

CREATING HOPE IN CONFLICT:
A HUMANITARIAN GRAND CHALLENGE

DESCRIPTIVE PORTFOLIO ANALYSIS

JULY 2020



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INTRODUCTION

DESCRIPTIVE PORTFOLIO ANALYSIS

The purpose of this document is to analyze the Creating Hope in Conflict: a Humanitarian Grand Challenge (CHIC) portfolio of humanitarian innovations, in order to generate insight on the key descriptive characteristics of the portfolio. This analysis will inform the RFP design process for the round three funding cycle, which will be launched in September 2020, as well as serve as a point of reflection on and synthesis of the nature and type of CHIC investments in the space of humanitarian innovation.

To date, CHIC has identified and funded **52 innovations** in total - 46 Seed and 6 Transition to Scale - across four primary focus areas, aiming to improve conflict-affected community access to safe water and sanitation, health supplies and equipment, life-saving information, and energy.¹

Through the multi-sectoral innovation platform, CHIC aspires to improve and save lives of the most vulnerable people affected by humanitarian crises.

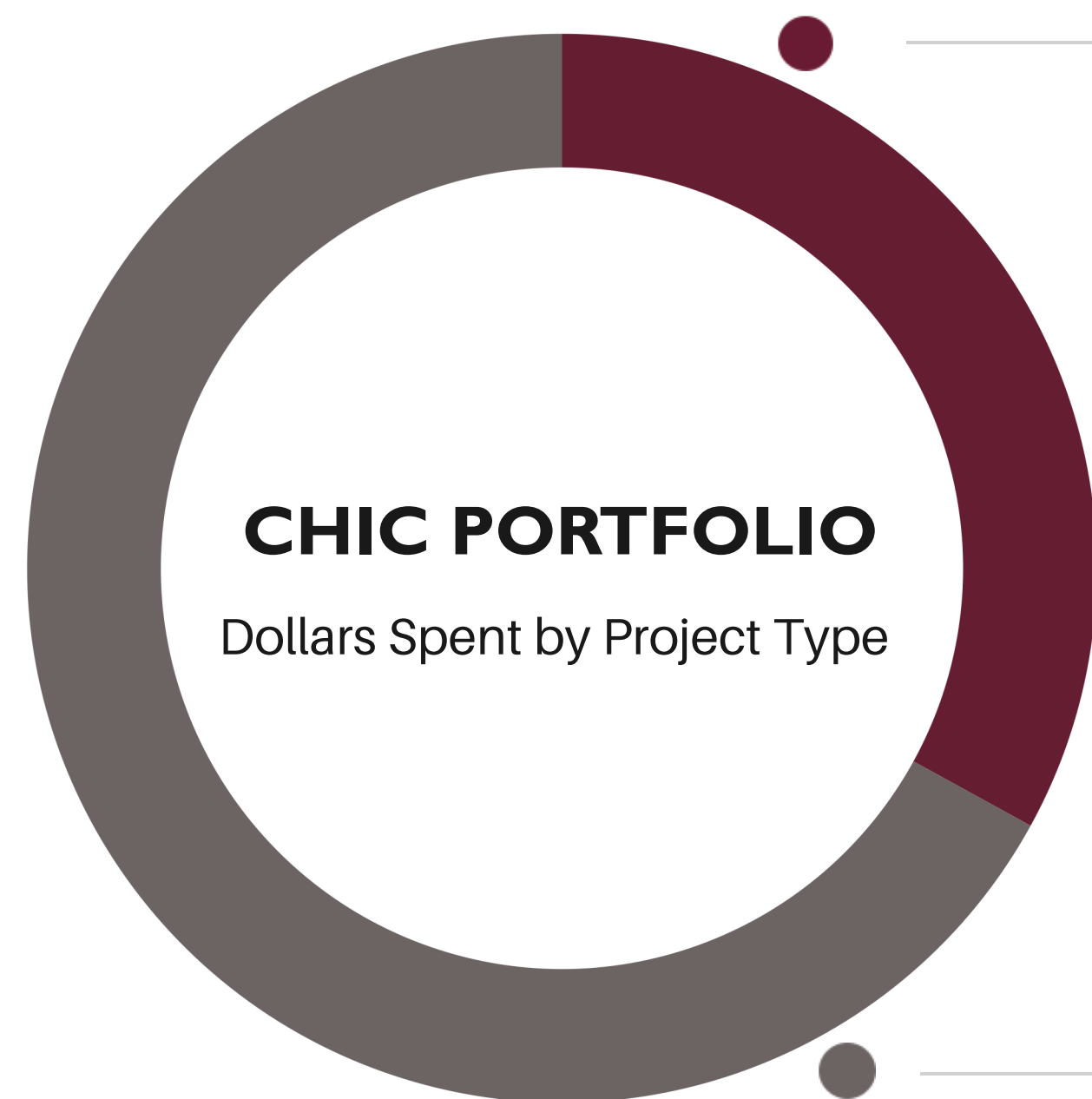
¹At the time of writing, some deals have yet to be signed as they are in the final stages of approval.

