300 (see 'Direct job creation' on previous page for analysis of results against this target).

More responsible production and consumption

There is evidence from some investees of their contributions to more responsible production and consumption. One investee has taken numerous steps to conserve and manage energy consumption at all their sites through the installation of energy meters, an industrial capacitor, a duty contactor, miniature circuit breakers and sub-meters. The investee is also using renewable energy sources, such as rooftop solar energy in one site, resulting in an estimated reduction of 330.25 tonnes per annum of CO2 emissions. The firm is also taking steps to manage its water consumption, using a rainwater harvesting system at three sites and using treated domestic wastewater in its developments, resulting in zero discharge, and reducing freshwater demand for its developments. In terms of waste management, the investee has adopted 'reduce, repair, reuse and storage' for managing all electronic waste, including selecting electronic equipment with a longer life cycle, regularly maintaining it, and reusing electronic equipment after work completion, either at the same site or another site. When e-waste is generated, the investee sells it to government-approved, licenced e-waste recyclers. Lastly, the investee disposes of hazardous waste responsibly, using the appropriate method for the type of waste through national or regional control board-approved treatment, storage and disposal facilities, or recyclers.

We found evidence of one investee aiming to reduce emissions as a core part of its DI thesis. It is an auto distributor and retailer that intends to sell low-emissions vehicles in African countries, thereby reducing emissions. We did not find evidence on the extent to which the investee has achieved this aim. The remaining investees with evidence of intentionality or achievement in responsible production or consumption are all focused on increasing use of renewable energy, monitoring and reducing use of energy or water, and/or reducing waste to landfill.

Accelerated development of services sector and support ecosystem

One investee has reported evidence of its role in supporting the development of the services sector and support ecosystem. At investment decision-making stage, the investee had already contributed to the accelerated growth of a peri-urban industrial area by setting up services in the area, which contributed to multiple companies constructing warehouse facilities and factories in the area.

According to the JIM calculations of BII's data, in total BII's C&BS investments have contributed $27.3 billion to GDP in the relevant countries and regions between 2019 and 2022 – the greatest contribution by any BII ITS sector portfolio. Of this, $18.4 billion is 'direct' and $8.9 billion is through the 'supply chain'.

5.4.1.3 Development impact across the Consumer and Business Services portfolio by most pertinent themes

In this section we summarise the DI of the C&BS portfolio according to the most relevant BII cross-cutting themes for this sector. We consider the DI of the portfolio firstly in terms of gender and diversity, then in terms of low-income populations.

Gender and diversity

38 per cent of direct jobs supported were filled by women in 2022, based on those investees for which there is reported gender-disaggregated data. The proportion of women in employment in the portfolio is lower than some, but not all, sector benchmarks. For instance, the percentage of roles in wholesale and related trade, hotels and restaurants that are fulfilled by women is 45 per cent on average across low and middle-income countries (LMICs).[178] Representation varies significantly in published data: in sub-Saharan Africa the proportion of female workers in commerce and hospitality-related services is 69 per cent;[179] in India, approximately 15 per cent of its logistics workforce (logistics being one of the services within C&BS) is formed by women.[180]

In the hospitality sector, at investment decision-making stage, one investee projected to create between 890 and 1,100 direct quality jobs, a significant portion of which (460 to 670) were expected to be filled by women. At the time of investment decision-making, the company's female employment rates stood at between 19 per cent and 42 per cent (depending on the country). Investee reporting indicates that at one of the sites, female employment was significantly lower than expected (13 per cent), with the proportion of female employment being 30 per cent in one portion of the business and 36 per cent in the other.

Another investee reports that over 54 per cent of its employees are women and 50 per cent of its executive team is female. It aims to directly employ over 9,000 people across 670 stores by 2024, with 4,000 of those roles being filled by women and youth. Although this investee has not been 2X qualified directly by BII because it is an underlying investment via a multi-sector fund, it has been 2X qualified via a multilateral development bank which also invests in the firm.

One additional investee reports that 70 per cent of its 1,800-person workforce is female. Another investee reports the number of its employees who are women, stating that 1,284 of 3,469 employees are women (37 per cent) and 620 are youth (18 per cent). However, there is no baseline data or target against which to compare this data.

Low-income populations

The extent to which investments within the C&BS portfolio reach people from low-income groups as employees, customers or suppliers is unclear. One logistics company focuses its

[178] Nayyar, G., Hallward-Driemeier, M. and Davies, E. (2021) *At Your Service? The Promise of Services-Led Development. Washington,* DC: World Bank. doi:10.1596/978-1-4648-1671-0
[179] Ibid.
[180] Agarwal, M. (2023) 'Future of Women in Logistics Industry in India'. Visit hr.economictimes.indiatimes.com/news/workplace-4-0/diversity-and-inclusion/future-of-women-in-logistics-industry-in-india/96861337?redirect=1

business model on delivering logistics services inland, far from key coastal trading hubs. As a result, the investee operates in some of the poorest parts of the country. It is therefore expected that the direct jobs supported by this firm are reaching employees from low-income groups; however, this is not reported on to BII.

5.4.1.4 Conclusions on achievement of DI within consumer and business services

Only limited evidence is available on the specific impact intentionality or achievement of C&BS investees, which is in part because there are only two direct investments in the sector and there is scant evidence of impact intentionality or achievement from the multi-sector fund reporting that BII has received.

Based on the data available, a core focus of **C&BS is on job creation. C&BS investees have supported jobs directly through their expansion of goods and services**, particularly through opening new outlets. There is also some evidence of investees creating jobs indirectly as their expanded services require greater uptake of goods or services from other firms in their supply chain. However, more could be done to understand who is being recruited into these new jobs and, whether these jobs are being filled by people from low-income groups.

Given the scale-up intentions of many of the investees, it is likely that the C&BS investees expand access to their goods and services through their new services offers or increase in outlets. It is also likely that this would result in benefits for firms in their supply chain. However, the affordability of these goods and services does not appear to be assessed in depth at investment decision-making stage, and it is not reported on during the investment life cycle. Furthermore, some investees explicitly target middle-income groups with their goods or services. Without the intentionality of targeting low-income groups as service-users, it is unlikely that this segment is benefiting from the investees' increased goods and services available.

Climate change considerations are of importance in many C&BS investments, including logistics services. **There are some examples of investees taking steps to reduce their energy and water consumption and to improve their waste management. However, as C&BS by their nature involve physical units (for example, stores, hotels, restaurants, warehouses), there are opportunities for investees to reduce the carbon footprint of these spaces more systematically across the portfolio.** BII could draw on learning from the CRE portfolio to provide support in green building. Additionally, we did not find evidence of investees in the logistics and transportation sectors taking steps to green their own delivery operations. This is an area in which BII could support investees to improve their DI theses and achievements through knowledge-sharing and prioritisation.

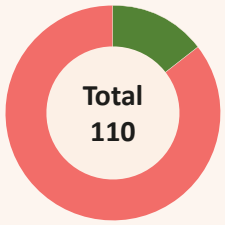
As sectors within C&BS, such as retail, hospitality, and food services, are associated with a high proportion of female workers, **the overall proportion of 38 per cent female workforce across the C&BS portfolio seems low.** There are some good examples of investees achieving high levels of female employment; however, overall, this is an area in which there could be improvements across the portfolio to maximise DI.

5.4.2 Social infrastructure

5.4.2.1 Health

HEALTH

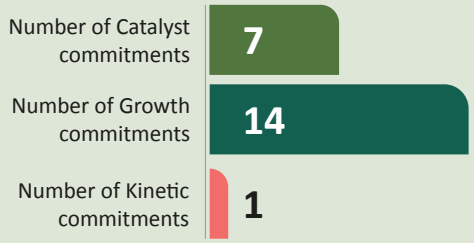
TOTAL NUMBER OF INVESTEES



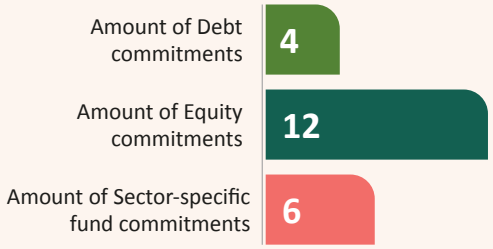
Direct commitments: 16

Underlying investees through funds: 94

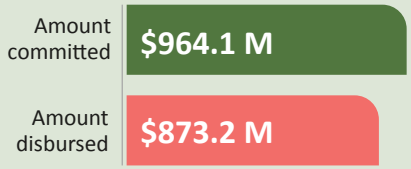
NUMBER OF CATALYST VS. GROWTH COMMITMENTS



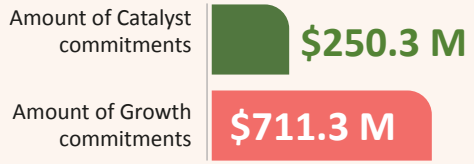
NUMBER OF INVESTMENTS BY INSTRUMENT



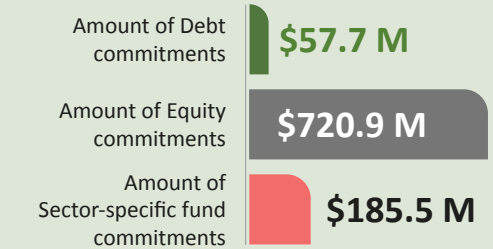
TOTAL AMOUNTS



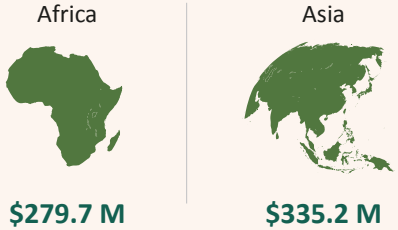
AMOUNT OF CATALYST/GROWTH COMMITMENTS



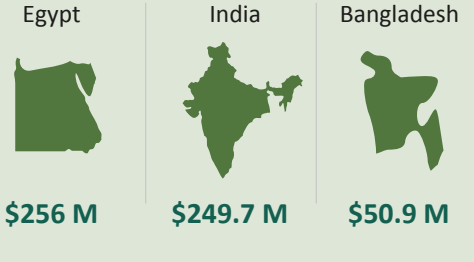
AMOUNT OF COMMITMENTS BY INSTRUMENT



AMOUNT COMMITTED BY REGION

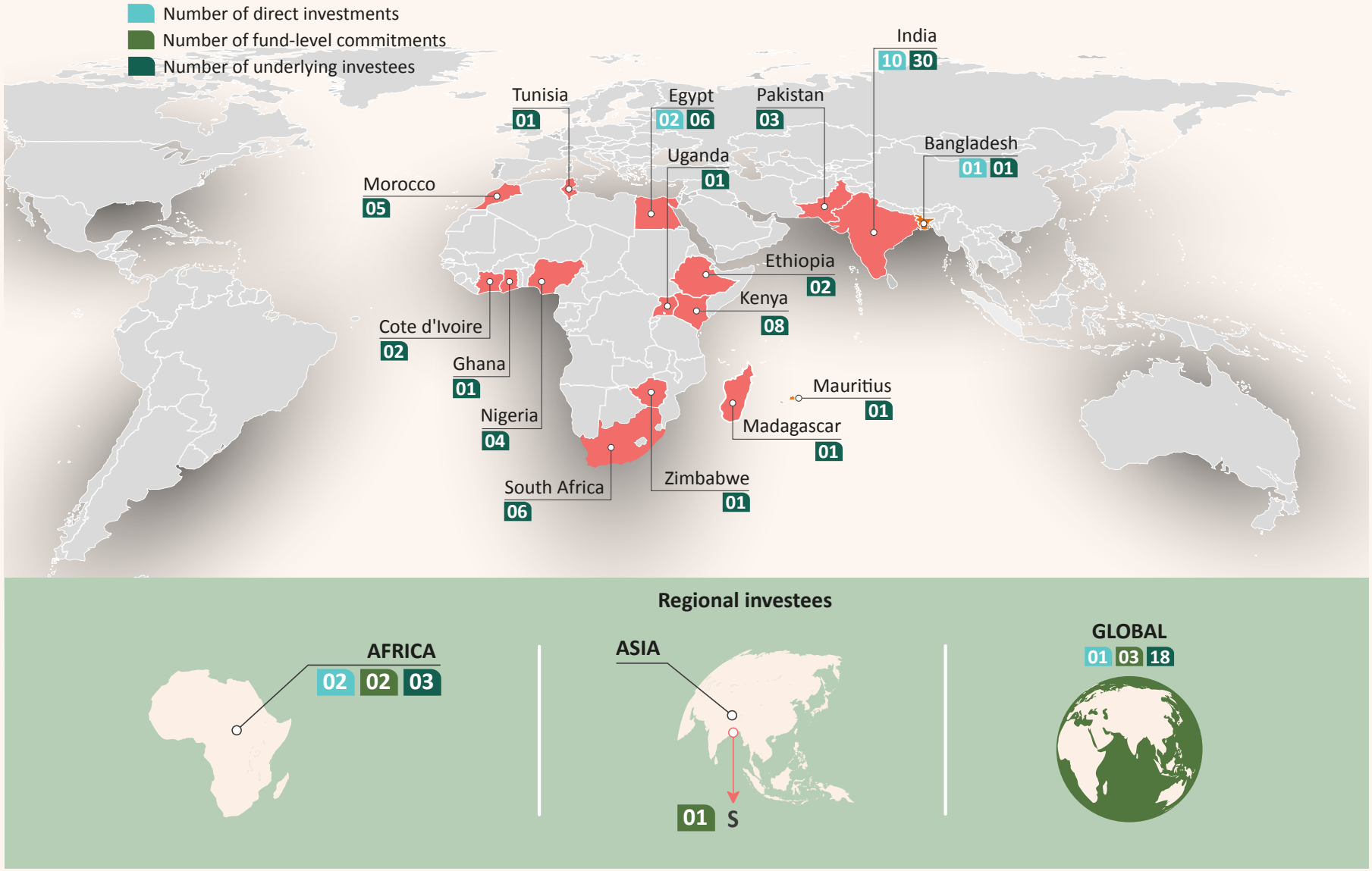


TOP 3 COUNTRIES BY AMOUNT



TOP 3 COUNTRIES BY NUMBER OF INVESTMENTS

HEALTH



* Note: Investments at a regional level are shown on the three maps at the bottom; country-specific investments are presented on the main map.

Summary of findings

- Since the 2017 strategy period, BII began to make more health investments into diagnostics and invested in innovative financing solutions to improve access to pharmaceuticals and vaccines and technology for health outcomes, expanding beyond its previous focus on primary healthcare. In 2021 BII committed to a more limited approach to investing in hospitals.
- In its latest Technical Strategy (from 2022), BII stated its health priorities as: manufacturing of medicine, vaccines, devices and equipment; treatment and delivery; early-stage funding for research and development and health technology companies; and market-shaping interventions combining the public and private sector.[181]
- BII supported more than 70,000 jobs in 2022 through health investments.[182] BII's health investees reached more than 31.9 million patients in 2022 across its full portfolio. 7.7 million of these patients were reached by businesses focusing on diagnostics, and more than 8.6 million were reached by digital solutions. 15.6 million were served through patient consultations.[183]
- The portfolio shows intentionality to improve access to health services for people in low-income groups, including through manufacturing pharmaceuticals and vaccines to lower costs, developing accessible diagnostics and expanding the distribution of pharmaceuticals.
- There is innovation within the Health portfolio, leveraging technology to create disruptive new diagnostic solutions and to expand the reach of mental health and well-being services to large numbers of people through apps.
- Across the portfolio, 34 per cent of BII supported jobs are filled by women, based on investees that reported gender-disaggregated data. This is comparable with the one-third of health workers that are women in India[184] (one of BII's two most invested countries in the Health portfolio by value); however, it is significantly lower than the proportion of health workers that are women in Egypt (the other most invested country in BII's Health portfolio by value), where women make up 73 per cent of nursing staff in the private sector, 91 per cent of nursing staff employed by the Ministry of Health and 42 per cent of doctors.[185]
- Some investments specifically target women as end-users of their products or services; however, there is limited evidence across the portfolio on the extent to which women are accessing or benefiting from health services.
- 44 per cent of the portfolio has DI RAG ratings of amber (six medium risk) or red (two high risk), which signals that some of the DI intentionality described in our analysis could be at risk.

[181] BII (2022) *Productive, Sustainable and Inclusive Investment: 2022 – 26 Technical Strategy.* Visit assets.bii.co.uk/wp-content/uploads/2022/01/06170001/2022-2026-technical-strategy-2.pdf

[182] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.

[183] According to BII's Quality Controlled Development Impact Dataset (2021 & 2022). Reach metrics were introduced in 2017. Commitments before this date would therefore not be required to report on these metrics, and not all health investments will have direct engagement with patients as a part of their business model.

[184] Rao, K.D., Bhatnagar, A. and Berman, P. (2009) 'India's Health Workforce: Size, Composition, and Distribution'. *India Health Beat* 1(3). Visit documents1.worldbank.org/curated/en/928481468284348996/pdf/702410BRI0P1020k0Final000Vol010no03.pdf

[185] El Saadany, N. (2021) 'Egyptian Women & Labour Force: Challenges and Opportunities'. Visit wilsoncenter.org/blog-post/egyptian-women-labor-force-challenges-and-opportunities

State of the Health portfolio

At Q1 2023, BII assessed 18 investments using their DI RAG rating system. 44 per cent of the investments are classified as medium/high risk (six amber and two red). BII had exited two investments as of December 2022, and was in the process of exiting one other investment. One commitment was cancelled.

5.4.2.1.1 Overview of investment strategy for development impact for Health

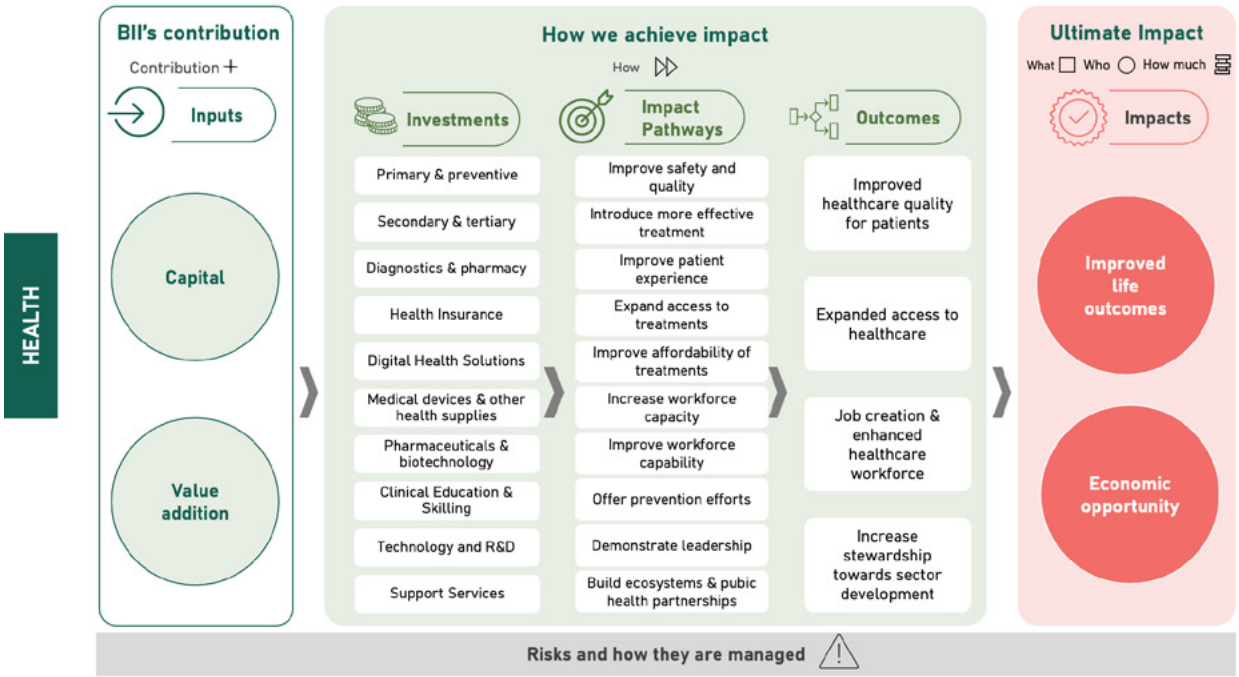
Recognising that high-quality public healthcare is limited in many of the countries in which BII invests, BII has committed to investing in private healthcare providers that have a positive impact on the overall healthcare system, particularly focusing on access and affordability. As such, BII prioritises investing in:

- manufacturing of medicine, vaccines, devices and equipment;
- treatment and delivery;
- early-stage funding for research and development and health technology companies; and
- market-shaping interventions combining the public and private sector.[186]

BII's approach to investing in Health is informed by its research with Imperial College London on how private sector Health investments can create positive impacts for patients and for the public health system in support of universal health coverage.[187] This DI approach has four intended outcomes – (i) quality and (ii) access (both focused on patients), (iii) workforce, and (iv) stewardship (with a focus on the health ecosystem) – and is summarised in BII's health impact framework (see Figure 26).