PORTFOLIO OVERVIEW

AN IDENTIFICATION AND ANALYSIS
OF THE PORTFOLIO'S BROAD
CHARACTERISTICS

PROJECT STAGE

Dollars Spent: By Project Type²



33%

TRANSITION TO SCALE

\$5,550,000 (USD)

6 TTS Projects Funded

67%

PROOF OF CONCEPT

\$11,500,000 (USD)

46 Seed Projects Funded

Since 2019, CHIC has funded **52 innovative solutions** to address the needs of the most vulnerable populations in conflict-affected communities.

In total, **46 Seed** and **6 TTS** innovations have been selected for funding.

- During round one, 22 Seed projects were funded.
- During round two, an additional 24 Seed innovations were selected and are in the final stages of approval for funding.
- To date, 3 TTS innovations have been awarded funding, and 3 are in the final stages of approval for funding.
- An additional 3 Covid-19 related TTS deals have been identified but are not included in this analysis.

TTS innovations comprise 33% (\$5.5M USD) of overall dollars invested.

² This chart illustrates the portfolio in terms of dollars spent on each project type, rather than number of projects within each Seed and TTS project types.

SECTORAL DISTRIBUTION

Dollars Spent: By Sector³



Across the portfolio, the highest investments - in terms of dollars spent - are directed towards innovations in the Life-Saving Information (\$5.8M) and Health (\$5.75M) sectors. Energy (\$3.2M) and WASH (\$2.2M) are the least invested sectors.

³ This chart illustrates the portfolio in terms of dollars spent within each sector, rather than number of projects across the sectors.

SECTORAL DISTRIBUTION

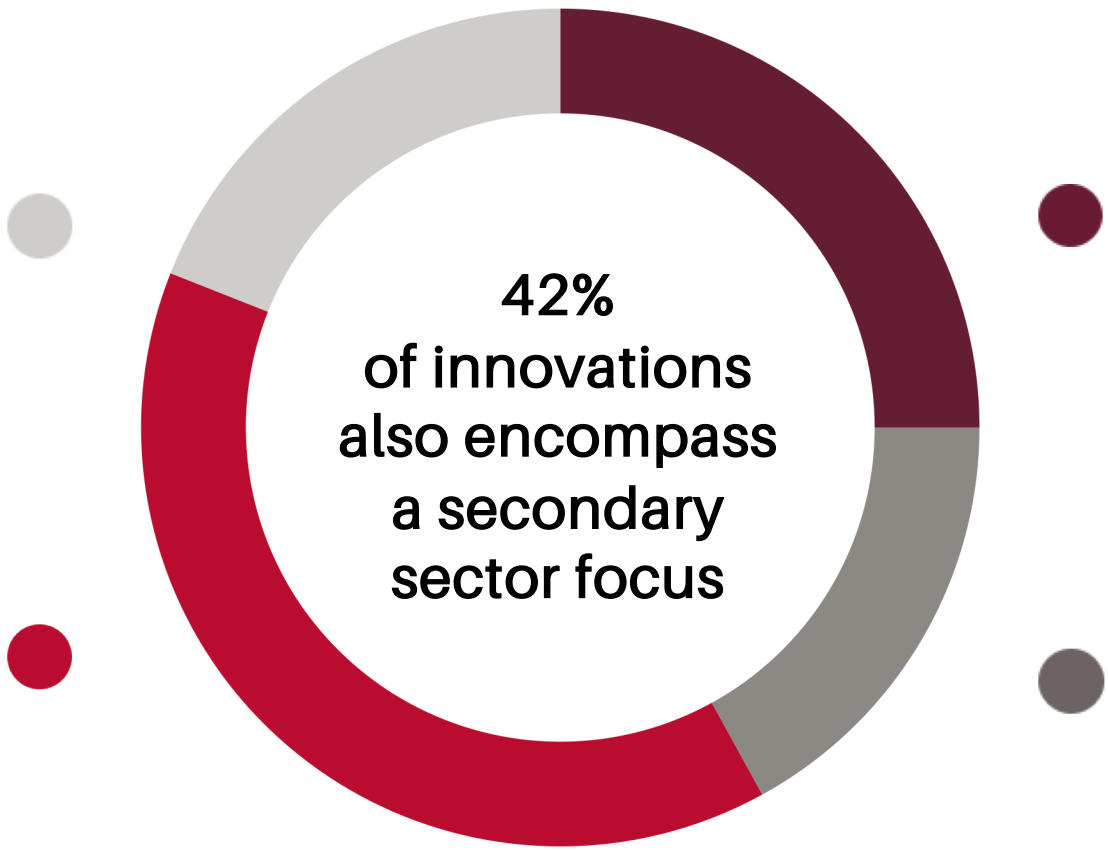
Number of Projects: By Primary Sector⁴

17%
WASH

9 Projects Funded
\$2,250,000 (USD)

25%
LIFE SAVING INFORMATION

13 Projects Funded
\$5,800,000 (USD)



39%
HEALTH

20 Projects Funded
\$5,750,000 (USD)

19%
ENERGY

10 Projects Funded
\$3,250,000 (USD)

Sectoral distribution of the portfolio reflects the primary sector addressed through the innovation. Sixty-three percent of innovations are classified within either the Health (39%) or Life-saving information (25%) sectors. Although 39% of innovations primarily address health sector needs, in terms of dollars spent, Life-Saving Information and Health sectors each comprise 34% of the portfolio's overall spending.

In terms of the 42% (22 projects) of innovations that encompass a secondary or multiple sector focus, combined, 46% of multi-sector innovations also address Protection or Energy related needs.

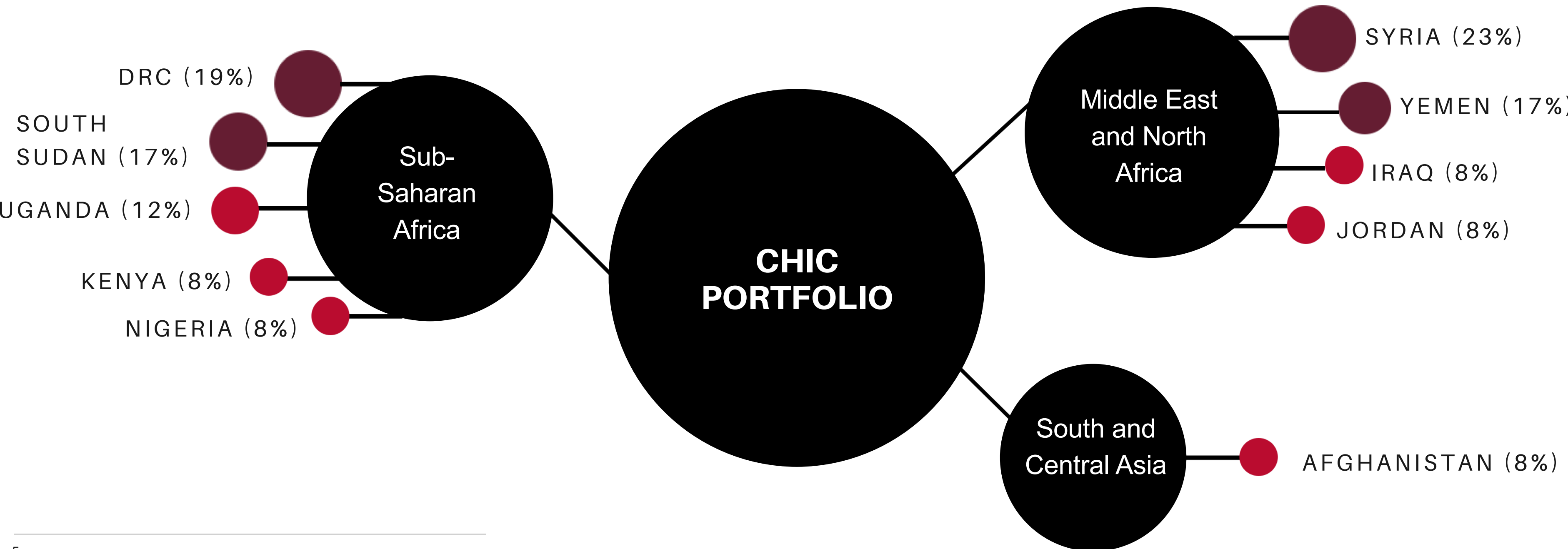
⁴ This chart illustrates the portfolio in terms of the number of projects funded within each sector, rather than the overall investment of dollars spent across the sectors.