This analysis of the Health portfolio includes an assessment of the DI of all 16 direct investments, six sector-specific funds – including their 38 underlying investments – and a sample of 22 underlying investments from multi-sector funds and VC funds.

Figure 26. BII Health sector impact framework



[186] BII (2022) *Productive, Sustainable and Inclusive Investment: 2022 – 26 Technical Strategy.* Visit assets.bii.co.uk/wp-content/uploads/2022/01/06170001/2022-2026-technical-strategy-2.pdf

[187] Wadge, H. et al. (2017) *Evaluating the impact of private providers on health and health systems.* Visit assets.cdcgroup.com/wp-content/uploads/2017/06/25150846/Impact-of-private-providers-on-health-and-health-systems.pdf

The most prevalent categories of investment types[188] within the current Health portfolio are pharmaceuticals and biotechnology, with 20 out of 76 investees (26 per cent) focusing on this, primarily through funds; primary and preventative health, with 16 out of 76 investees (21 per cent); and secondary and tertiary health, with 15 investees out of 76 (20 per cent).

Pharmaceuticals and biotechnology companies include drug and vaccine manufacturers. Primary and preventative health investments include nutrition investments, hospitals and clinics running vaccine and screening programmes, and businesses focused on financing and distribution of antiviral HIV drugs. There is a total of 15 hospital investments (20 per cent of all investments), comprising both direct and fund investments, within the secondary and tertiary categories. Private hospitals represent 34 per cent of the total amount of BII's commitments in health. No direct investments into private hospitals have been made since the new policy was put in place in October 2021.

5.4.2.1.2 Development impact across Health portfolio against the impact framework

In this section we summarise the evidence of the intended or achieved impact across the portfolio for each of the impact pathways and outcomes in the impact framework. To the extent possible, we provide an overview of the intended or achieved impact for each result across the portfolio level. We also provide examples of how investees have delivered against each result.

Impact pathways

The impact pathway that is most targeted across the portfolio is 'expand access to treatments'. The high representation of this intended result, alongside the large proportion of investments in primary and preventative health and secondary and tertiary health, is indicative of BII's strategic approach to direct patient care, which is focused on enabling access to healthcare.[189]

Some health investments are targeting 'improved safety and quality' by aiming to meet safety standards and gain national and international accreditations as a core aim within their DI intentions. Some of the investees that aim to 'expand access to treatments' also aim to 'improve safety and quality'. Other impact pathways that are most frequently targeted are focused on improvements to the health ecosystem: 'improve workforce capability' (for which BII's Health portfolio has supported healthcare providers who offer training programmes to staff, including supporting doctors to specialise) and 'demonstrate leadership' in the health sector (where BII investees show leadership through innovation, contribute to sector knowledge or development, or win leadership awards).

Outcomes

Improved healthcare quality for patients

BII considers improved healthcare quality for patients to be comprised of three critical components: safety and quality, effective treatment, and a positive patient experience.

Three investee companies had already received third-party safety accreditations (for at least one of their facilities) at the time of the IC decision to invest in them, with one other investee working towards this goal at that stage. Since BII's decision to invest, six further investees have received third-party accreditations for their safety, quality, and good practices, with one investee increasing fivefold the number of their facilities that were accredited in one year. One further investee was in the process of receiving certification at the last point of reporting. BII has also invested in improving healthcare safety and quality by investing in businesses that

[188] With reference to the categories of investment type outlined in the Health Sector Impact Framework.

[189] BII (2022) *Our Approach to Investing in Private Hospitals (Internal Document only).*

have this intention at the centre of their business model. For example, one investee trains clinics in safe care and rates their safety, and another aims to reduce the risk of patients using counterfeit medication by providing pharmacy services.

BII has invested in diagnostic services and centres as an essential step to patients receiving effective treatment. Some investees run diagnostic centres that directly serve patients; some investees provide diagnostic services to businesses. One investee runs services for both patients and businesses, serving approximately 500 patients a day with more than 1,000 test results.

For several investees, BII recognised their impact on positive patient experiences during investment screening and reported on this in the IC papers. Indications of high-quality patient experience included decreasing waiting and discharge times, a commitment to measuring changes in patient satisfaction, community members' perspectives of the investee, and an established patient feedback and grievance redress process.[190] There is updated data on patient experience, following BII investment, for two investees. This recent data is focused on a rating of customer satisfaction and loyalty and on positive (qualitative) feedback from the community.[191]

Expanded access to healthcare

BII's sector impact framework outlines two key components to expanding access to healthcare: expanding access to treatment and improving affordability of treatment.

Improving accessibility of healthcare requires removing both the physical barrier of distance to necessary healthcare and the cultural barriers to accessing healthcare.[192] Across the full Health portfolio, investees reported that they served 15,605,736 patients in 2022. [193] A further 7,730,000 were served through companies providing diagnostic products or services. An additional 8,641,499 were served by companies offering health technology (HealthTech) solutions. In total, BII investees had 31,977,235 interactions with patients in 2022. Four direct patient care investees reported 'patients served' data to BII each year from 2019 to 2022. Over this period, the four investees have increased the number of patients served by 25,447, 79,586, 408,312 and 511,078 respectively. Two further investees reported each year from 2020 to 2022: one is a clinic that reported an increase of 99,309 patients over this time; the other provides access to medicines, increasing its patients served by 1.38 million over this period.[194]

All the 15 hospital and healthcare provider investees are referenced as intending to expand their facilities at IC stage. Six of these investees outlined an intention to expand their services into Tier 2 and/or Tier 3 cities. These investees specifically aimed to increase access to high-quality care in regions with limited healthcare options, according to IC papers, with two of these investees reporting progress against this following BII's investment. The remaining investees have not reported on whether they have expanded access to their services as intended.

BII has increased its investment focus on other components of the health system (in addition to provision of health services in hospital and clinics), as indicated by the large proportion of investments that have been made into pharmaceuticals, diagnostics, and health technology

190 BII, relevant IC Papers.
191 Based on customer satisfaction surveys commissioned by BII, 2023.
192 Wadge, H. *et al.* (2017) *Evaluating the impact of private providers on health and health systems.* Visit assets.cdcgroup.com/wp-content/uploads/2017/06/25150846/Impact-of-private-providers-on-health-and-health-systems.pdf
193 'Number of patients served' is defined as 'number of patient consultations provided by the client company during the reporting period'. Data sourced from BII's Quality Controlled Development Impact Dataset (2021 & 2022). Reach metrics were introduced in 2017. Commitments before this date would therefore not be required to report on these metrics, and not all health investments will have direct engagement with patients as a part of their business model.
194 Ibid.

since 2020. BII has made investments into a range of healthcare solutions in or since 2020, including development of diagnostic tools, development of pharmaceuticals and diagnostics, and distribution of pharmaceuticals and medicines.

As part of this increased focus, BII invests in some pharmaceutical distributors which aim to improve access to pharmaceutical products and medical devices. One specific investment is a tech-enabled healthcare company that is aiming to drive supply chain efficiencies through an innovative inventory management model. By leveraging technology and data and partnering with small pharmacies, the investment can distribute pharmaceutical products to the mass market at a significantly lower cost (and higher quality) than competitors. They own and operate their own pharmacies, franchise to third-party pharmacists, and provide a health management programme with access to virtual doctors for customers. They currently operate in ten countries in sub-Saharan Africa.

BII is also leveraging tech-enabled solutions to improve access to healthcare, with some investees providing services either directly to customers or to relevant businesses. These services range from health and wellness apps to e-consultations and health management information platforms such as record-keeping services.

To improve the affordability of healthcare, BII has invested into some businesses that manufacture and/or (facilitate agreements to) distribute generic – and therefore more affordable – drugs. For further information on BII's results in healthcare affordability, please refer to the 'Low-income populations' subsection below.

Job creation and enhanced healthcare workforce

BII aims to create jobs and enhance the healthcare workforce through its investments by increasing workforce capacity and improving workforce capability.

BII's Health investments supported 70,682 jobs across its Health portfolio in 2022, based on 59 per cent of investees reporting, with 34 per cent of those positions being filled by women for those investees reporting gender-disaggregated data.[195] In many Health investments, BII has aimed to generate jobs, as articulated in IC papers. Some investees have reported an increase in jobs within their own businesses in their reporting to BII, and only one investee reported that its job creation had not been significant. Two investees reported that employment numbers decreased. This reflects low levels of reporting. For more information on employment of women, please refer to the 'Gender and diversity' subsection below.

We could not find any evidence on the extent to which BII investees have recruited skilled health professionals from the public sector or evidence on how this risk has been actively managed. BII's study with Imperial College on the impact of private health providers flags that "the recruitment of public sector workers is almost inevitable, and the impact this will have will vary greatly from country to country, robust measures to address the balance should be put in place". Suggested steps include training up new clinical staff and recruiting from geographies with fewer staff retention problems. For one investee, it was flagged at IC stage that one hospital carried a risk of recruiting doctors from the public sector, as there were no existing private sector hospitals in the region. However, it was considered that the benefits would offset the potentially negative impact, given the opportunities for training both these doctors and additional junior doctors and retaining them in the region. The extent to which

[195] There was at least one investee that did not report employment data, which is expected to have a large reach. There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.

recruited doctors for this hospital came from the public sector and the extent to which the potential offsetting benefits were realised are not documented. External evidence indicates that dual practice by clinicians (dividing their time between public and private service) is a common phenomenon that, arguably, allows some level of specialist retention in the public sector.[196]

Some investees aimed to improve workforce capability by providing formalised training, upskilling programmes and/or mentorship to healthcare professionals. Three of these investees have reported making progress against this objective. For example, one investee has the second-largest paediatric training programme in India and has trained approximately 5 per cent of new paediatric consultants and up to 10 per cent of all neonatology consultants. One investee had intended to open a nursing college but had to shift plans to support upskilling because of logistical issues related to Covid-19.

Increased stewardship towards sector development

BII aims to increase stewardship towards sector development by offering prevention efforts, demonstrating leadership, and building ecosystems and public health partnerships across its portfolio of health investments.

Some investees are delivering preventative products and services through free or low-cost screenings, vaccine development, and improving availability of vaccines and preventative products. Three of these investees are piloting low-cost clinics and free screening services in rural areas, with one investee almost doubling the number of low-cost surgeries that they offer from one year to the next (since BII's investment). Four businesses that are supported by a sector-specific fund are focused on developing vaccines and other medical biotech solutions to prevent diseases that are prevalent in LMICs, including HIV, hepatitis B, chikungunya, Zika and herpes simplex virus.

BII has set up a social finance company which is offering solutions to improve the accessibility and affordability of preventative treatments. The company has formed partnerships with three businesses that provide diagnostic tests and preventative products as their core business model. One investee reported that it had supported 554,000 patients and saved $27 million for governments, donors, and public bodies in direct procurements by the end of 2021. Another investee has developed next-generation dual-insecticide mosquito nets that protect against mosquitos that have become resistant to standard nets. By the end of 2021, this investee had reported 1.5 million malaria cases averted and 2,100 deaths averted (both figures are additional to those for standard nets). Their sales had also incurred $19 million in procurement savings for public bodies.

Some investees have created partnerships with national governments. In part this is by necessity, to meet empanelment requirements. Empanelment enables healthcare providers to be acknowledged as qualified providers in government insurance programmes, allowing them to supply their services to programme participants. The aim is that the health system becomes more accessible by utilising these collaborations, providing a greater reach of healthcare services, and establishing sustainable healthcare systems that benefit the general public. Two health technology investees are working in partnership with public and private partners to leverage technology solutions to pay for healthcare.

There are examples of BII investing in businesses run by leaders who are committed to expanding the knowledge base and learning on their specialist topic as an explicit DI intention. Those investees that aim to do so actively engage in conferences, seminars and other

[196] Wadge, H. *et al.* (2017) *Evaluating the impact of private providers on health and health systems.* Visit assets.cdcgroup.com/wp-content/uploads/2017/06/25150846/Impact-of-private-providers-on-health-and-health-systems.pdf

forums, as well as publishing research findings on the effectiveness of their interventions.[197] Additionally, there are also few examples in which investees explicitly provide leadership in the health sector through their commitment to developing and using groundbreaking medical technologies as part of their core offer into which BII chose to invest.

5.4.2.1.3 Development impact across the Health portfolio by most pertinent themes

In this section we summarise the intended and achieved impact of investments in the Health portfolio according to the most relevant BII cross-cutting themes. We include analysis of digital transformation within the Health portfolio, followed by gender and diversity.

Digital transformation

There are investees across the Health portfolio that are considered to be disruptive digital, digitally native or digitally enabled businesses. A digital disruptive business (i.e. a business using emerging, digital technology with market-disrupting potential but underdeveloped real-world applications)[198] in the portfolio deploys AI technology in its breast cancer screening software; another investee automates microscopy through advanced AI and robotics enabled through the cloud. These investments have the potential to transform healthcare with their technology solutions.

Digitally native businesses in the Health portfolio rely on digital technology as core to their operations. These include health and wellness apps for both physical and mental health and a health benefits platform for employees. These investees typically have a large reach. One of the health and wellness apps has reported 34 million registered users on its platform, and the employee health benefits platform has reported 1.6 million users in a recent report to BII. However, demographic data on users is not captured in documents accessed by the evaluation team (and therefore there is no visibility into gender disaggregation data and whether these apps are used by low-income populations), and it is not known to BII how these users engage with the platform (for example, how frequently or for what purposes), so it is not possible to establish the app's impact.

Digitally enabled businesses increase efficiency and accessibility by using technology solutions to provide traditional services or products that already exist in the market. Examples in the portfolio include a tech-enabled emergency medical services platform for an ambulance company, a medical crowd-funding app, and medical supply and pharmaceutical distribution platforms.

Climate change performance

Across the Health portfolio there are two direct investments that have achieved EDGE green building certification and so contribute to the greening of BII's portfolio and climate objectives. Both investments were made before the climate change strategy launch in 2020, representing 33 per cent of the direct investments made before 2020.[199] No climate finance qualified direct investments have been made since the strategy launch.

Climate change considerations have been considered in the development of the Health portfolio, but we could not find evidence of how the portfolio may contribute to climate

[197] For example, Sinha, C., Meheli, S. and Kadaba, M. (2023) 'Understanding Digital Mental Health Needs and Usage With an Artificial Intelligence-Led Mental Health App (Wysa) During the COVID-19 Pandemic: Retrospective Analysis'. *JMIR Form Res.* 2023(7). Visit ncbi.nlm.nih.gov/pmc/articles/PMC9885755/

[198] BII (n.d.) 'Digital Stack'.

[199] And within scope of this evaluation.

change. Global trends in climate change and health are highly prevalent and important. Climate change is impacting people's health through increased extreme weather events and their direct impacts on people's health and on social infrastructure and other determinants of good health, such as accessibility to health systems: "Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress".[200] However, BII has provided support to some investees to improve their resource management.

Gender and diversity

Gender and diversity in the health sector is multifaceted, looking at gender in employment as well as in terms of service provision. Currently, "women form 70 per cent of workers in the health and social sector"[201] but still experience inequality in terms of pay, protection, and receiving healthcare as patients. In Africa, 28 per cent of physicians and 65 per cent of nurses are female.[202] Lack of access to essential services and a lack of focus on women's health lead to persistent inequalities in healthcare, leading to more than 5 million deaths among women, children and adolescents from preventable health conditions every year.[203] Investing in health with a gender lens can improve workforce productivity in the healthcare sector and beyond, enhance innovation and improve overall healthcare utilisation rates and provision.[204] It can achieve this by addressing the gap in education and healthcare work to increase and improve women's participation in the sector, as well as by improving healthcare for women as patients.

Some of the Health investments specifically target women as end-users of their products or services. Three investees providing healthcare services directly specifically target women's health: one is a maternity and paediatric hospital, another is a hospital dedicated to women's health, and one is a women-founded and women-led non-invasive breast cancer screening technology company. This last investee is committed to making the cost of screening more affordable, but it also improves access to screening where women feel uncomfortable taking these tests because of cultural norms. It is reasonable to assume that other healthcare services include services for women's health. There are seven biotechnology pharmaceutical development investees focusing on a range of women's health issues, including breast cancer drugs, contraceptive gel, and therapeutics for precancerous lesions caused by human papillomavirus infection (HPV).

Data on the proportion of women accessing or benefiting from services and products across the portfolio is limited. Research commissioned by BII indicates that 95 per cent of female customers who were surveyed report that their knowledge and insight into their medical condition has improved since accessing a particular investee's service, and 85 per cent report that their ability to manage their health condition has improved.[205]

34 per cent of direct jobs supported in 2022 across the Health portfolio were filled by women.[206] This is based on 56 per cent of investees that reported on the number of female jobs that they supported in 2022, representing 23,324 jobs.

The countries with the most investment by value in the Health portfolio are India and Egypt

[200] World Health Organisation (2023) 'Climate Change'. Visit who.int/news-room/fact-sheets/detail/climate-change-and-health#:~:text=Key%20facts,malaria%2C%20diarrhoea%20and%20heat%20stress (accessed 4 August 2023).
[201] In an analysis of 104 countries in Boniol, M. et al. (2019) *Gender equity in the health workforce: analysis of 104 countries. Working paper 1.*
[202] Ibid.
[203] Uribe, J.P. (2022) 'Gender equality in health – still a long way to go'. Visit blogs.worldbank.org/health/gender-equality-health-still-long-way-go
[204] BII (n.d.) 'Sector profiles: Healthcare'. Visit gendertoolkit.bii.co.uk/sector-profiles/health/ (accessed 4 August 2023).
[205] 60 Decibels (2023) [Investee] Impact Performance report.
[206] BII's Quality Controlled Development Impact Dataset (2021 & 2022).

(at 29 per cent each, based on value of investments). India also has the most direct and fund-level commitments by BII (ten commitments). In India there are approximatively seven female health workers per 10,000 population, with women comprising only around one-third of all health workers in the country and only 17 per cent of all doctors in the country. However, 70 per cent of nurses and midwives are female.[207] Based on this country context and the concentration of the BII portfolio in India, the proportion of jobs that are filled by women seems like a reasonable achievement, and the examples of the hospital chains (outlined below) are significant. In Egypt, women make up 73 per cent of nursing staff in the private sector (which is comparable to India's figure), 91 per cent of nursing staff for the Ministry of Health, and 42 per cent of doctors,[208] far exceeding India's figures.

The proportion of people employed who are women is one part of the employment criteria for 2X qualification (the other being a quality indicator).[209] In the Health portfolio there are three investments that are 2X qualified and one investment that is a potential candidate for 2X. One of the 2X qualified investments stated in a recent report to BII that 53 per cent of their employees are female. In 2020, a hospital chain reported that 57 per cent of its employees were female, with 50 per cent female senior consultants. A business providing primary healthcare services has reported over 67 per cent female employment. A health and well-being app investee reports over 50 per cent female employment over the past two years. One investee has a stated target in the paper informing the IC's decision to invest that they would increase women's employment within their business to 25 per cent (from 24 per cent). Since then, the number of women employees has fluctuated significantly, initially decreasing by eight percentage points before recovering to 17 per cent in 2022. Although the cause of this fluctuation is not known, it could be attributable to the Covid-19 pandemic.

5.4.2.1.4 Conclusions on achievement of DI within health

BII has a significant exposure to hospitals and primary health services, as this used to be the primary investment focus. **In several instances, primary healthcare providers are expanding services into new geographical locations, thereby increasing access to services.** Furthermore, these investees provide job opportunities to women and men, although the risk of 'poaching' staff from existing facilities needs to be managed proactively. Within some of these investments, there is also a strong intention to improve the safety and quality of services provided, with a focus on the quality of patient experience.

By applying a health systems lens, BII has taken on a more varied role in supporting health outcomes within target countries. BII has made investments into a range of healthcare solutions in or since 2020, including development of diagnostic tools, development of pharmaceuticals and diagnostics, and distribution of pharmaceuticals and medicines. **Many of these investments aim to improve access to health services for people in low-income groups** by reducing costs of production – so that savings can be passed on to end-users – and by expanding geographical coverage of services.

There is significant innovation within the Health portfolio. **BII has invested in a wide range of HealthTech solutions**, from leveraging AI technology to create disruptive new diagnostic solutions to expanding the reach of mental health and well-being services to large numbers of people through apps.

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[207] Rao, K.D., Bhatnagar, A. and Berman, P. (2009) 'India's Health Workforce: Size, Composition, and Distribution'. *India Health Beat* 1(3). Visit documents1.worldbank.org/curated/en/928481468284348996/pdf/702410BRI0P1020k0Final000Vol010no03.pdf

[208] El Saadany, N. (2021) 'Egyptian Women & Labour Force: Challenges and Opportunities'. Visit wilsoncenter.org/blog-post/egyptian-women-labor-force-challenges-and-opportunities

[209] The 2X Employment criteria include two variables which must be met. One is the share of women in the workforce (30–50 per cent, depending on the sector). Workforce includes direct, indirect and/or supplier employees as makes sense in the investee context. The second is a quality indicator: a policy or programme, beyond those required for compliance, addressing barriers to women's quality employment (for example, wage inequity, lack of childcare, discrimination/harassment), with evidence of implementation or a commitment to implement).

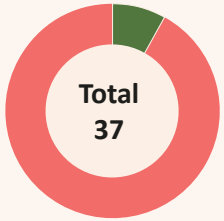
Climate change considerations have been considered in the development of the Health portfolio, to the extent that BII has provided TA to investees to reduce their energy and water consumption. However, we have not found evidence of a systematic assessment of how the Health portfolio may contribute to climate change.

Women have a critical role in all health systems, both as workers and as patients. **In some primary healthcare investments, women's employment is notably high, including in highly skilled roles.** Additionally, BII has invested in some businesses that are focused specifically on women's health. Despite this, there is limited evidence across the portfolio on the extent to which women are accessing or benefiting from health services. This is an area in which BII could focus on improving its DI monitoring.

5.4.2.2 Education

EDUCATION

TOTAL NUMBER OF INVESTEES

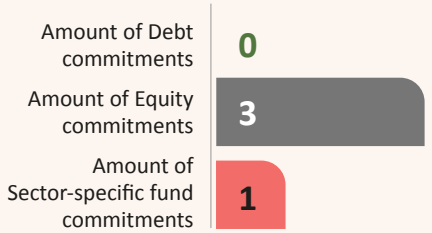


Direct commitments: 3

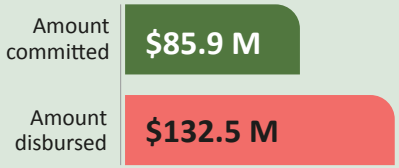
Underlying investees through funds: 34

NUMBER OF CATALYST VS. GROWTH COMMITMENTS

NUMBER OF INVESTMENTS BY INSTRUMENT

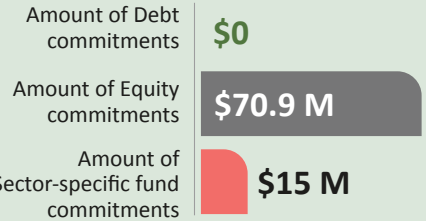


TOTAL AMOUNTS



AMOUNT OF CATALYST/GROWTH COMMITMENTS

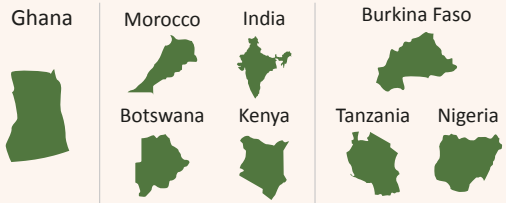
AMOUNT OF COMMITMENTS BY INSTRUMENT



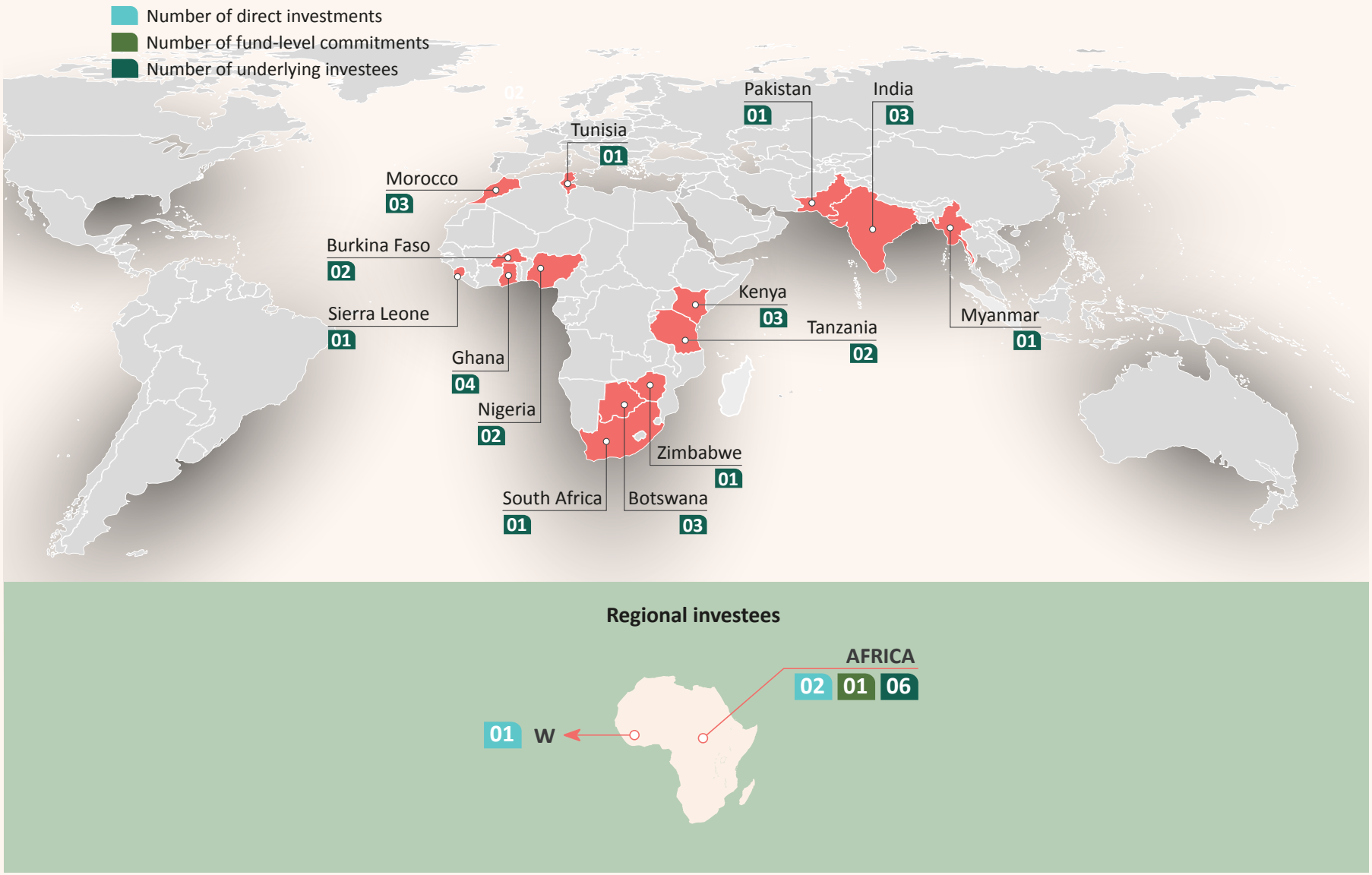
AMOUNT COMMITTED BY REGION

TOP 3 COUNTRIES BY AMOUNT

TOP 3 COUNTRIES BY NUMBER OF INVESTMENTS



EDUCATION



* Note: Investments at a regional level are shown on the map at the bottom; country-specific investments are presented on the main map.

Summary of findings

- BII intends to improve learning outcomes, expand access to job-relevant quality education, and enhance capacity and equity in the education system. Education is the smallest sector within the ITS portfolio.
- In the 2021 strategy, BII stated that they will "not prioritise new investments in K-12 (kindergarten to twelfth grade) private education".[210] Investments were made in private schools before the 2021 policy. Since then, no direct investments have been made in the education sector.
- BII has made three direct investments into education and one into an education fund in Africa with additional investments made by multi-sector funds, supporting 33 Education investees with a total disbursement of $132.5 million. BII has also expanded reach into Asia via multi-sector funds.
- There is some evidence of improved learning outcomes among students supported by BII investees. This data is primarily from supported schools that are no longer within BII's investment strategy. One higher education investment also reports improved learning outcomes.
- We found no evidence of improvements in students' employment following enrolment in vocational skills and job placement services, despite several investees providing these services.
- In 2022, 1,363,066 students enrolled were enrolled across six active investments in the BII Education portfolio.[211] 92 per cent of these students were reached by a single investment, and another 30,515 were reached through technology solutions. BII received enrolment data annually from five investees from 2019 to 2022, collectively increasing enrolment by 48,860 over these four years through their secondary, tertiary, and adult education and their technology services.[212] Seven investees have reported an increased capacity of schools and/or school places since BII's investment.
- Across the whole portfolio, in 2022, 54 per cent of the jobs that are supported by investees and were filled by women.[213] This was the highest proportion of female jobs across the ITS sectors. However, data on women's educational attainment is limited, with just one investee reporting gender-disaggregated data on educational achievement.
- Investees typically price their services as lower than the market average, to improve the affordability of their service. However, there is limited evidence on who benefits from these lower costs. Only one investee analyses whether their services reach students from low-income backgrounds.

[210] BII (2021) Productive, Sustainable and Inclusive Investment 2022–26 Technical Strategy. Visit bii.co.uk/en/news-insight/news/cdc-group-announces-full-details-of-its-2022-to-2026-strategy/

[211] Data sourced from BII's Quality Controlled Development Impact Dataset (2021 & 2022). Reach metrics were introduced in 2017, therefore commitments before this date would not be required to report on these metrics, and not all Education investments will have students enrolled as a part of their business model.

[212] According to BII's Quality Controlled Data Set (2021 and 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.

[213] According to BII's Quality Controlled Data Set (2021 and 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. The drivers behind these discrepancies are as outlined above.

State of the Education portfolio

At Q1 2023 BII assessed three investments using their DI RAG rating system, with two assessed as low-risk and one as high-risk. Although BII has exited one investment, it remains active as an underlying investment of a multi-sector fund.

5.4.2.2.1 Overview of investment strategy for development impact for Education

BII's report on the DI of investing in education outlines the key issues facing the sector, which BII aims to address through its education investments. These issues include:

- high variability in access to education between high-income and low-income countries;
- differences in access to education within countries, with affordability, gender, disability, ethnicity, and location affecting both access and learning outcomes, resulting in the most disadvantaged often being underserved;
- insufficient quality of education, with 617 million children and youths worldwide not meeting minimum proficiency levels in reading and maths – 80 per cent of those young people come from LMICs;
- significantly lower government spending on education, on average, in LDCs, with governments and international donors typically focusing resources on primary education;
- investment gap to meet the demand for education in LMICs; and
- challenges in assessing the positive impact and impact risks of private sector education.[214]

BII's DI approach focuses on investments that (a) benefit the learner – in terms of (i) learning outcomes, (ii) life outcomes, (iii) access to learning and scale (of reach), and (iv) well-being – and (b) benefit the education system's (i) capacity and equity (including inclusion and affordability), (ii) accountability and transparency, and (iii) economy and society.

BII prioritises investments into education for employment, such as higher education, Technical and Vocational Education and Training (TVET), distance learning, skilling and further education, corporate training, and test preparation. BII also aims to invest in companies that support government school systems and/or private schools, for example through education publishing, infrastructure, technology, and teacher training. It also aims to invest in out-of-school education for school-age children. Since 2021, BII has stated that they will "not prioritise new investments in K-12 (kindergarten to twelfth grade) private education"[215] and no direct investments have been made into education since this policy was introduced.

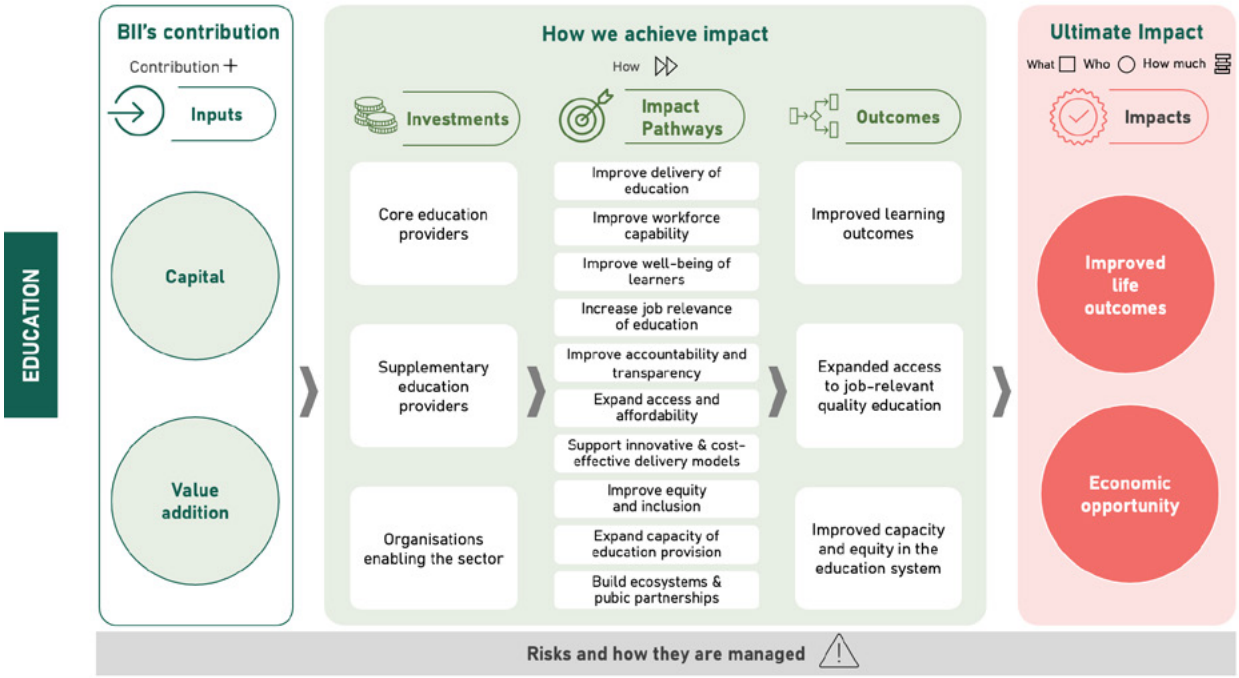
This analysis[216] of the Education portfolio includes an assessment of the DI of all three direct investments, one sector-specific fund and a sample of 11 underlying investments from multi-sector funds and VC funds.

[214] BII (2019) *Maximising the impact of education investments.* Visit assets.cdcgroup.com/wp-content/uploads/2020/01/10140708/Maximising-the-impact-of-education-investments.pdf

[215] BII (2021) *Productive, Sustainable and Inclusive Investment 2022 – 26 Technical Strategy.* Visit assets.bii.co.uk/wp-content/uploads/2022/01/06170001/2022-2026-technical-strategy-2.pdf

[216] This analysis refers to the DI analysis conducted on the Education sector, looking at a sample of underlying investments in multi-sector and VC funds. The full Education portfolio is described in the portfolio analysis section.

Figure 27. BII Education sector impact framework



The Education portfolio comprises three direct investments and one sector-specific fund. Through multi-sector funds, BII has supported a further 33 investees with a total exposure of $132.5 million. This makes education the smallest sector within the ITS portfolio. We sampled 11 underlying investments for the analysis of DI across the portfolio. Across the three direct investments and 11 underlying investments, seven investments are into core education providers, six into supplementary education providers and one into enabling the sector.[217]

All three direct investments were made during the 2012–16 strategy period. Two provide K-12 education services[218] directly through private schools, though one has since shifted to public–private partnerships. The third investment supports remote higher education for employed individuals in Africa. The sector-specific fund provides debt for on-lending to affordable, private K-12 and higher education providers, and for school fee loans to individuals. The underlying investments through multi-sector funds cover a range of services, including K-12 education, supplementary education through technology solutions, vocational training and student placements, and upskilling young people in technology.

5.4.2.2.2 Development impact across Education portfolio against the impact framework

Impact pathways

The impact pathway that was targeted by the largest number of investees is 'expand capacity of education provision'. Few investees plan to achieve results in 'increase job relevance of education', 'improve accountability and transparency', and 'improve equity and inclusion'. Other impact pathways in the framework are targeted by even fewer investees.[219]

Outcomes

Improved learning outcomes

BII's Education impact framework indicates that improved learning outcomes are an intended result of improved delivery of education and improved workforce capability.

[217] This totals 14, as the sector-specific fund is not categorised according to investment type at the fund level.
[218] 'K-12' refers to the education that is provided between the ages of kindergarten and grade 12 (based on the US education system). It is applied to countries beyond North America and refers to primary and secondary education.
[219] Investees can target more than one impact pathway.

Several investees have reported data on learning outcomes since receiving investment from BII. One investee reports strong learning outcomes for the students in their schools. It reports higher than national average performance on national exams in its schools in Kenya and Nigeria, including a 98 per cent pass rate of primary exams in its Lagos community schools, compared with the nationwide pass rate of 35 per cent. The investee has also commissioned independent evaluations and studies of its schools to assess learning outcomes. The findings of these studies are specific to particular geographies:

In pilot schools in one country, after five months of schooling, pupils were outperforming pupils in the grade above who were not involved in the programme.

In a city in another country, results are mixed, with better attainment of literacy than in other low-fee private schools but with no significant differences in numeracy achievement.

In another country, the investee commissioned a randomised control trial which found that the learning effects found in the study were the largest effects that had been reported and independently validated in an emerging market.

Another investee reported a very high success rate of 99 per cent on national exams for middle schools and baccalaureate exams. A third investee provides K-12 education services directly; however, it has not reported exam results (or other evidence of learning outcomes) since 2017. The fourth investee provides higher education, and has reported an upward trajectory of student graduation, with an increase of 106 students graduating between 2016 and 2022. The largest number of students graduating was 773 in 2021.

Two investees (that both focus on direct school provision) have contributed to **teacher training**. One reported having trained 12,879 teachers in 2019.[220] Another does not include specific quantitative data but reports having "trained hundreds of educators across the country" that it operates in. One further investee aimed to bring together a network of teacher training systems to benefit its own schools and contribute to the African schools' systems; however, all the documents provided show that they have not trained any teachers.

Expanded access to job-relevant quality education

Several investees focus on TVET to increase job opportunities. One investee provides "bridge" professional training for young professionals needing additional workforce training and upskilling. This investee has seen fluctuating placement rates of students who have completed the programme. There was a modest increase from 67 per cent in 2018 and 2019 to 69 per cent in FY 2020, before a fall to 56 per cent in Q1 2022 then another to 62 per cent by Q2 2022. Another four investees aim to provide education services that are relevant to students' future job opportunities. An investee aimed to recruit high-potential young African men and women with little prior knowledge of technology, put them through a rigorous training programme to become world-class software engineers and then embed them into software engineering teams in companies across the US and Europe, working out of offices in a few African cities. However, reduced demand for junior engineers led this investee to pivot to establish an engineering talent platform instead, coordinating a supply of experienced engineers for US- and Europe-based companies. **We could not find evidence of employment for students that have accessed these education services since BII's investment, employment being the end goal of providing job-relevant education**.