CHIC PORTFOLIO

Top 10 Countries of Implementation⁵

CONFLICT AFFECTED/HOST COUNTRY

TOP 4 IMPLEMENTATION COUNTRIES
IN ACTIVE CONFLICT REGIONS

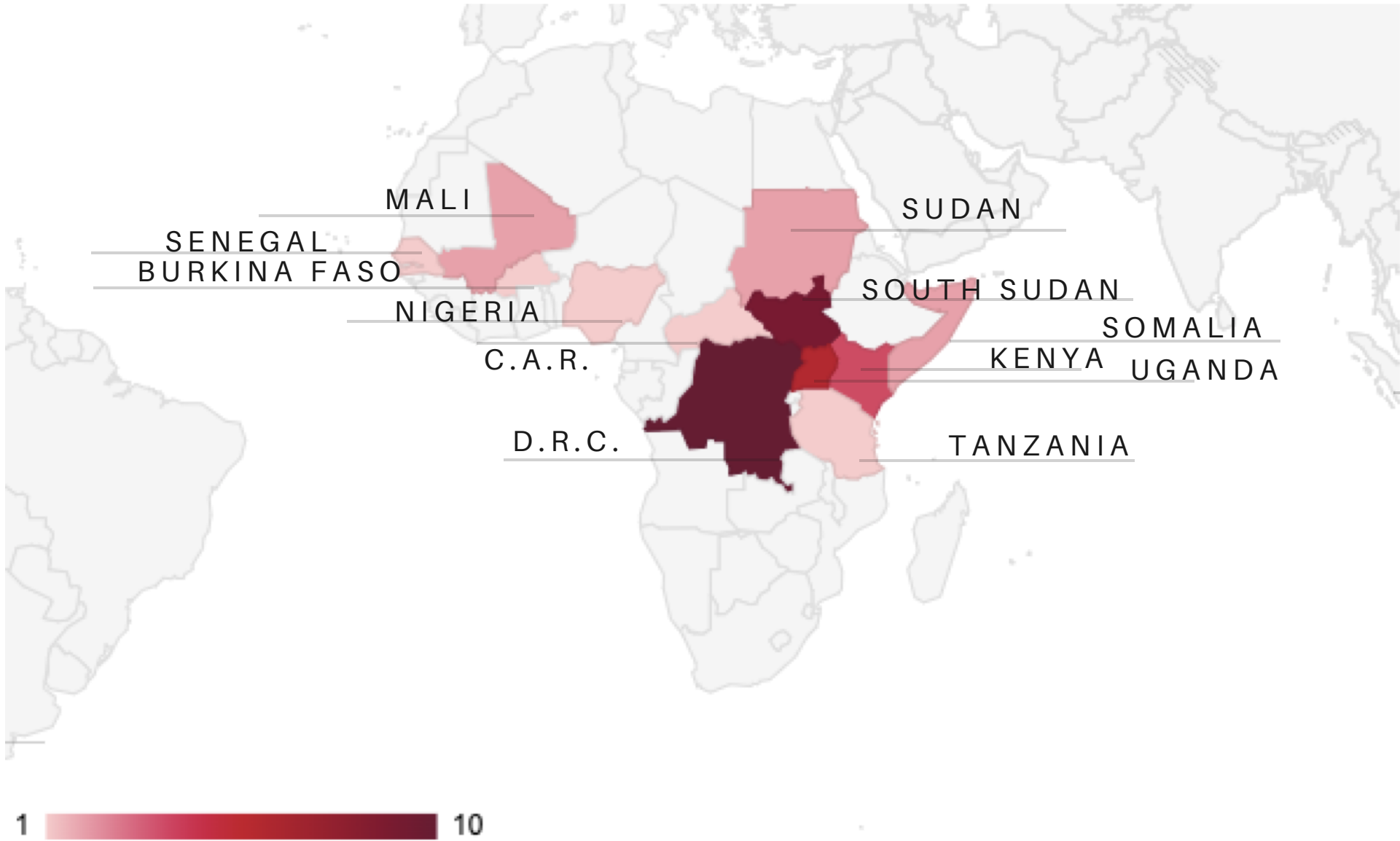


⁵ Many projects in the portfolio are implemented across multiple countries, so percentages will not equal 100%.