At least four investments, all through funds, aim to leverage technology to improve learners' skills, for the future workforce. There is no evidence that these investments achieved results. However, one investee supports children and young people to discover and design their career pathways in "21st-century domains" such as AI, climate change, the gig economy, space

[220] Assumed, based on reporting, to be a total number of teachers to date at the time of reporting.

technology and robotics. Another two provide video-based digital education platforms. The fourth offers a blended supplementary learning platform focusing on higher-order thinking skills, coding, and robotics programmes, either delivered directly to customers through online live classes, a personalised app and social learning or sold to government schools.

Improved capacity and equity in the education system

Seven investees have reported an overall increase in capacity since investment. This includes the construction of additional schools and the expansion of businesses. One investee has increased its number of academies from 213 (when BII first invested) to 2,200 over seven years, serving 3,637 schools as of Q3 2022. Another investee, providing K-12 education, has opened a new campus with capacity for 850 students. One investee, providing vocational training and placements for students into the corporate sector, has experienced fluctuations in capacity but currently operates more centres than it did at the time of investment.

However, it is not possible to assess the scale of expansion consistently across the portfolio. For instance, one investee consistently expanded and developed schools in partnership with local government, focusing on developing affordable schools. However, the investee's inconsistent approach to data reporting means that specific numbers of new affordable schools are not reported. Another investee also does not clearly report quantified data on school expansion; but expanded school capacity through both the construction (of new schools or classrooms) and acquisition of schools.

In 2022, 1,363,066 students were enrolled[221] across the BII Education portfolio, with 92 per cent reached by a single investment and another 30,515 reached through technology solutions. Five investees reported student enrolment data to BII annually from 2019 to 2022, collectively increasing enrolment by 48,860 through their secondary, tertiary, and adult education and their technology services.[222]

Through quarterly impact reporting, seven investees reported an increase in student enrolment figures since BII's investment, and one reported a decline. One investee increased its enrolled students by more than 1,000 in 2018 and reported in the same quarter that it opened two new affordable schools; however, it has not reported enrolment data since 2018. A further five investees, through fund investments, have reported increases in student enrolment numbers since investment.

5.4.2.2.3 Development impact across the Education portfolio by most pertinent themes

In this section we summarise the intended and achieved impact of investments in the Education portfolio according to the most relevant BII cross-cutting themes. We include analysis of gender and diversity, followed by low-income populations.

Gender and diversity

Completion of a basic education is associated with higher-quality health indicators; however, the completion of a secondary education can contribute directly to many other development indicators, particularly so for women.[223] Women with a secondary education seek out antenatal care and better medical treatment in general, take more measures to improve their

[221] 'Students enrolled' is a Harmonised Indicators for Private Sector Operations (HIPSO) indicator, defined as "number of students enrolled at the end the reporting period, both full-time and part-time, where each discrete student is counted regardless of number of courses". Data sourced from BII's Quality Controlled Development Impact Dataset (2021 & 2022). Reach metrics were introduced in 2017. Commitments before this date would therefore not be required to report on these metrics, and not all Education investments will have students enrolled as a part of their business model.

[222] Data sourced from BII's Quality Controlled Development Impact Dataset (2021 & 2022).

[223] Grant, C. (2017) *The Contribution of Education to Economic Growth.* Visit assets.publishing.service.gov.uk/media/5b9b87f340f0b67896977bae/K4D_HDR_The_Contribution_of_Education_to_Economic_Growth_Final.pdf

children's health, delay marriage and have fewer children (thus reducing maternal mortality), are more likely to send their children to school, and have greater economic opportunities that will alleviate poverty and hunger.[224] For example, in sub-Saharan Africa an estimated 1.8 million children's lives could have been saved in 2008 if their mothers had secondary education – a 41 per cent reduction of child mortality rates.[225]

The proportion of female teachers is an important indicator of progress towards gender equality. Women made up 43 per cent of primary teachers in sub-Saharan Africa in 2012 but only 31 per cent of secondary teachers. In 2012, in the Central African Republic, Chad, Guinea, and Mali, which have severe gender disparities in education, fewer than 12 per cent of secondary teachers were women, denying adolescent girls important role models.[226] In 2020, 41.5 per cent of India's teaching professionals were women.[227]

One Education investee is 2X qualified and has adopted a gender lens impact framework in its assessment of potential portfolio companies. The investee has a commitment to target 70 per cent of end-borrowers being women, through its provision of loans directly to parents and students to access education. However, this figure has fluctuated between 33 per cent and 37 per cent of its customers. The investee has integrated equity as a key criterion for investment decision-making for potential investments into education providers. The investee has also qualified for 2X based on its employment criteria; however, there is no reported data available on the jobs it supported.

Across the whole portfolio, on average 54 per cent of jobs supported by investees are filled by women, equating to 5,598 women. This is based on the 12 investees that reported this data and is the highest proportion of female jobs across the ITS sectors. When compared with the benchmarks noted above, this shows that BII investees are performing favourably in terms of women's representation. Among investments reporting on female employment numbers over time, three have seen an increase in female employees, while one has seen a decrease.

The available evidence of BII's investments' impact on women's education is limited. One investee reports on gender-disaggregated data on educational achievement. This direct education provider reports that "girls perform much better than boys" in its supported schools in Lagos, whereas in other private schools in the city, girls and boys perform similarly. Where gender-disaggregated data is reported, it focuses primarily on girls' enrolment rates. One investee reports that women enrolled make up at least 50 per cent of their student population, a peak of 57 per cent in 2020. Another education service provider reported consistently higher male than female enrolment over 16 months, with 41 per cent female enrolment.

A key diversity and inclusion consideration in the education sector is the inclusion of students with special educational needs. However, there is no evidence of the extent to which – or how – this is being addressed in the portfolio. In this strategy period, BII's focus is on gender and BOLD, and other aspects of diversity, such as special educational needs, are not addressed systematically. Only one investee considers special educational needs in the documents available; however, it is not clear how they define these needs or what measures they have put in place to meet specific needs of students.

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[224] UNESCO (2010) *The Central Role of Education in the Millennium Development Goals.* Visit unesdoc.unesco.org/ark:/48223/pf0000190587

[225] Watkins, K. (2010) 'When learning saves lives: education and child mortality'. Visit world-education-blog.org/2010/04/12/when-education-saves-lives

[226] UNESCO (2015) 'No country in sub-Saharan Africa has achieved gender parity in both primary and secondary education'. Education for All Global Monitoring Report, Press Release. Visit en.unesco.org/gem-report/sites/default/files/SSA_Press_Release_English_Gender_Report2015.pdf

[227] According to the Periodic Labour Force Survey. ILO (n.d.) 'ILOSTAT Explorer'. Visit ilo.org/shinyapps/bulkexplorer22/?lang=en&id=BRN_A (accessed 10 October 2023).

Low-income populations

Several investees aim to reach low-income populations with their education services. One direct investee and core education provider reports that it has increased the proportion of its students that are "bottom of the pyramid" from 50 per cent in 2013 to 100 per cent of students in 2022.[228] Another investee opened affordable schools and offered scholarships to girls from low-income backgrounds, but not the total number of affordable schools or how this has affected the number of students from low-income backgrounds enrolling in their schools. A higher education provider reports that approximately 37 per cent of its students earn $6,000 per year or less, compared with a median annual income of students of $6,000–$12,000 across countries. However, this is much higher than a typical benchmark for low-income populations in sub-Saharan Africa; BII now uses the benchmark of $6.85/day, based on 2017 PPPs.[229]

Two investees have not been able to serve low-income populations as previously intended. One reported that the proportion of its students from low-income backgrounds decreased from 86 per cent in 2018 to 38 per cent in 2022, possibly due to increased fees. The other could not offer its service to low-income students during Covid-19 due to school closures.

Four other investees mention providing lower-cost services; however, there is no evidence on whether these reach people from low-income backgrounds. One of these investees reported having secured donor funding to establish a foundation to provide scholarships to children with "outstanding educational capabilities who would otherwise not have the means to attend"; but there is no reported data on how many students have accessed this funding or whether they would be considered low-income. Another investee provides curriculum-relevant video content at "a fraction of the cost of a traditional tutor". The third investee delivers the B2B version of its service at a subsidised cost for Tier 2 and Tier 3 government schools in India. The final investee aims to provide quality education at a more competitive price than previously available within the international system, thereby expanding access to an international standard of education to a wider demographic. However, there is no demographic data to support whether this impact is being realised.

Two investees made adjustments to support students financially during Covid-19. One investee deferred payment options to families impacted by economic hardships due to Covid-19. The other investee halted tuition fees during its shift to online learning.

5.4.2.2.4 Conclusions on achievement of DI within education

It is challenging for BII to achieve the intended DI in its impact framework with its current portfolio, as all direct investments were made before the development of the sector impact framework and under a previous strategy period. The vintage of the direct investments (which pre-date the current sector impact framework) and the dominance of investments through multi-sector funds (for which BII do not have the same level of oversight as direct investments) has led to a gap between BII's DI intention across the education portfolio and what can be achieved through its active investments.

In the current strategy, published in 2021, BII has stated that they will "not prioritise new investments in K-12 (kindergarten to twelfth grade) private education",[230] which comprised

[228] The investee defines 'bottom of the pyramid' as $2 per person per day.

[229] BII (2023) *Insight: Understanding who we reach: a deep dive into our portfolio in India.* Visit assets.bii.co.uk/wp-content/uploads/2023/09/26095524/Understanding-who-we-reach-in-India-BII.pdf

[230] BII (2021) *Productive, Sustainable and Inclusive Investment 2022 – 26 Technical Strategy.* Visit assets.bii.co.uk/wp-content/uploads/2022/01/06170001/2022-2026-technical-strategy-2.pdf https://www.bii.co.uk/en/news-insight/news/cdc-group-announces-full-details-of-its-2022-to-2026-strategy/

most of the direct investments during this evaluation.

There is some evidence of improved learning outcomes for students supported by BII investees; however, this data comes primarily from supported schools that are no longer within BII's investment strategy. None of the more recent investments that focus on supplementary education or vocational education (and are therefore aligned with the private school policy) report on learning outcomes, posing a future risk for BII's monitoring of this outcome.

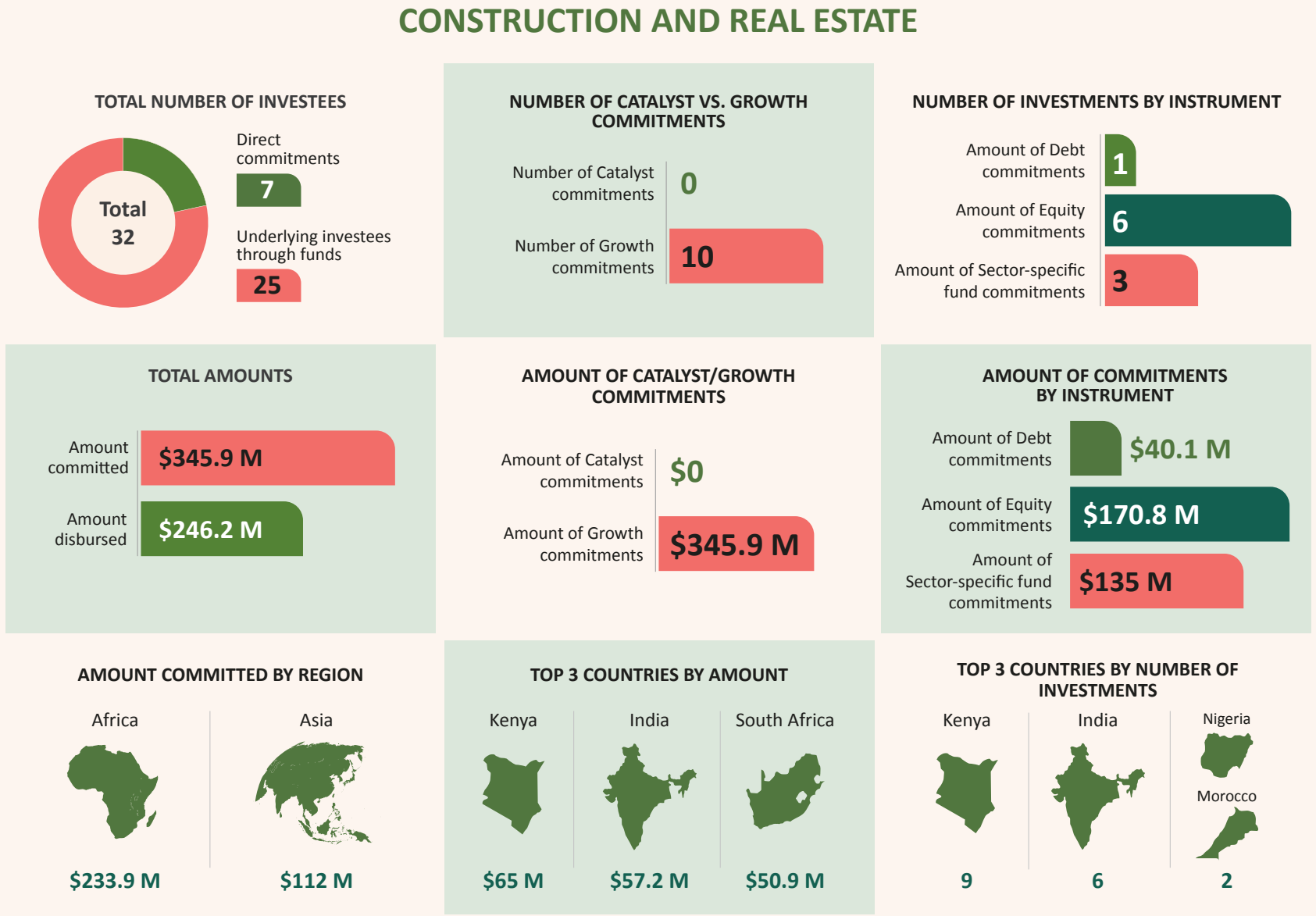
Similarly, the data reported on 'students enrolled' and 'increased capacity' is highly dependent on investees that BII would no longer invest in under the current policy. It's important for BII to determine whether the portfolio risks achieving less in these areas in the future, or whether the risk is limited to a decrease in the reporting of achievement in these areas. The mitigation of these two risks will require different actions by BII.

We could not find evidence of improvements in students' employment following their enrolment in education services that focus on vocational skills and job placements, despite several investees providing these services. We understand that technical and vocational education and training has been identified as an area of opportunity for future investments.

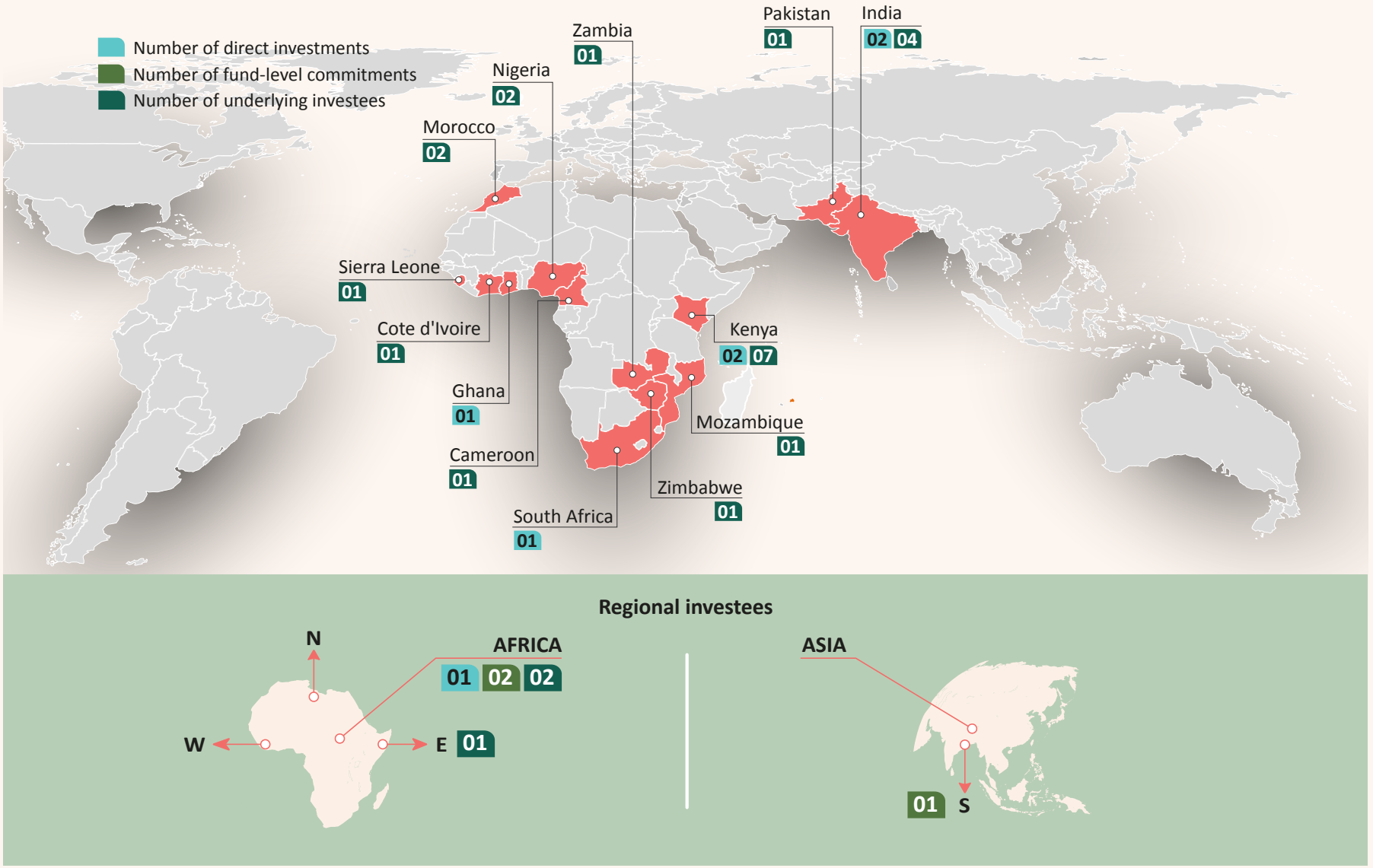
The proportion of jobs that are going to women across the Education portfolio is over 50 per cent. However, there is very limited evidence on the achievement of girls' and women's education compared with that of boys and men. There is also one 2X qualified investment, and its provision of services to women is far below gender parity (despite the aim to provide services to women more than to men). We did not find evidence on BII providing gender and diversity support to investees. This may be an area where BII could add particular value to its education investees.

There is good evidence of investees pricing their services lower than the market average to improve the affordability of their service; however, there is limited evidence on who benefits from these lower costs. Only one investee analyses of whether their services reach students from low-income backgrounds.

5.4.3 Construction and Real Estate



CONSTRUCTION AND REAL ESTATE



* Note: Investments at a regional level are shown on the two maps at the bottom; country-specific investments are presented on the main map.

Summary of findings

- BII's CRE impact goals are to create (i) economic opportunity (through job creation, economic growth, and land-based public revenue), (ii) inclusive urbanisation (through access to jobs, housing and services, economic and social inclusion and contributing to safer and healthier cities), and (iii) environmental sustainability (by improving energy and resource efficiency, reducing emissions, and contributing to climate resilience).
- There is evidence that BII's CRE investees have contributed to economic opportunity. In 2022, the portfolio supported 10,300 jobs across investees, based on only 48 per cent of investees reporting, with one investee reporting 75 per cent of reported jobs.[231] Therefore, the actual number of jobs supported across the full portfolio is likely to be significantly higher. External evidence indicates that the development of hotels and student housing generates many upstream and downstream permanent jobs (in addition to temporary construction jobs).
- There is limited evidence on the inclusivity of investees' CRE projects. IC papers show the intention of both spatially and socially inclusive urbanisation. Spatially, BII's retail and warehousing developments have aimed to serve a wide range of customers and fit into the urban design framework. Socially, housing developments have aimed to serve lower income groups. However, there is limited evidence of the extent to which these impact intentions have been achieved across the portfolio.
- We can conclude that the CRE portfolio has made significant achievements in improving environmental sustainability. Investees have reduced energy and water consumption beyond normal practice. Seven recent developments have achieved EDGE certification regarding energy consumption, which has the potential to influence other investors and developers, in line with BII's 'market strengthening' pillar for CRE.
- In 2022, 9 per cent of jobs supported across CRE were filled by women. One CRE investee is 2X qualified, with women representing 45 per cent of its leaseholders (compared with the national average of 29 per cent) and an aim to increase consultation with female clients and apply a gender lens to its work where feasible.