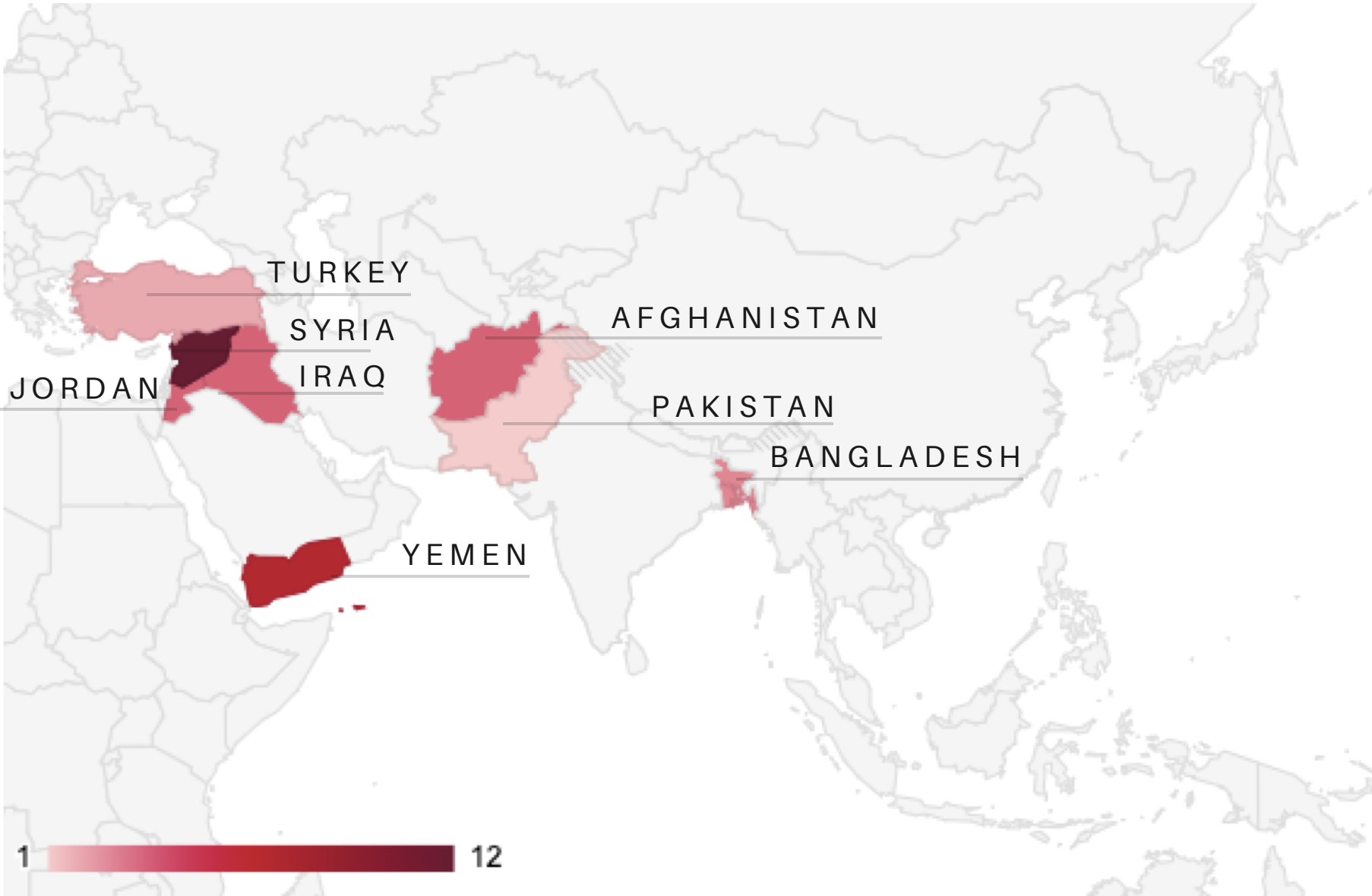
CHIC PORTFOLIO

Countries of Implementation

AFRICA

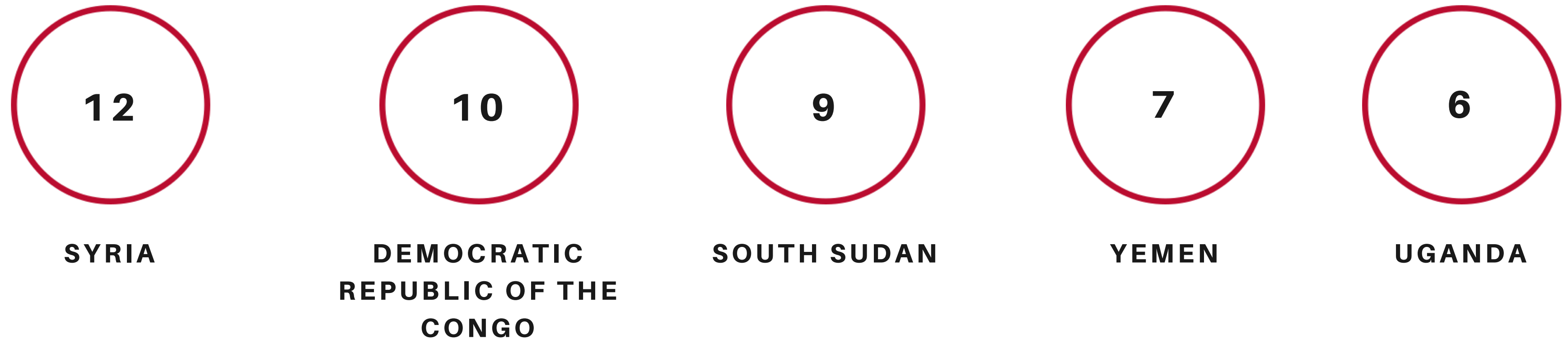


MIDDLE EAST & ASIA



TOP FIVE COUNTRIES OF IMPLEMENTATION

Number of Projects⁶



According to UN OCHA statistics, Syria and Yemen are currently system-wide Level 3 responses, making them the two most complex and challenging humanitarian emergencies. In Democratic Republic of the Congo, an estimated 12.8 million people require humanitarian assistance, which comprises 10% of the global humanitarian caseload. In South Sudan, two thirds of the population, an estimated 7 million people, still require humanitarian assistance. Uganda, the location of 12% of CHIC innovations, currently hosts the largest refugee crisis in Africa.

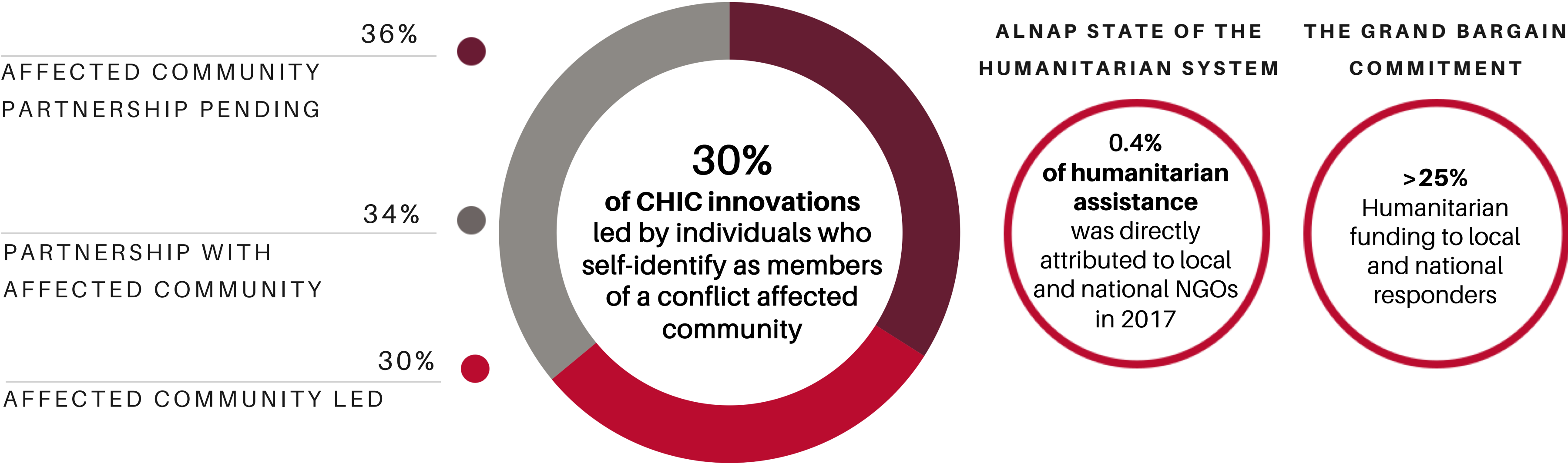
⁶ Many projects in the portfolio are implemented across multiple countries, so number of projects will not equal 100% of total projects