State of the Construction & Real Estate portfolio

BII assessed seven investments using their DI RAG rating system at Q1 2023. Three out of seven investments are at risk of not achieving their DI intentions (two medium risk and one high risk); therefore 57 per cent are deemed to be on track. BII has exited two investments and cancelled one commitment.

5.4.3.1 Overview of investment strategy for development impact for Construction and Real Estate

Before BII introduced its current CRE strategy and impact framework, its investments focused on job creation in specific countries through mixed retail and mid-level housing, large-scale construction, and long-term retail jobs.

[231] According to BII's Quality Controlled Data Set (2021 and 2022). There are discrepancies between the output of our analysed data and the figures reported in BII's Annual Report. These may be a result of the following: (i) the scope of our evaluation (in terms of time horizons) differs from BII's for its annual report; (ii) we have reclassified the sector of some investments for the purposes of the evaluation; and (iii) BII's reporting year is misaligned with investees' reporting, which results in BII updating its annual reporting data as further data is received from investees, whereas our data set represents a snapshot in time. Please refer to 'Methodology' for more information on scope and classification of sectors.

BII's current CRE strategy aims to achieve:[232]

- economic opportunity;
- inclusive urbanisation; and
- environmental sustainability.

These are to be achieved through a 'sector development' pillar and its three themes:

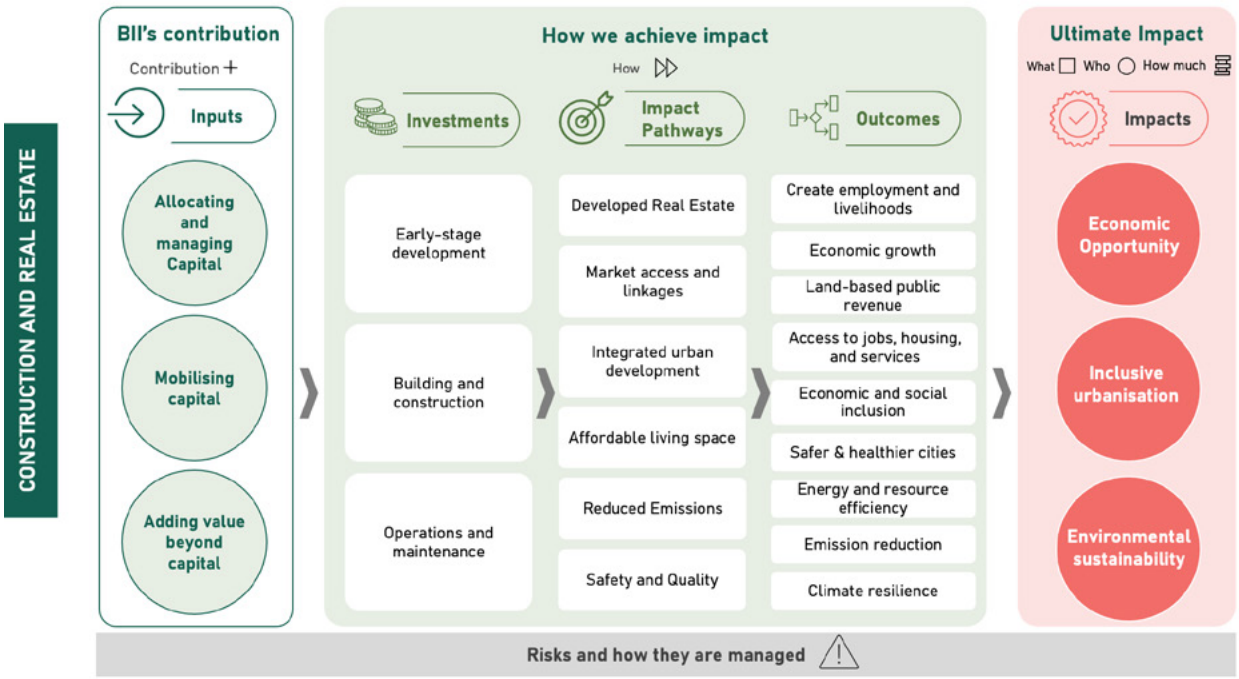
- create socially inclusive and sustainable communities;
- promote industrial space for production and distribution; and
- develop business-enabling infrastructure and ecosystems.

There is also a 'market strengthening' pillar, also with three themes:

- strengthen and build capacity of private sector';
- enable increased capital mobilisation; and
- climate sustainability.

The analysis[233] of the CRE portfolio includes an assessment of the DI of all seven direct investments and three sector-specific funds, totalling 32 companies. The portfolio does not include any underlying investments through multi-sector or VC funds.

Figure 28. BII Construction and Real Estate sector impact framework



The portfolio comprises eleven investments in residential real estate – middle-income (four) and low-income (three) affordable housing – and there are five housing investments where the income level of residents is not specified. Nine investments are in commercial real estate, comprising offices (three), warehouses (two), shopping malls (two), a business park and a data centre; and four investments are in hotels – one is a budget hotel, and the other hotels are

[232] BII (2021) *What is the impact of investing in construction and real estate?* Visit assets.bii.co.uk/wp-content/uploads/2021/01/25173530/Whats-the-impact-of-investing-in-construction-and-real-estate.pdf

[233] This analysis refers to the DI analysis done on the CRE sector, looking at a sample of underlying investments in multi-sector and VC funds. The full CRE portfolio is described in the portfolio analysis section.

not specified. In the case of one investment, some properties were bought as a going concern; all other investments involved construction.

The most prevalent investment types[234] in BII's portfolio are 'Building and construction' (18) and 'Operations and maintenance' (18), followed by 'Early-stage development and feasibility studies' (seven).

5.4.3.2 Development impact across Construction and Real Estate portfolio against the impact framework

This section describes the results achieved under each outcome in the impact framework, drawing on external evidence to contextualise the expected DI of CRE investments.

Impact pathways

The most targeted impact pathway is across the portfolio is 'Developed real estate' (explicitly intended by several investees), followed by 'Reduced emissions' and then 'Affordable living space'.

Outcomes

Create employment and livelihoods

The economic impacts of construction and post-construction operations vary by project. In residential construction the construction phase is likely to have a larger direct economic impact than the post-construction phase.[235] The CRE sector is labour-intensive in terms of creating construction jobs, and the employment supported per unit of CRE investment is relatively large compared to other economic sectors. The construction phase creates jobs both through the building material industry and through on-site employment; it is a relatively large employer in many developing countries and is a large employer for the lower income groups.[236]

Across the full CRE portfolio, BII investees supported 10,316 direct jobs in 2022. Of the investments which report gender-disaggregated data, 9 per cent of those jobs were filled by women.[237] As 48 per cent of investees have reported data against this indicator, the actual number of direct jobs supported by the CRE portfolio is likely higher. One investee accounts for 75 per cent of the supported jobs. One sector-specific fund has not reported figures for its investments. Therefore, we expect that there are more jobs supported in this sector through BII investments.

Two investees report on permanent jobs in their quarterly impact reports. One reported supporting 100 facilities management jobs at the mall that it constructed, with locals holding 99 of these roles. The other reported creating 316 permanent jobs across the two hotels that it constructed, with locals holding 314 of these posts.

Economic growth

Real estate is an important contributor to GDP in terms of employment and fixed asset creation. According to the JIM calculations of BII's data, in total BII's CRE investments have contributed $1 billion to GDP in the relevant countries and regions between 2019 and 2022. Of this, $0.4 billion is 'direct' and $0.6 billion is through the 'supply chain'.

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234 With reference to the categories of investment type outlined in the CRE Sector Impact Framework.

235 Fuller, S. (2020) *The Contribution of Residential Construction to the U.S. Economy*, George Mason University, Fairfax, VA. Visit leadingbuilders.org/wp-content/uploads/2020/07/Residential-Construction-Economic-Study-5-2020.pdf

236 Hartrich, S. (2018) *Can We Create Better Jobs in Africa's Booming Construction Sector? Looking To Market Systems Analyses to Point us in The Right Direction*. ILO, Geneva. Visit https://www.ilo.org/empent/Projects/the-lab/publications/WCMS_652333/lang--en/index.htm

237 BII's Quality Controlled Development Impact Dataset (2021 & 2022); based on the 40 per cent of investees who reported.

Land-based public revenue

External evidence indicates that the real estate sector can significantly contribute to government revenue because of (i) land value capture and (ii) property taxes.

- **Land value capture:**[238] Land value capture allows low-yield agricultural land to transform into high-value urban uses, providing a crucial revenue source for local governments. Management of the increase in the value of land as a public good can be an extremely important source of revenue for local governments by which they provide urban infrastructure.
- **Property taxation:**[239] Land value taxes can make an important contribution to the government. Land value taxation is neutral, meaning that a compensated land value tax does not distort the tax base. This makes it preferable to distortionary taxes such as capital and labour income taxes from the economic efficiency point of view. In relative terms, households around the median level of wealth have to pay the highest share of land value taxes.

However, only two investee (both funds) IC papers commented on the intention for the investments to generate public revenue, and there was no subsequent reporting on actual revenues generated.

Across all ITS sectors, we have 259 data points for reported taxes paid in 2022.[240] Only ten of these data points are in the CRE sector. In 2021 there are 193 data points, of which seven (out of 32 investments) are in the CRE sector. The total taxes paid[241] in 2022 by CRE investments is $330,046, made up of four of the ten investments.[242] Only two of the investees reported on taxes across all four years (2019–22). One investee estimated that its fund would introduce more than $38 million in taxes over its life.

Access to jobs, housing, and services

An increase in housing access should correspond to a rise in the number of housing units built. Three investees have reported increases: (i) the first reported an increase in residential units sold, and reported that its "main impacts have been achieved in terms of [...] residential units constructed"; (ii) another reported an increase of assets for low-cost rental of 665 units in a one year period from 2020 to 2021; and (iii) the third investee reported in 2019 that it had made 160 housing units available for occupation, with intending to add 1,540 units; however, there has been no further reporting on this goal.

Access to services includes access to water, electricity, transport, and other basic services. Reported data is sparse, indicating the possibility of student housing, a training facility, and a hospital, but subsequent investee reports do not confirm if these were built and are now operational.

Economic and social inclusion

BII's focus on inclusion and equity in managing its investments has set a good example in a market where such issues are often overlooked. For example, one investee introduced an explicit bias awareness policy so that property managers exercise fairness and equality in

238 Source: OECD/Lincoln Institute of Land Policy, PKU-Lincoln Institute Centre (2022), *Global Compendium of Land Value Capture Policies*. OECD Publishing, Paris.

239 Material derived from Schwerhoff, G., Edenhofer, O. and Fleurbaey, M. (2022) *Equity and Efficiency Effects of Land Value Taxation,* IMF working paper WP/22/263, Washington DC. Visit imf.org/en/Publications/WP/Issues/2022/12/17/Equity-and-Efficiency-Effects-of-Land-Value-Taxation-527079

240 BII Collected DI data set.

241 Value of all transfers made to the government over the reporting period. At a minimum, this should include payments to the government in the form of corporate income or profit taxes.

242 BII notes that taxes are not paid during construction.

resident selection; and one fund reported a 168 per cent increase in female employment since investment.

Safer and healthier cities

Two investments aim to create safer spaces: one plans to increase the security of its community through "safe design of public spaces", and the other has the "goals of improved safety, quality of life and transport time/costs [for] households benefiting [from] low-income housing investments". Regarding health, below we discuss the portfolio's work on reducing emissions.[243] Improved housing leads to improved health, and higher productivity.[244]

Energy and resource efficiency

Two funds are tracking and conserving resources, with reported energy efficiency at 29 per cent and water savings as high as 51 per cent. One fund reports that one of its companies uses 50 per cent less embodied energy in the building materials compared to a standard building in the same market.

Emissions reduction

Reported energy efficiency and adherence to IFC EDGE certification[245] indicate that at least seven investments have reduced emissions. Two reports have included data on CO2 savings ranging from approximately 150 to 800 tonnes annually.

IFC EDGE certification
An innovation of International Finance Corporation (IFC), a member of the World Bank Group, EDGE makes it easy to design and certify resource-efficient zero carbon buildings of every type everywhere. IFC's app determines the best resource-efficient measures to incorporate and estimate the incremental cost of building green. If the project meets the EDGE Standard of at least 20 per cent savings in energy, water, and embodied energy in materials, it will receive EDGE certification.

Climate resilience

According to the OECD, "the defining characteristic of climate-resilient infrastructure is that it is planned, designed, built, and operated in a way that anticipates, prepares for, and adapts to changing climate conditions. It can also withstand, respond to, and recover rapidly from disruptions caused by these climate conditions".[246] BII's CRE investments address climate resilience as investments with IFC EDGE certified buildings are both "green and resilient".[247] Otherwise, there was a lack of explicit reported data on climate resilience.

5.4.3.3 Development impact across the Construction and Real Estate portfolio by most pertinent themes

In this section we summarise the intended and achieved impact of investments in the CRE portfolio according to the most relevant BII cross-cutting themes. We include analysis of climate change, followed by gender and diversity and low-income populations.

[243] Reducing emissions of greenhouse gases through better transport, food and energy use choices can result in very large gains for health, particularly through reduced air pollution." WHO (2023) 'Climate change'.

[244] WHO (2018) *WHO Housing and health guidelines.* Geneva: World Health Organization. Visit who.int/publications/i/item/9789241550376

[245] Visit edgebuildings.com/

[246] OECD (2018) *Climate-resilient Infrastructure: OECD Environment Policy Paper* No. 14. Visit oecd.org/environment/cc/policy-perspectives-climate-resilient-infrastructure.pdf

[247] EDGE (2023) 'Building Green and Resilient Hotels: Investing in our Planet'. Visit edgebuildings.com/building-green-and-resilient-hotels-investing-in-our-planet/

Climate change performance

Seven investments achieved IFC EDGE green building certification for one or more of their buildings. Three are direct investments and four were underlying investments in a fund. These investees report saving energy and subsequently reducing emissions. A fourth direct investee has applied for EDGE certification. Four other investments' reports mention other standards – for example, Leadership in Energy and Environmental Design (LEED), Greenstar standards, and Indian Green Building Council standards – in IC documents, but we cannot confirm whether certifications have been achieved.

Investees in one fund are also piloting green building standards in new geographies, for example, in West African countries, and new standards for types of buildings, for example, data centres. Other positive examples include moving from diesel to natural gas and responsible sourcing of building materials.

Gender and diversity

Across the CRE portfolio, 9 per cent of jobs supported went to women, based on investments that have gender-disaggregated reporting.[248] This number is influenced by two investments. The highest reported proportion of jobs for women is 47 per cent, which is achieved by the only 2X qualified investment. Varying country benchmarks across Asia show that a range of 10–40 per cent of labourers in this sector are women, in Africa this range is from 6 per cent to 30 per cent,[249] and in India a recent report found that out of the total people employed in this industry, only 12 per cent are women.[250]

Although there are no strong trends in benefits for women/women workers, there are examples. One fund has reported training for women and investment into a female-owned development. There are two direct investments reporting serving female-headed households. One direct investee is providing women with access to housing and has a gender profile of leaseholders that is more equal relative to the large national renters' profile, which is male dominated. The other direct investee is providing a service to sales agents, typically low-income women, receiving warehouse deliveries.

One CRE investee is 2X qualified, with women representing 45 per cent of its leaseholders (as compared with the national average of 29 per cent). The investee has also committed to increasing consultation with existing and prospective female clients and applying a gender lens to the design, development, leasing and marketing of future units where feasible. There is no updated information yet on how these additional commitments have been put into practice.

Low-income populations and job creation

Although affordable housing is a stated objective of four investees, only one (a fund) has reported an increase in number of affordable housing units created so far. One direct investee reports that 80 per cent of its existing units are occupied by households with net

[248] Based on BII collected DI data set reporting in 2022.
[249] ILO (n.d.) 'Data'. Visit ilostat.ilo.org/data/ (accessed 10 October 2023). Note that this data covers the sectors 'mining, construction, manufacturing and transport', so is not exclusively CRE.
[250] The Economic Times (2023) 'Women workers in construction and real estate sector earn 30-40 pc less than male workers: Report'. Visit economictimes.indiatimes.com/news/india/women-workers-in-construction-and-real-estate-sector-earn-30-40-pc-less-than-male-workers-report/articleshow/96855805.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

incomes between the 33rd and 82nd income percentiles nationally.

Affordable housing in India

Usage of the term 'affordable housing' varies between geographies. The most significant BII investee in affordable housing is a fund in India. Our analysis shows that the term is not synonymous with housing for lower income groups.

In India, the Government defines affordable housing projects as "housing projects where 35% of the houses are constructed for EWS (Economically Weaker Section) category [...] EWS households are defined as households having an annual income up to Rs.3,00,000 (Rupees three lakh)."[251] The Indian housing fund we looked at said it was targeting individuals earning Rupees 5–15 lakh. According to Government of India definitions, this fund is therefore primarily catering to Middle Income Groups – "households having an annual income from Rs.6,00,001 (Rupees six lakh one) [...] up to Rs.18,00,000 (Rupees eighteen lakhs)" – and the higher earners among the Low Income Group – "households having an annual income from Rs.3,00,001 (Rupees three lakhs one) up to Rs.6,00,000 (Rupees six lakhs)".[252]

Jobs for low-income groups

As an industry that relies primarily on manual labour, whether skilled or unskilled, construction is a major employer. Although industrialisation of components reduces the demand for labour in high-cost economies, in Africa and India construction is one of the most important sources of employment for lower income groups.[253] There is no specific evidence available among investees on the proportion of jobs supported (as assessed under 'Create employment and livelihoods' in Section 5.4.3.2 above) that are filled by people from low-income groups.

5.4.3.4 Conclusions on achievement of DI within construction and real estate

Real estate development is a major generator of employment opportunities; **BII supported 10,316 direct jobs across the CRE portfolio in 2022,** based on 48 per cent of investees who reported. It is estimated that the actual number of jobs supported is significantly higher than this figure. Construction is typically a major source of employment and is noteworthy for employing large numbers from the lower income groups. Once developed, employment levels vary between different sectors: for example, hotels and student housing generate many upstream and downstream jobs. Retail development is also a source of employment for relatively large numbers. Indeed, real estate is a component in all economic activity, apart from some rural activities. Regarding job creation, individual investments report the creation of construction jobs in the hundreds, although the stated intention is to create jobs in the thousands.

Inclusive urbanisation has both a spatial and social component. Spatially, BII's retail and warehousing developments have aimed to serve a wide range of customers and fit into the urban design framework, with the design of safe public spaces. Socially, housing developments have aimed to serve lower income groups, with goals of improved safety, quality of life and transport time and cost. All categories of development have aimed to set a good example in their management practices. **Although the stated intentions for inclusivity are clear, the evidence of resulting inclusion is not strong, and some of**

[251] Ministry of Housing & Urban Affairs, Government of India (2021) *Housing for All Mission: Scheme Guidelines.* Visit pmay-urban.gov.in/uploads/guidelines/62381c744c188-Updated-guidelines-of-PMAY-U.pdf
[252] Ibid.
[253] Yadav, S.K. and Indrakumar, D. (2015) 'Construction sector in India: rationale behind phenomenal increase in employment during first decade of the 21st century'. *Afro Asian Journal of Social Sciences* 6(4); Hartrich, S. (2018) *Can we create better jobs in Africa's booming construction sector? Looking to market systems analyses to point us in the right direction.* ILO, Geneva; United Nations Environment Programme (2022) 2022 *Global Status Report for Buildings and Construction: Towards a Zero-emissions, Efficient and Resilient Buildings and Construction Sector.*

our analysis shows that a few housing construction projects across the portfolio are actually targeted to middle-income earners.