INNOVATOR PROFILES

AN ANALYSIS OF THE TYPE AND
COMPOSITION OF INNOVATOR
TEAMS

CHIC PORTFOLIO

Connection to Conflict Affected Communities

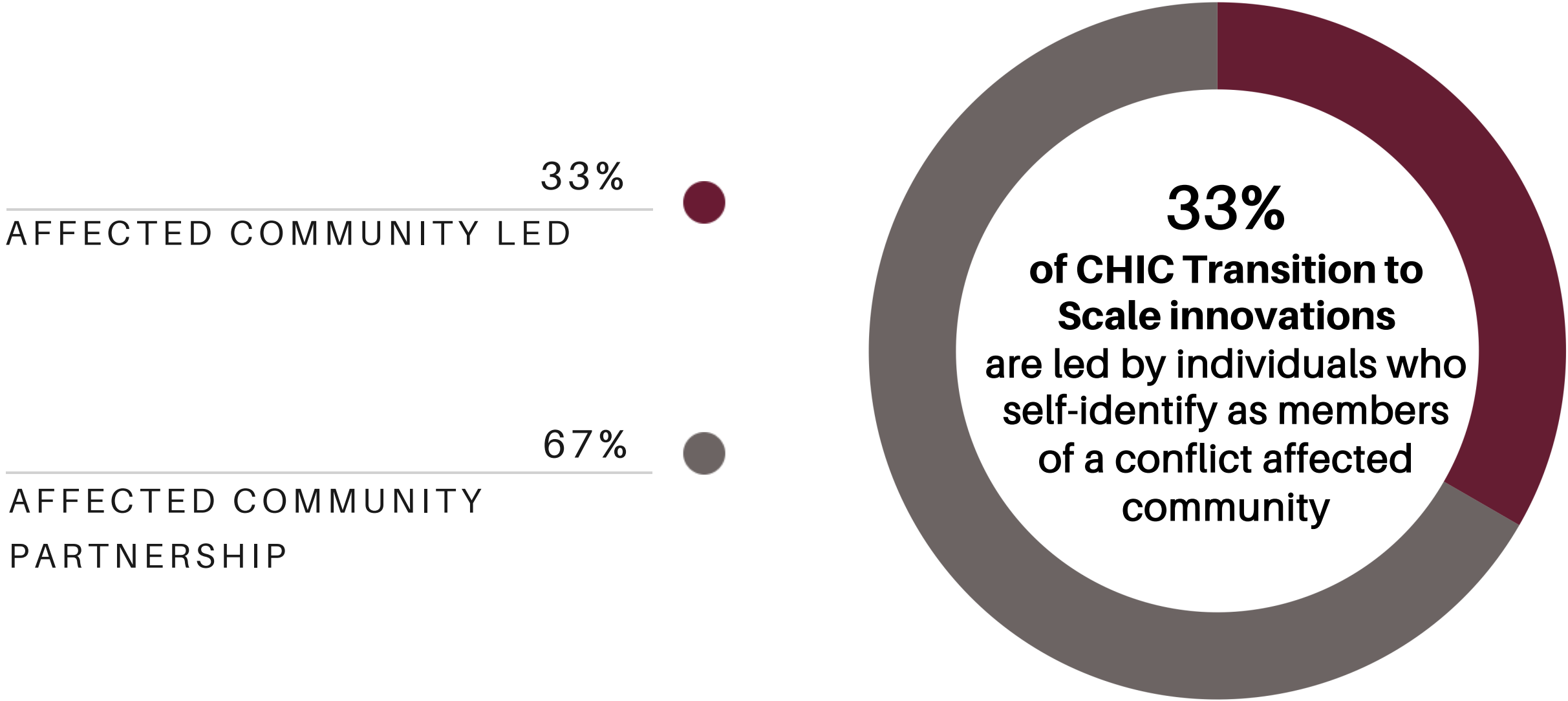


The CHIC portfolio emphasizes the importance of locally-developed solutions and several of the teams are led by local organizations and/or individuals from conflict affected communities.

Thirty percent of innovations are led by individuals who self-identify as members of conflict affected communities. At the time of application, 34% of innovations had secured valuable partnerships with affected communities/organizations.

CHIC PORTFOLIO

Connection to Conflict Affected Communities:TTS Projects



Thirty-three percent (2 of 6) of Transition to Scale innovations are led by individuals who self-identify as members of conflict