Environmental sustainability has been the most significant impact of the CRE portfolio. The investments have set an example, in terms of energy and water consumption, that is ahead of normal practice in the countries concerned. More recent developments have achieved EDGE certification regarding energy consumption, with the potential to create demonstration effects for future investors and developers.

Only 9 per cent of jobs supported across CRE in 2022 were filled by women, and there is no evidence of women being specifically targeted, for example with affordable housing solutions. Although BII has provided value addition through support to meeting health and safety standards and EDGE certification, there is little evidence of CRE investees receiving BII's gender and diversity TA. This is an area where BII could add greater value to its CRE investees to improve opportunities for women.

6. Conclusions

The diverse ITS portfolio encompasses various sectors and subsectors, each with different business models and impact intentionality. Some sector portfolios, such as F&A and health, are substantial. Therefore, despite their variety, they have the potential for depth in particular areas of DI. However, sectors with few investments, such as education and C&BS, find it difficult to achieve the ambitions of a broad sector impact framework. Furthermore, the diversity of investments in each sector makes it difficult to drive any systems-level or transformational change in a sector or economy. **What we observe is a patchwork of investments and evidence that makes it difficult to substantiate the intended impact.**

BII has the potential to transform systems through its investments. **Although high-level ambitions exist in some sector impact frameworks for impact on economies or systems, there is limited evidence of these results being achieved. In some cases, these system-level effects may be difficult to measure.** It may be possible to create system-wide change through more streamlined and focused investment theses, clustering of investments within a subsector or geography, and/or partnering with actors in the system. Pursuing such a strategy might, however, limit the ability to find enough investments that meet the financial return thresholds that BII needs to achieve. Nevertheless, by using TA (for example, BII Plus projects), and leveraging the different types of investment approaches, instruments and partnerships at BII's disposal, it is possible to deliver against a specific ecosystem-approach in a selected number of priority markets and sectors.

A significant proportion of investees aim to deliver goods and/or services to low-income populations directly or indirectly. Recently, BII and research partner 60 Decibels have collected more evidence of investees' reach to this group. However, there is a low proportion of investees reporting on jobs supported, with substantive gaps in some sectors and, notably but not exclusively, gaps in reporting by funds. As jobs supported is a critical element of BII's strategy, this evidence needs to be collected more diligently on an annual basis.

Although gender and diversity, climate change, and digital transformation are the themes driving the 2022–26 strategy, these are not new issues in ITS sectors. **We would have expected to see more evidence of these themes being addressed through DI intentionality,** as well as evidence where they are material to the sector. In some sectors there are gaps in addressing these themes, and we need to interrogate the absence of these issues in more detail.

Through value addition activities, BII has contributed to improving the inclusivity and sustainability of some investees. Specifically, BII's TA support has improved the gender and diversity within investees' operations, particularly among 2X qualified investments. Furthermore, BII's climate change mitigation support in the CRE portfolio has been valuable, with investees achieving green building certifications, and potential demonstration effects for other investors and developers. As these successes are not yet mainstreamed within and across sectors, it is difficult to decipher a consistent approach to value addition across the ITS portfolio.

Sectoral investment strategies and IC papers indicate a strong and well-articulated DI intent at portfolio and investment levels. However, evidence is not always collected to demonstrate progress and performance against the impact thesis, although BII has been working to improve this over time.[254] PSI scores, introduced in 2022, forecast and then assess the depth of impact against certain criteria and are externally assured. Gaps in quality-controlled DI metrics due to the lack of a comprehensive data set, affects the ability to make a robust case for DI and identify gaps and opportunities, especially as BII is moving to more rigorous PSI scoring assessments. Despite multiple systems, processes, and data points, and trying to piece all the assessments and data together, it is difficult to confirm that ITS investments are delivering their intended impact.

[254] See Annex B for DI Tools and Annex C for Controls, Audits and Assurance Policies.

7. Recommendations

Our recommendations are subdivided into three sections:

- (i) **recommendations for each sector** (which have not been ordered by priority);
- (ii) **portfolio-wide recommendations** (ordered by priority); and
- (iii) **impact measurement recommendations** (ordered by priority).

7.1 Recommendations for each sector

These recommendations have not been prioritised, as there is one per sector.

Food and Agriculture

We recommend increased intentionality on improving gender equality and climate mitigation and adaptation. The increased focus could be achieved during investment screening, to ensure strong intentionality on these themes, and through greater use of BII's value addition activities and improved targets and evidence gathering. The portfolio could also benefit from greater focus to achieve the goal of transforming agricultural economies and food security.

Manufacturing

We recommend BII to continue to invest in green, or circular economy products within this portfolio, focusing more on greening manufacturing processes. We also recommend placing more emphasis on assessing and tracking how and to what extent investees reach low-income consumers with their products. The portfolio could benefit from measuring the trade-offs between domestic consumption and exported goods, and segmenting B2C and B2B business models more to track spillover effects.

Digital Services

We recommend an increased focus on whom investees' services are reaching and the outcomes these service-users experience from their engagement. This focus should improve the inclusion of low-income groups, gender, and diversity among investees. We particularly recommend considering the access and potential limitations women may have to the Internet and mobile phones (the digital divide), and how that may affect the investment's intended outcomes.

Consumer & Business Services

We recommend that BII make more direct investments into this sector, given its potential to create jobs, especially for women and youth. Additionally, we recommend that BII learn more about the opportunities for investing for impact in this sector from its multi-sector fund investments, and that BII apply this learning to maximise impact in future multi-sector fund investments.

Health

We recommend that BII continue focusing on inclusive health access through affordable pharmaceuticals, vaccines, and accessible diagnostics. This focus is particularly important for the future, given the anticipated health effects of climate change due to increased extreme weather events, their direct impacts on health and social infrastructure, and other determinants of good health such as health system accessibility.[255] In addition, we recommend that BII continues to seek out opportunities to build ecosystems and public health partnerships.

Education

We recommend an increased focus on the origination and pipeline of education investments, especially those that support young people to develop skills for employment. This could be achieved through continued investment into multi-sector funds.

Construction and Real Estate

We recommend maintaining a focus on climate mitigation and adaptation. Additionally, we recommend rolling out assessments of potential outcomes for value chain businesses, leveraging opportunities to construct warehousing and business infrastructure to cover more investments in the portfolio.

7.2 Portfolio-wide recommendations

The recommendations below are presented in order of priority

More systematic focus on climate change across the ITS portfolio

We recommend mainstreaming climate mitigation and adaptation activities more systematically across the ITS portfolio to meet BII's ambitions in this space. This could be achieved not only by increasing support to investees through BII's TA but also by requiring all relevant BII staff to take responsibility for integrating this cross-cutting theme into their work.

Mainstream gender and diversity considerations more consistently across the portfolio

We recommend focusing on areas where the BII portfolio lags behind sector expectations for gender equality, such as jobs supported by F&A investees and gender inclusion strategies through technology investments. As with mainstreaming climate, mainstreaming gender and diversity requires BII investment managers and DI specialists to apply the appropriate lens at the right time. The responsibility for improving gender results lies with BII as a whole, not just the Gender & Diversity team.

[255] World Health Organization (2021) 'Climate Change and Health'. Visit who.int/news-room/fact-sheets/detail/climate-change-and-health#:~:text=Key%20facts,malaria%2C%20diarrhoea%20and%20heat%20stress (accessed 4 August 2023).

Greater intentionality of reaching low-income groups

We recommend that BII clearly delineate the intent to provide (more) affordable goods and services from the intent to serve low-income populations, emphasising access for these groups. This will enhance targeting low-income customers at the investment decision-making stage and throughout the investment cycle.

Greater intentionality around geographies and supply chains within a particular sector

We recommend a more focused approach to achieve more ecosystem-level or economy-level outcomes identified in impact frameworks. This could involve leveraging clusters of sector-specific investments in the same geographical area or system, by partnering with others who are operating at different supply chain scales, and/or by aligning investments with existing national development plans.

Being purposeful in linking sectors for greater impact

We recommend identifying and maximising opportunities to create links across ITS sectors to achieve greater impact. For example, leverage the complementarity of investments into TVET for young people with investments into consumer services for future employment opportunities for young people, and opportunities for market linkages with F&A and logistics or warehousing solutions.

Continuing to invest in funds

We recommend continuing to maximise the opportunities that sector-specific and multi-sector funds offer in expanding geographic reach (including into more fragile countries), originating C&BS, manufacturing, and education investments, and 'right-sizing' capital for SMEs through smaller ticket sizes.

7.3 Impact measurement recommendations

The recommendations below are presented in order of priority:

Pilot modes of data collection, analysis, and evaluation to address gaps in the DI data set

The current data set makes it very difficult to assess the DI of the ITS portfolio. Despite the obligation for investees to report DI metrics, the absence of concrete consequences for non-compliance suggests a need for change. We recommend using deep dives to collect, analyse, and evaluate investment data. This approach would complement existing data sets and verify impacts. Gender-disaggregated data collection should also be prioritised.

Maximise the use of the sector impact frameworks

We recommend refining the sector impact frameworks to improve the logical consistency, clarify definitions of key terms, and where material, mainstream gender and diversity, climate change and digital transformation. This ensures alignment with BII's cross-cutting DI themes. We also recommend more intentional use of these frameworks throughout the investment cycle to align DI targets so that they can be aggregated across the sector portfolio.

Regularly analyse and report on the ITS portfolio against the sector frameworks

We recommend that BII repeat and institutionalise a simplified, lighter-touch version of this analysis on an annual basis. This could be used to drive up data completeness, quality, and use.

Annexes

Annex A

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Annex B

Details of BII's approach to DI

Table 1. BII impact framework development timeline

Year(s) of introduction		Tool	Explanation
2012	Cross-sector 	Development Impact Grid[256]	The 2012–16 and 2017–21 investment policies used the DI Grid as the impact tool to assess investments ex ante, which scored investments based on the likelihood of a sector to generate employment and the investment difficulty of a country or state.[257]
2017	Cross-sector 	Impact Management Framework[258]	Overarching framework that draws on dimensions of impact defined by Impact Frontiers (formerly the Impact Management Project)[259] that informs how BII assesses expected impact of investments.
2017–20	Sector-specific 	Introduction of Sector Strategies & Sector Impact Frameworks	Sector strategies articulate the DI thesis of a specific sector; sector impact frameworks apply the Impact Management Framework dimensions of impact per sector.
2019–20	Sector-specific 	Impact Dashboard[260]	Application of the dimensions of impact to assess expected impact of a specific investment. This applies sector impact frameworks to assess the potential impact of individual opportunities.
2020	Cross-sector 	Operating Principles for Impact Management[261]	A globally recognised framework that BII uses to underpin the design and implementation of its impact management systems, ensuring that impact considerations are integrated throughout the investment life cycle.[262]
2022	Cross-sector 	Impact Score[263]	The Impact Score replaces the DI Grid. The Impact Score is designed to recognise and incentivise investments that are likely to contribute most to BII's three strategic impact objectives (productive, sustainable and inclusive (PSI)) by providing a quantitative metric that can be aggregated and used to monitor and analyse strategic impact performance across the portfolio.[264]

[256] BII (2018) *BII Development Impact Grid*.
[257] BII (2018) *BII Development Impact Grid*.
[258] BII (n.d.) 'What impact means to us'. Visit bii.co.uk/en/our-impact/what-impact-means-to-us/
[259] Impact Management Project. Visit theimpactprogramme.org.uk/portfolio/impact-management-project/
[260] Visit bii.co.uk/wp-content/uploads/2020/07/impact-framework-explanatory-sheet.pdf
[261] BII (2023) *Operating Principles for Impact Managemen*t.
[262] Ibid.
[263] BII (n.d.) *Impact Score: 2022 – 26 Strategy Period*.
[264] Ibid.

Table 2. Description of tools used to assess development impact

Tool	Description
Investment Committee (IC) paper	All equity, debt and fund investments have a final IC paper. This is the document that is used as the basis of the IC decision to invest, and contains information on the investee's business model, key financials, DI risks and concerns, and any due diligence undertaken on possible impact and additionality.
Quarterly monitoring reports (QMRs)	Direct investments and fund investments are monitored by the BII teams. QMRs contain sections on financial and operational performance, cashflow forecasts, impact monitoring, and E&S and BI performance.
Fund reports	Funds provide quarterly, biannual and/or annual monitoring fund reports, setting out key information about disbursements and underlying investment performance. The format and detail provided in these reports is left to the discretion of fund managers, and therefore it varies per investment.
DI metrics	DI metrics are collected by investment managers annually and then collated for BII's annual reporting process. DI metrics include job creation figures, financial metrics, gender metrics, and some sector-specific metrics (e.g. patients served) for relevant investments. The data we used was from a quality controlled version of the figures, which has been reviewed for annual reporting. We used some older data points that were not quality controlled when we needed a longer time series of data, but we felt that it would meaningfully add to the analysis. We did some sense-checking on these numbers but did not undertake any validation exercises. As of 2020, BII collects and/or calculates emissions data as part of their DI metrics collection.
DI RAG ratings	The DI RAG ratings are one of six dimensions of an early warning system intended to assess whether an investment is on or off track vis-à-vis expectations and should signal whether material risks to impact may affect or are already affecting delivery of impact. The BII DI representative responsible for each investment makes a regular assessment of DI performance to understand the overall health of the portfolio from a DI perspective. Although the process for reviewing the DI RAG ratings internally is run quarterly, this does not mean that all investments are rated every quarter. At a minimum, impact performance appraisals take place as follows: ▸ Direct investments: every six months. ▸ Fund investments: annually. ▸ All investments: Comprehensive Impact Performance Dashboard completed annually. ▸ Investments where the impact is deemed at risk are reviewed with greater frequency.

Figure 1. Inclusivity – country default score list[265]

Methodology	▸ Uses 3 indicators: Poverty Gap @ $5.5, GDP per capita (current PPP), OECD Fragile ▸ Methodology: Poverty Gap and GDP per capita (PPP) normalised using z-scores, then added. Categories drawn using larger gaps in the distribution. ▸ Fragile countries (OECD) moved to Beta where otherwise lower, extremely fragile countries (OECD) moved to Alpha where otherwise lower				
Output	**'ALPHA'** Default score 3	South Sudan Burundi Somalia Central African Republic Congo, Dem. Rep. Congo, Rep	Guinea-Bissau Liberia Eritrea Niger Togo Malawi	Sierra Leone Tanzania Chad Mali Benin Sudan	Rwanda Zambia Mozambique Madagacar Afghanistan Haiti
	'BETA' Default score 2	Burkina Faso Uganda Zimbabwe Angola Nigeria Sao Tome and Principe Ethiopia Guinea	Kenya Senegal Lesotho Cameroon Cote d'Ivoire Comoros Gambia, The eSwatini	Djibouti Mauritania Bangladesh Pakistan Myanmar Libya Equatorial Guinea	Cambofia Lao PDR Papua New Guinea Solomon Ilands Micronesia Vanuatu
	'GAMMA' Default score 1	Nepal India Ghana	Namibia South Africa Egypt, Arab Rep. Cabo Verde	Philippines Timor-Leste Belize	Kiribati Tuvalu Marshall Islands Samoa Tonga
	'DELTA' Default score 0	Morocco Botwana Bhutan Tunisia Algeria	Mauritiua Sri Lanka Gabon Maldives Seychelles	Indonesia Thailand Malaysia Vietnam Fiji Nauru Palau	Dominica Dominican Republic Grenada Guyana Jamaica St Lucia St Vincent and the Grenadines Suriname

Three eligible geographies in the Indo-Pacific (Niue, Tokelau and Wallis & Futuna) are not classified in World Bank income groups and data availability is limited. These countries will be scored using the regional average.

[265] Visit bii.co.uk/en/news-insight/insight/articles/managing-the-impact-of-our-portfolio-our-impact-score/

Annex C

Controls, audits and assurance

The following table details the controls, audits, and/or assurance over data sets and processes. BII states on its website that it is improving its information systems during 2023. "Until the end of 2023, the quality of our data may vary and there may be some data gaps" (BII).[266]

Data/System	Controls, audits, assurance
Commitment & Disbursement Data	BII's accounts are independently audited. Financial information was contained in the Commitments and Disbursements spreadsheets that were shared by BII with the evaluation team. In effect, this financial information has been audited.
DI Metrics	Data is collected from audited financial reports (where possible and appropriate), Quarterly Management Reports, Annual Monitoring Reports (including DI templates), S&P's Capital IQ, emails containing required data, and online websites. Data is quality checked by BII internal teams and is sometimes further clarified or verified by more online research or by contacting the investee.
DI RAG Ratings	DI RAG Ratings are an internal tool as a part of a holistic "early warning" system around risk of a given investment. Investments are rated by BII's DI specialists and reviewed with the internal management teams. These are an internal tool and there is no external oversight.
Impact Management System	The Impact Management System has undergone an independent third-party verification of the alignment of BII's impact management (IM) system with the Impact Principles. This has been conducted by BlueMark, a provider of independent impact verification and intelligence for the impact and sustainable investing market.
Impact Scores	Impact Scores are assured using a limited assurance approach using a third-party in accordance with the International Standard for Assurance Engagements (ISAE) 3000, the globally recognised assurance standard for audit and review of non-financial information, including impact disclosures. This assurance has been provided by EY.
Climate Mitigation and Adaptation Finance	The Common Principles for Climate Mitigation Finance Tracking consist of a set of definitions and guidelines and a list of eligible activities that allow for consistent accounting and reporting of financial flows for climate change mitigation finance.
Emissions	GHG emissions of an investee can either be reported, calculated or estimated. BII's attribution share in the investee is also calculated. These calculations use various approaches and include combining financial and impact data. There are a variety of escalating internal checks on the data. The emissions data culminates in BII's annual TCFD (Task Force on Climate-related Financial Disclosures) disclosures.

Data provided to British International Investment by its fund managers has not been audited or independently verified by British International Investment or any other third party.[267]

266 Visit bii.co.uk/en/data-guidance/.
267 Ibid.

Annex D

Detailed methodology

Table 3. Summarised description and analytical uses of commitment data and disbursement data

Investment amount data point	Description of data point	Analytical strengths/uses	Analytical shortcomings
Commitments	The investment thesis, instrument and amount that the BII IC approves to invest into a company or fund.	▸ Captures impact intentionality. ▸ Dataset includes investment decisions through 2022, and therefore it is possible to analyse 2022 investments against the recent 2022–26 technical strategy. ▸ Focuses on the direct and fund-level investments to assess the geographies and impact theses that BII is investing in.	▸ Reflects direct and fund-level investments only: underlying companies invested in through funds are not visible in this dataset. ▸ Does not reflect the full portfolio in terms of sectors and geographies because underlying investments are not visible.
Disbursements	The investment amounts and companies into which capital is actually deployed.	▸ Provides detailed view of all businesses invested in, directly and indirectly, allowing for analysis by sector and geography. ▸ Provides the true picture of what has been invested in and the actual amounts, as some commitments are cancelled or delayed, or disbursement amounts are less than commitment amounts. ▸ More closely linked to impact *achieved* (rather than intended at commitment stage) as impact cannot be achieved until funds are deployed.	▸ There is a time delay between commitment and disbursement, so more recent BII approved investments (2022) are not captured in the disbursement data set.

Details of process for compiling a single database of investments

The first step (identifying relevant commitments and investments) was done in conjunction with BII to ensure investments in scope for this evaluation and to agree on categorisation. Step 2 (reconciling the data) involved ensuring that the line items for each investment on each spreadsheet could be mapped onto one another and reconciling inconsistencies across the two spreadsheets, such as double counting or duplicate numbers for some investments, as well as resolving human error that occurred in transferring the data. Double counting could occur where there are multiple commitments to the same investment (by BII, through co-investments, or when multiple funds have invested in the same investee). The third step involved a categorisation effort classifying investments differently for use in the portfolio descriptive analysis and for the development impact analysis (please refer to Table 4 for details).

This process provided us with a single database of all commitments and disbursements that are within scope of this evaluation, appropriately classified.

Details of process of cleaning BII's DI metrics

BII provided the evaluation team with a Quality Controlled Development Impact Dataset, which provides data points against key DI metrics per investment (where available). Our approach to cleaning the Quality Controlled Development Impact Dataset involved excluding items that were listed in the data set template as exclusions (for employment, financial and sector metrics) and removing duplicates. Where we found duplicates (i.e. the same investee reporting multiple data points against the same metric):

- We used the data from BII direct investment reporting rather than reporting through a fund (for co-investments), where applicable.
- If this was not applicable, we used the most complete data available.
- If two entries were of comparable completeness, we excluded the one labelled as "Exclude from results – duplicate" in the data set provided.

The cleaned data from the Quality Controlled Development Impact Dataset was subsequently integrated into the master database of investments for analysis.

Details of our approach to managing investments that cross-cut sectors

Table 4. Summary of how types of investments are managed in the portfolio analysis and DI analysis is a summary of the types of investments that are categorised differently in the portfolio composition analysis and in the DI analysis, with the rationale for their categorisation.

Table 4. Summary of how types of investments are managed in the portfolio analysis and DI analysis

Types of investment	Rationale for inclusion in portfolio composition analysis	How these are integrated into the analysis of DI (and rationale)
Technology infrastructure (Direct & Funds)	These form part of the Technology portfolio.	Not included (they are included in a separate FCDO–BII evaluation of DI across the Infrastructure portfolio).
Financial services businesses and infrastructure investments that are invested in via multi-sector funds	These form part of the Consumer & Business Services portfolio.	Not included (they are included in separate FCDO–BII evaluations of DI across the Financial Institutions and Infrastructure portfolios).
Fintech businesses that are invested in directly	These form part of the Technology portfolio.	Analysed as part of the Digital Services portfolio.
Underlying investments of VC funds that have sector-specific impact	These form part of the Technology portfolio.	Analysed within the relevant sector portfolio (including against the relevant sector impact framework).
Private Equity Legacy funds	These form part of the ITS portfolio.	Not included (they are no longer managed within BII and are not aligned with its impact strategy from 2017

Data analytics

Process for collating the DI data set with the single data set of investments to create a master database

We compiled a master database integrating BII's datasets. Compiling the master database comprised three steps: (i) identifying the relevant ITS commitments and investments (and in some cases recategorising investments – for example, an investment via a multi-sector fund that had been categorised as services is an apparel manufacturer, so was recategorised);[268] (ii) reconciling the relevant data from various spreadsheets; and (iii) categorising the data appropriately to fit with our sectoral analysis. We also developed a process to ensure that we could screen out duplicate information (for example, when a single investee had been invested in by BII directly and via a fund and thus had job numbers reported twice).

Approach to data collation from individual investments

For each direct investment and each intermediated investment included in the sample, we reviewed the IC document to extract the overall DI thesis and the specific intended impacts of each investment. We also reviewed all quarterly impact reporting that was available for each direct investment, to extract all reported measures of achievement of DI against intended impact and targets, and we have used BII's own case studies and commissioned assessments where available and relevant. We extracted quantitative measures where they existed and complemented these with qualitative descriptions related to investment DI themes, outputs, outcomes and any impact achieved.[269]

For underlying investments, we reviewed all fund reports to extract all reported measures of achievement of specific investee companies within the fund, and in some cases referred to public documentation available on websites. For VC funds, we reviewed only the most recent fund report. We extracted quantitative data to the extent possible, as well as qualitative explanations of impact achieved.

Our use of 'jobs supported' data

We have analysed the jobs supported by investees in a given sector, using two methods. We used the BII DI data set to provide total figures of jobs supported, and jobs supported for women, for each sector portfolio.[270] We also extracted data points from IC papers and quarterly impact reporting that relate to the number of jobs that individual investees supported and the proportion that were filled by women.[271] We present both analyses – due to the fact that there are gaps in reporting numbers in the BII DI data set – in Section 5.

Our approach to managing investments that cross-cut sectors

There are investments that cross-cut sectors. For instance, pharmaceuticals manufacturing can deliver DI via impact pathways in both the health and manufacturing impact sector frameworks. We relied upon the original impact thesis in the IC paper to determine the sector to which to allocate the investment.

Differences between our calculations and BII's public reporting

Our aggregate calculations may differ from BII's reporting on figures related to ITS in their annual reports and in other publications. We were working with a specific scope and data set

[268] Our agreed approach was to use BII's own classifications; however, where we became aware of instances that required reclassification, we recategorised an investment accordingly.
[269] Where there were discrepancies on individual data points (at investment level) between the DI data extracted through this process and the DI data reported through the Quality Controlled Development Impact Dataset, we did not undertake to reconcile these differences.
[270] These figures include all (reporting) investees in the portfolio.
[271] These figures are reported at individual investee level and are extracted only from reporting completed by sampled investees.

(for example, BII also reports on pre-2012 investments, and our scope was 2012–22). We have classified a few investments differently based on our methodology (for example, some tech investments were classified as F&A as that sector impact framework was a more appropriate framework for measuring DI). The Evaluation Team were required to make assessments on inclusion or exclusion of specific data points in places based on relevance or apparent accuracy of data points. These decisions may differ from BII's judgment calls resulting in differences between our figures.

Ethics and inclusion

Itad's Ethics Principles and the Code of Conduct set the frame for policy and process to ensure that we conform to high ethical and moral standards. Itad's Ethics Principles set a standard of behaviour and practice to which all Itad staff and partners must adhere to when conducting monitoring and evaluation activities.[272] Itad's Ethics Principles align closely with *DFID Ethical Guidance for Research, Evaluation and Monitoring Activities* (2019), which sets out expectations on ethical principles and standards for FCDO-funded projects. Our policies and procedures comply with the ethical principles it sets out, including safeguarding in research standards.

Through the Ethics Principles and the Code of Conduct, Itad works impartially and with propriety, setting a standard of behaviour and practice and ensuring the safety and dignity of all team members, staff and beneficiaries with whom we engage through culturally sensitive and participatory approaches. In Phase 1 of this evaluation, we did not collect any primary data or engage with anyone outside BII and FCDO. Therefore, our consideration of ethics within Phase 1 is focused mostly on ensuring inclusion of BII and FCDO stakeholders, , managing conflict of interest (COI), and protecting confidentiality through secure data storage and protocols for sharing, using and archiving data.[273]

In Phase 1 of this evaluation, our inclusion of stakeholders has been limited to the inclusion of BII and FCDO stakeholders. We have engaged these groups throughout our analysis, as well as through an in-depth review process of our final report. Inclusion and equity are core principles for Itad's monitoring, evaluation and learning (MEL) work and we hope to apply these principles more fully in Phase 2 of the evaluation, where there will be greater opportunities for broader stakeholder and beneficiary engagement. During this phase, we will aim to understand power relations, different intersections of identity such as gender, age and disability, and other dimensions relevant to the context of specific in-depth studies, such as ethnicity, sexuality or class.

We can confirm that there is no COI to manage in our delivery of this evaluation. Itad has a COI policy and management principles to which we and our partners adhere.

Policy Statement: "Itad will minimise and avoid the potential for Conflict of Interest (COI) by managing the contract according to the following principles:

- Our first principle is to avoid COI**.** We will apply a **precautionary principle**, erring on the side of caution where there appears to be conflict.
- **Declaration of interest**: All subcontractors will be expected to self-declare any known actual or potential conflicts of interests at the earliest possible opportunity.
- The **principle of disclosing conflict of interest will cascade down** to individual consultants that Itad or our subcontractors propose, though a responsibility rests with the

[272] The principles cover independence and impartiality, doing no harm, voluntary participation, fair treatment of participants, confidentiality, informed consent, data protection and ownership of findings.
[273] The evaluation team adheres to nine Itad Ethical Principles: independence and impartiality of the researchers, avoiding harm; child protection; treatment of participants; voluntary participation; informed consent; ensuring confidentiality; data security; and sharing of findings. The final three are most applicable to the activities undertaken in Phase 1 of this evaluation, and therefore those are the principles that are focused on within this section.

consortium member to satisfy itself regarding consultants' eligibility.

- The principle of **transparency** will apply in all cases, particularly where there is doubt about the existence of COI. We will consult with the FCDO where there is uncertainty.
- Itad will undertake a **COI assessment** as a primary activity on any specific piece of work that arises through the contract. This will apply to subcontracting organisations and consultants, including those from the countries in which services are to be delivered.
- The FCDO will be able to have final say in adjudicating assessments of potential COI.
- All documentation and data shared with the evaluation team by BII will be treated as strictly confidential, in line with the non-disclosure agreement that each partner has in place with BII. BII will share documentation with us using their own Microsoft Teams channel."

Lastly, we have taken data management and confidentiality seriously throughout this evaluation and have worked closely with BII to ensure compliance. This is of particular importance for this evaluation, in which Itad has a responsibility to uphold commercial confidentiality, as well as protecting anonymity. For all documentation and data that the evaluation team produces, based on BII information, the team follows Itad's data protocols. Itad takes its approach to information security and general data protection regulation (GDPR) very seriously, ensuring all personal or sensitive information is adequately protected to industry recognised standards. Itad is certified with the government-backed Cyber Essentials scheme. This is based on international best practice, is risk-based and includes aspects such as physical security, staff awareness, data backup and GDPR. Itad Ltd is registered with the Information Commissioner in the UK as a 'data controller' in accordance with the provisions of the European General Data Protection Regulation and Data Protection Act. While actively working on documents, the evaluation team uses BII's Microsoft Teams channels, limiting access for external consultants only to the folders relevant to them, for secure collaboration.

All of Itad's policies and systems have been carefully designed to comply with international standards and the latest UK government terms and conditions (including on whistleblowing, safeguarding, anti-corruption, modern slavery, child protection, and the protection of vulnerable adults). As a minimum, Itad and its partners operate in accordance with international human rights conventions and covenants to which the UK is a signatory, also taking into account local and national laws. Itad is a proud signatory to the Ten Principles of the United Nations Global Compact in the areas of Human Rights, Labour, Environment and Anti-Corruption. Our policies on inclusion also uphold the development and humanitarian duties as per the Gender Act 2014 and are further guided by key strategies such as *DFID Strategic Vision for Gender Equality* (2018), the *UK National Action Plan on Women, Peace & Security 2018 - 2022* (2018) and *DFID's Strategy for Disability Inclusive Development 2018-23* (2018) to ensure that no one is left behind.

Annex E

ITS sector investments per strategy period diagrams

Figures 2–8 present the DI classification of investments as used in this evaluation. This does not always align with the internal classification at BII or how they were classified for the portfolio-level analysis. Specifically, Technology investments were analysed according to the most appropriate sector framework for the specific intended DI outcomes of the investment. Technology investments included in other sectors have been identified with icons relevant to each sector (for example, AgTech in F&A).

Figure 2. BII Food & Agriculture investments per strategy period

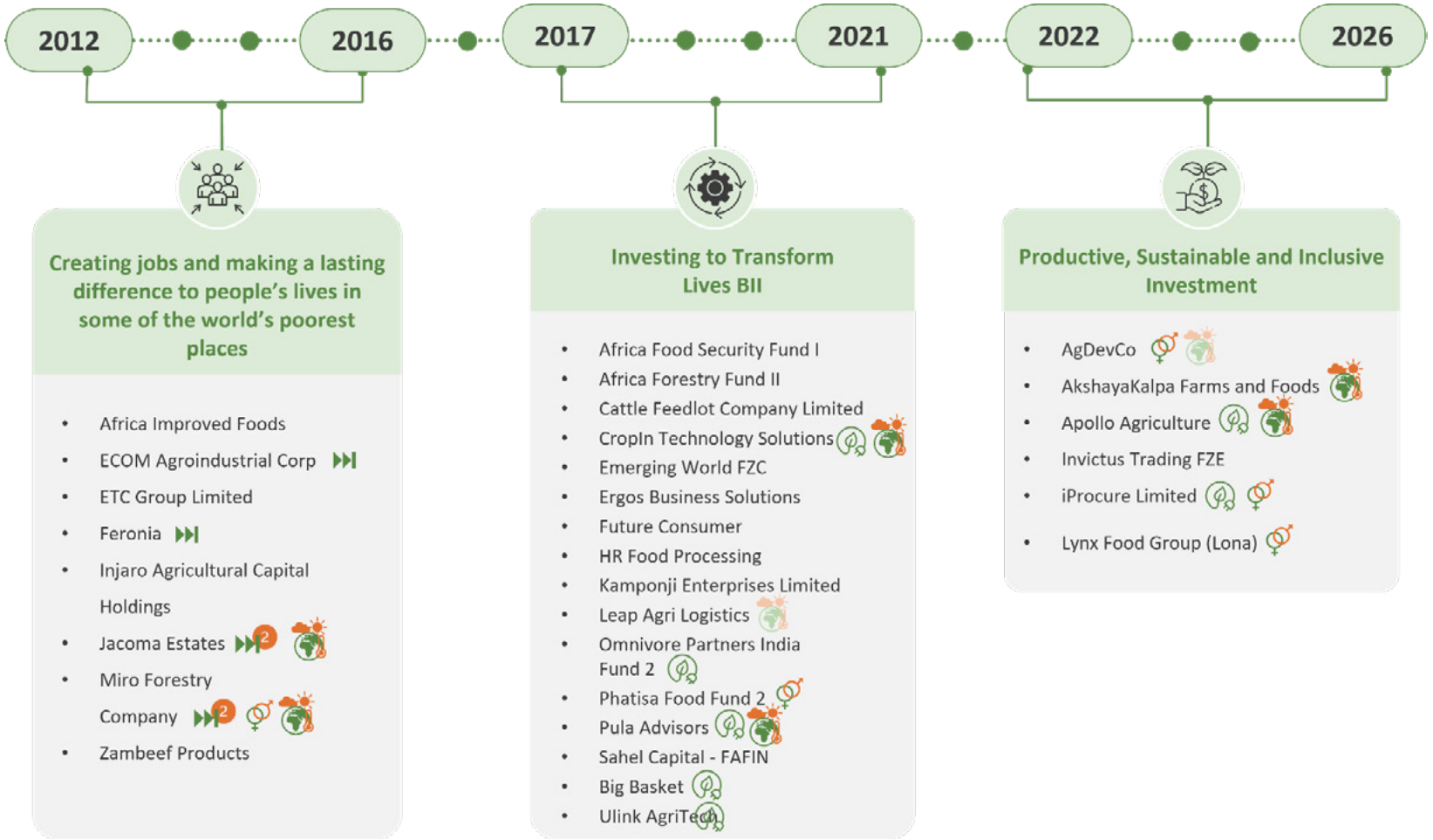


Figure 3. BII Manufacturing investments per strategy period

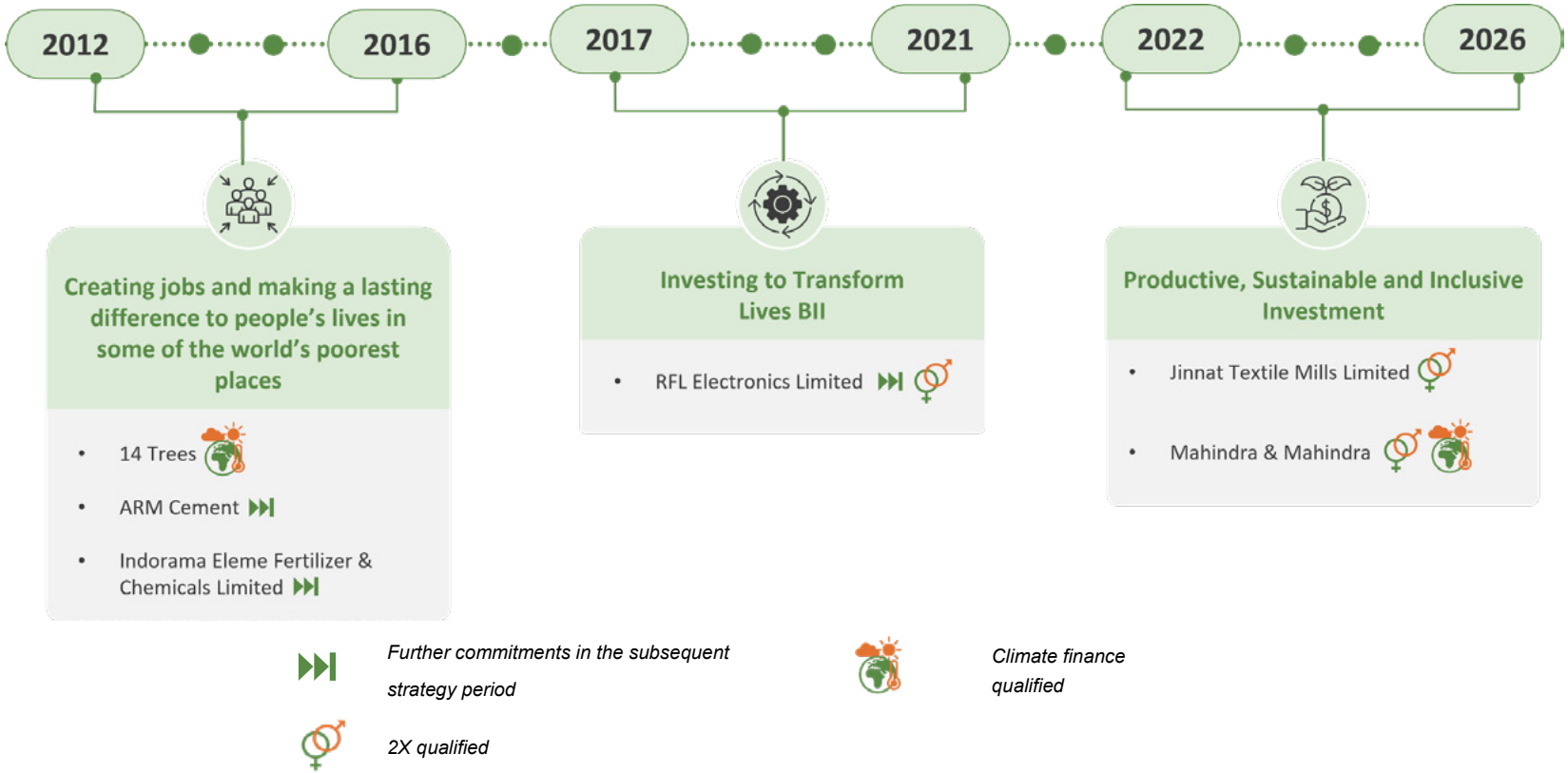


Figure 4. BII Digital Services investments by strategy period

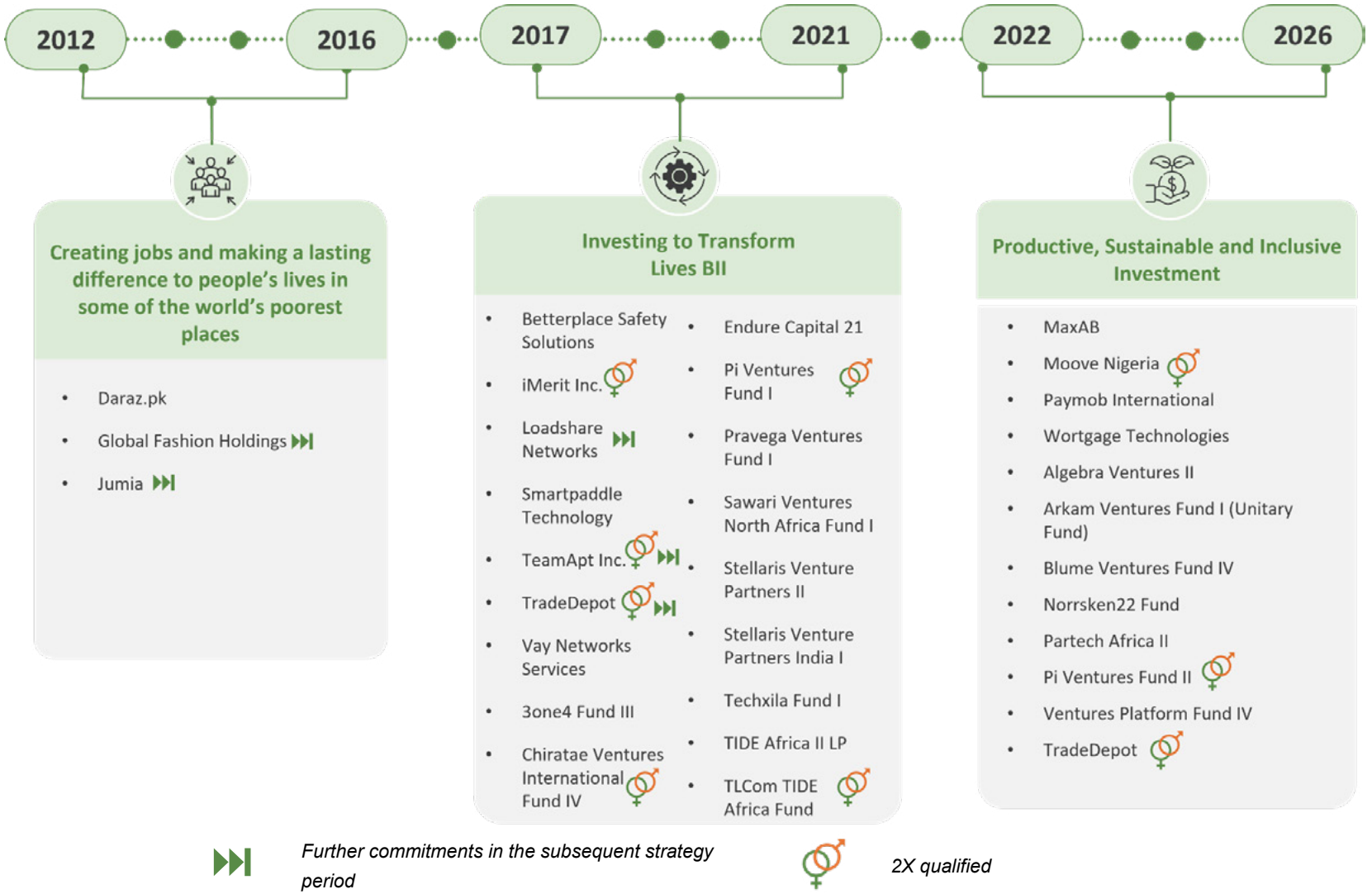


Figure 5. Consumer and Business Services investments by strategy period

Figure 6. BII Health investments per strategy period

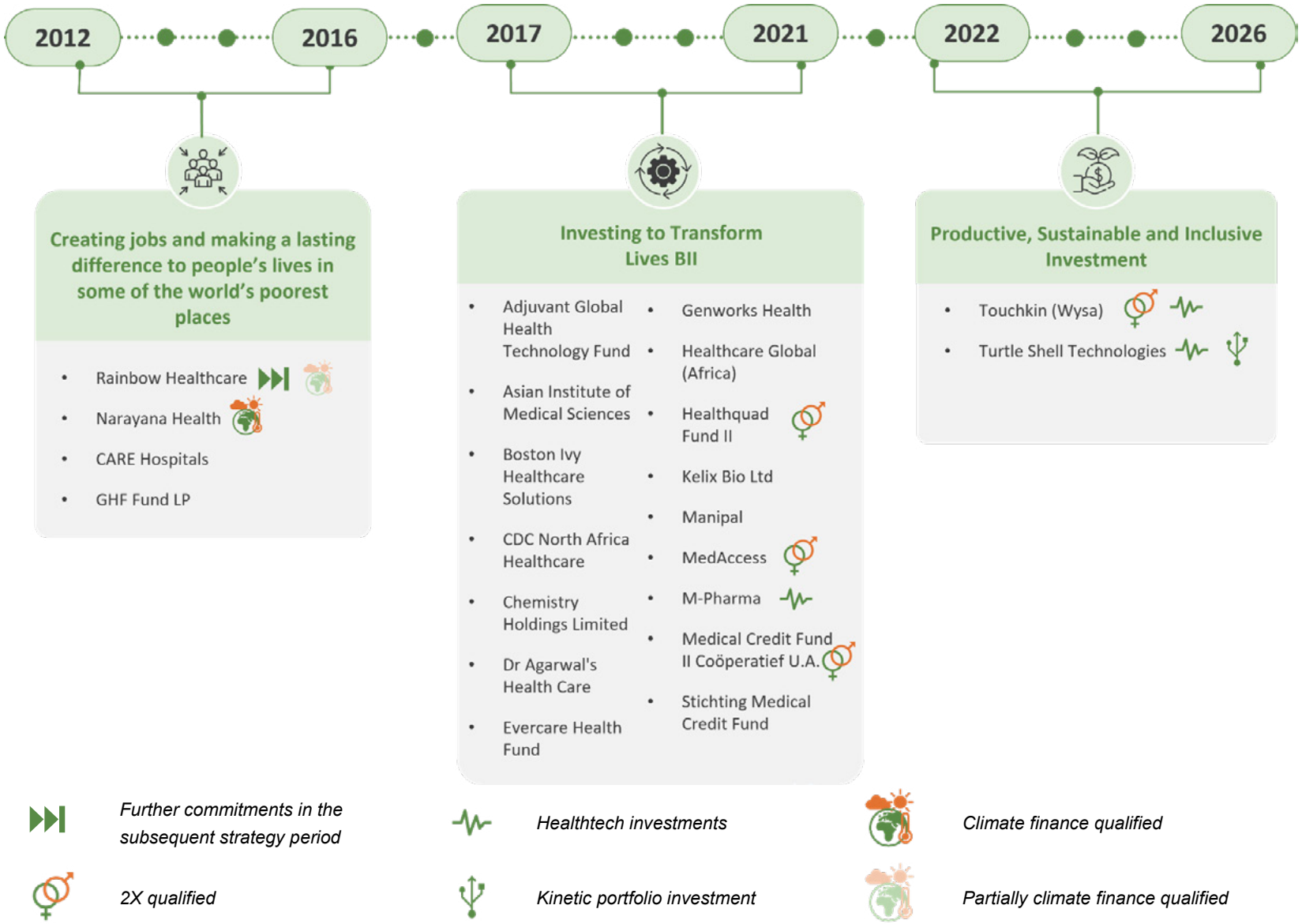


Figure 7. BII Education investments per strategy period

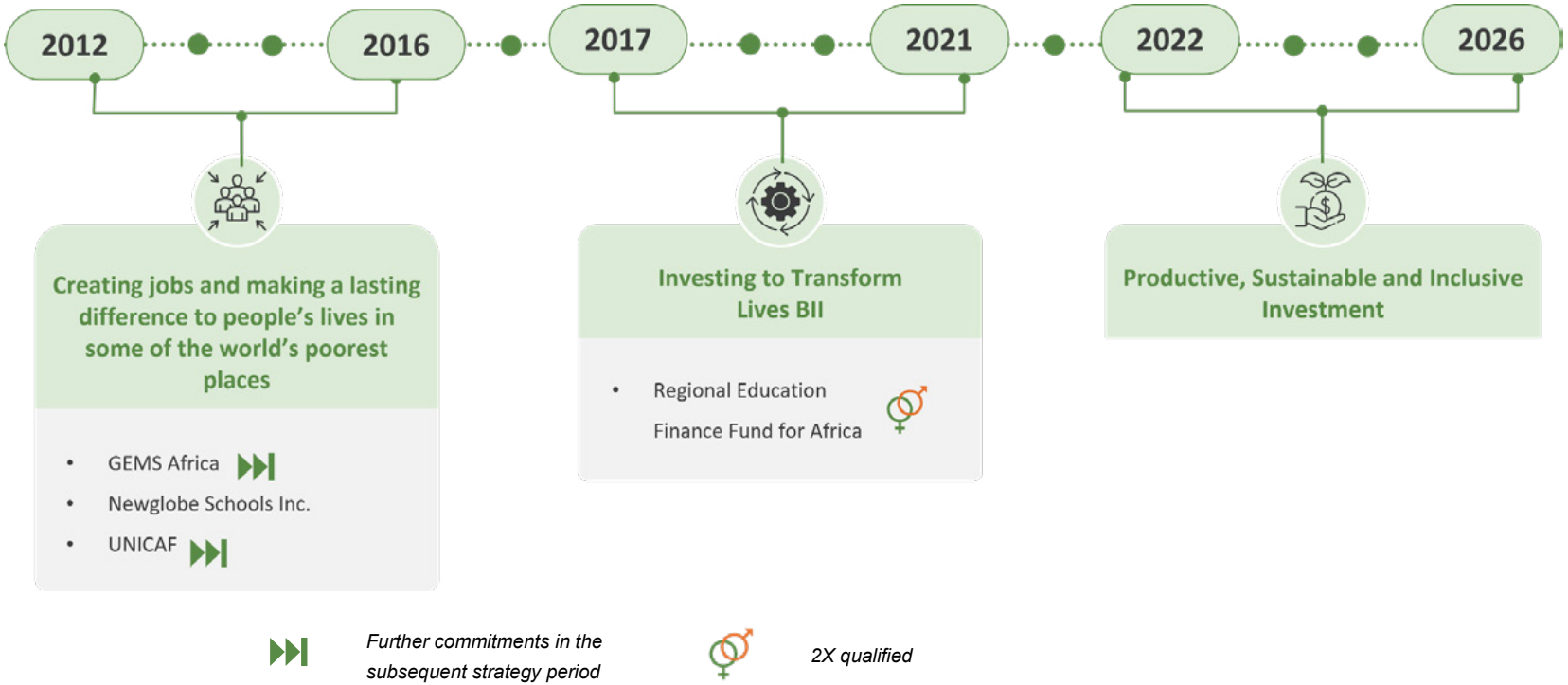
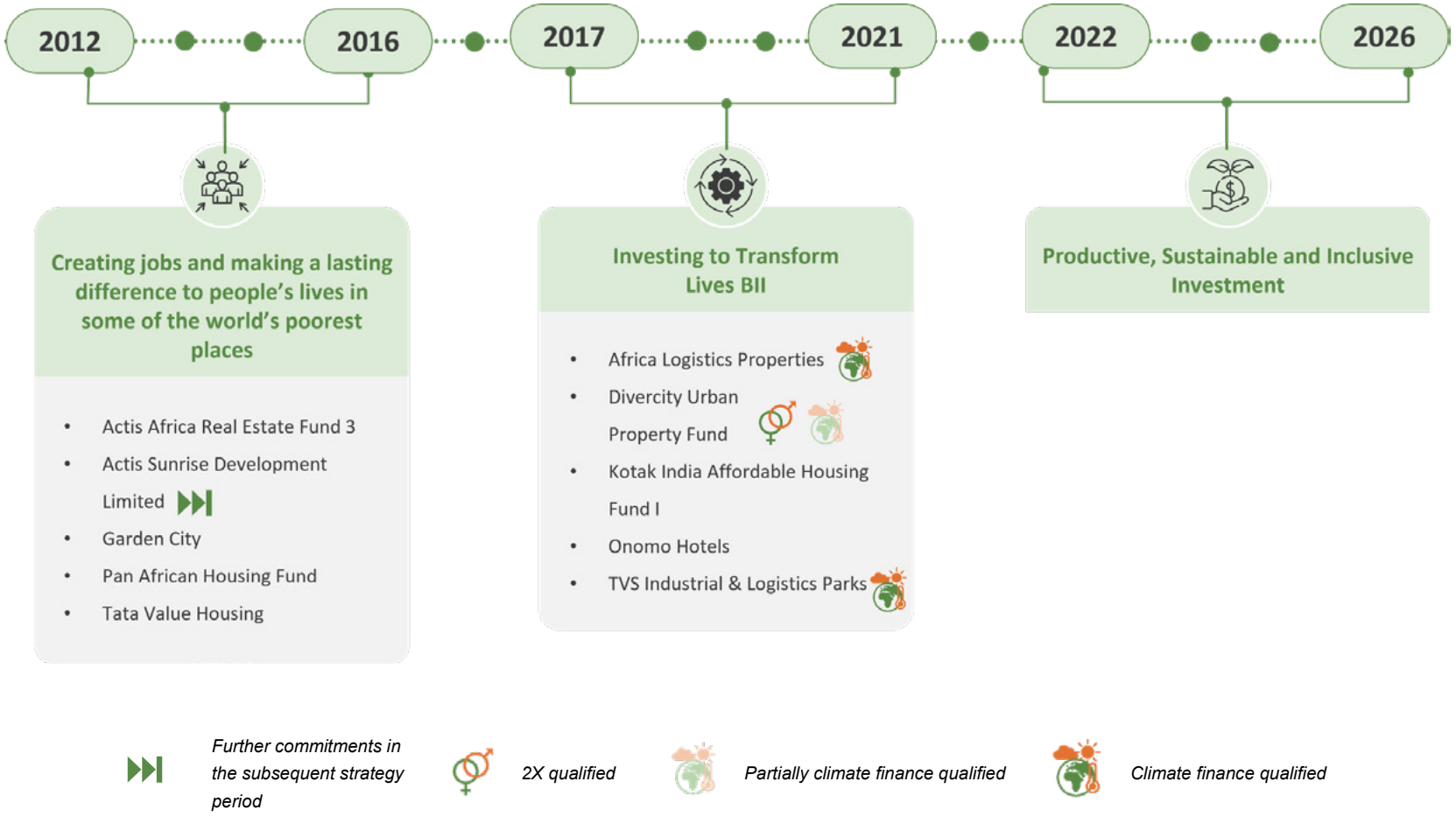


Figure 8. BII Construction and Real Estate investments per strategy period



Annex F

Stakeholder engagement

Stakeholders consulted

The evaluation team has engaged with BII colleagues to varying degrees throughout Phase 1 of the evaluation, depending on which topics colleagues could best provide inputs and feedback on, and when. Our main points of contact are members of the DI Evaluations team, with whom regular weekly catch-ups are scheduled and who manage communications between the evaluation team and other BII colleagues. They also play an important role in understanding the needs of the evaluation and identifying the appropriate BII staff members to liaise with.

Beyond our direct counterparts in the Evaluations team, we have also engaged more technically with investment colleagues within the Development Impact team to understand their processes and gain a deeper understanding of some of their investments. Moreover, we conducted impact workshops with directors and colleagues from each team representing a sector, to verify our initial findings and ask questions to understand decision-making and other details.

Lastly, our final report has gone through a lengthy review process, which has allowed BII colleagues at different levels to provide comments and fact-check our findings, which we have taken into account when revising the report.

The evaluation team also had the opportunity to present the emerging findings to the BII Steering Group as an initial touchpoint, providing them with an initial opportunity to give feedback. Steering Group Members are listed below.

Name	Role
Adnan Khan	FCDO Chief Economist, Chair of BII Steering Group
Alison Evans	Independent representative on BII Steering Group
Dan Wilcox (now replaced by Huw Lewis)	FCDO representative on BII Steering Group
Greg Fischer	Independent Representative on BII Steering Group
Liz Lloyd	BII Representative on BII Steering Group
Tavneet Suri	Independent representative on BII Steering Group

BII and FCDO were involved in regular meetings about both the content and the process of developing this report to inform, explain and help contextualise the data and findings. There were multiple reviews of drafts of this report by BII to dispute, validate, further inform and help contextualise the data and findings. There was also interim reporting and feedback from the FCDO–BII Evaluation and Learning Steering Group. We took all feedback into consideration into the analysis and presentation of findings but have interpreted the data and findings according to the methodologies outlined in the agreed-upon inception report. If there is any questioning of our interpretation or differences of opinion on the findings, BII has the right to respond through a management response to dispute any findings or recommendations contained herein.

Name	Role
Abhinav Sinha	Managing Director and Head of Technology and Telecoms
Adam Boros	Development Impact Manager (Fund investments)
Amelie Fabian	Development Impact Executive (Investments)
Aneese Lelijveld	Development Impact Manager (Evaluation)
Angus Elsby	Development Impact Associate (Evaluation)
Belinda Hurwitz	Manager, Green Manufacturing (no longer with BII)
Charles Groom	Director & Head of Forestry
Charlotte Davis	Development Impact Manager (Technology investments)
Chiranthan Patnaik	Venture Capital Director
Chris Woodruff	BII Development Impact Committee Chair
Clarisa de Franco	Managing Director and Head of Private Equity Funds
Clement Bisserbe	Development Impact Executive (Evaluation)
Dahlia Farahat	Executive, Manufacturing Agribusiness & Forestry
Dan Wilcox	FCDO – BII Senior Relationship Officer
Danni Cao	Manager, Consumer Services & Social Infrastructure
Dinesh Meel	Director, Consumer Services & Social Infrastructure
Eddie Dodd	BII SMART, Business Manager
Ellen Brookes	Climate Change Executive
Georges Vuong	Manager, Consumer Services & Social Infrastructure
Huma Yusuf	Business Integrity and Corporate Governance Director
Ilaria Benucci	Director of Construction and Real Estate (CRE)
John Owers	Director and Head of Funds Solutions
Kate Griffith	Head of Development Impact - Evaluations
Kavi Unadkat	Development Impact Executive (F&A and CRE investments)
Leandro Cuccioli	Director and Head of Consumer Services and Social Infrastructure
Liz Lloyd	Chief Impact Officer
Marie Gerbier	Executive, Private Debt (no longer with BII)
Nicholas Salway	FCDO BII M&E Oversight
Nikhil Chulani	Director, Private Debt
Paddy Carter	Director, Development Impact Research and Policy
Ragini Pillai	Gender & Diversity Finance Executive
Richard Palmer	Director of Private Debt
Rinchin Gaekwad	MEL Lead, BII Plus
Robert Borthwick	Environmental & Social Impact Manager
Rob Davies	Director of Development Impact (Investments)
Roman Frenkel	Director, Head of Food and Agriculture Equity
Roshni Patel	BII Plus Project Associate
Sakar Mawandia	Director, South Asia Manufacturing, Agribusiness & Forestry
Samir Abhyankar	Managing Director and Head of Manufacturing, Agribusiness and Forestry
Sara Taylor	Director and Head of PE Funds and Co-Investments
Sarah Marchand	Director, Capital Solutions
Sarah Mathies	Head of Sector Funds

Satish Chavva	Director and Head of South Asia
Simon Meier	Head of BII Plus
Sonal Premjee	Manager, Venture Capital
Sonia Jordan-Kirwan	Head of Gender and Diversity Finance
Ushnisha Ghosh	Development Impact Manager (Consumer investments)
Veronica Di Bella	Manager, Environmental & Social
Vineeth Menon	Development Impact Manager (South Asia investments)
Vipul Prakash	Managing Director & Head of ITS

Use and influence

In line with FCDO's commitment to transparency, this Phase 1 portfolio evaluation will be published. However, the primary audience at this stage is stakeholders within FCDO and BII. This is because the evaluation is at an interim stage, focused on the portfolio as a whole, and therefore the main lessons are for stakeholders within BII. For this reason, this evaluation report will be shared internally within BII to internalise and consider the recommendations in future strategic and operational decisions. Specifically, the report will be shared with BII's Board and Development subcommittee, Executive Committee, Investment Directors, and thematic leads in early 2024. FCDO will also host a learning session with relevant internal stakeholders.

For Phase 2, the focus will be on in-depth studies of investments in particular contexts, and a wider set of stakeholders will be engaged as part of a use and influence plan for the evaluation. This is likely to include investees, other DFIs and investors and in-country partners, amongst others.

We provide expert monitoring, evaluation, learning and strategy services to help build a more equitable and sustainable world for all.

itad.com **@ItadLtd** **Itad** **mail@itad.com**

Itad Ltd
International House
Queens Road
Brighton, BN1 3XE
United Kingdom
Tel: +44 (0)1273 765250

Itad Inc
c/o Open Gov Hub
1100 13th St NW, Suite 800
Washington, DC, 20005
United States