affected communities. The remaining Transition to Scale innovations have secured valuable partnerships with affected communities/organizations.

CHIC PORTFOLIO

Innovator Type

19%

ACADEMIC INSTITUTION

Examples include:

- Johns Hopkins University
- Griffith University
- York University
- SUNY Korea

37%

NON-PROFIT ORGANIZATION

Examples include:

- Translators without Borders
- Norwegian Refugee Council
- Rainmaker Organization for Sustainable Development
- Watan Foundation



44%

PRIVATE SECTOR

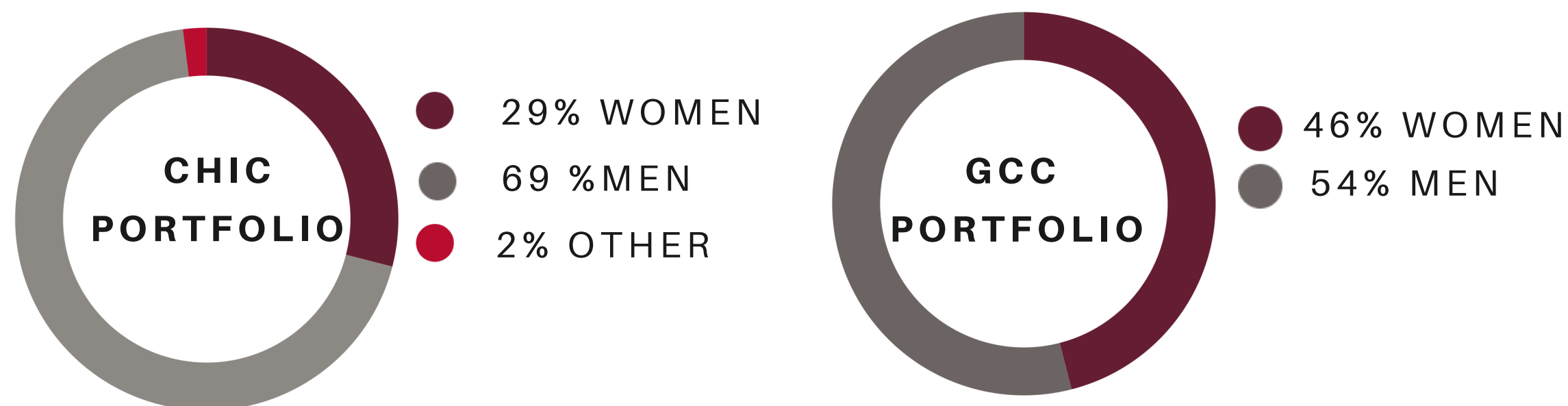
Examples include:

- SurgiBox Inc.
- Change: WATER Labs
- Kobo Inc.
- Avigo Health LLC

The portfolio of innovators comprises a variety of entities, with private sector companies (including social enterprises) among the most represented at **44%**.

CHIC PORTFOLIO

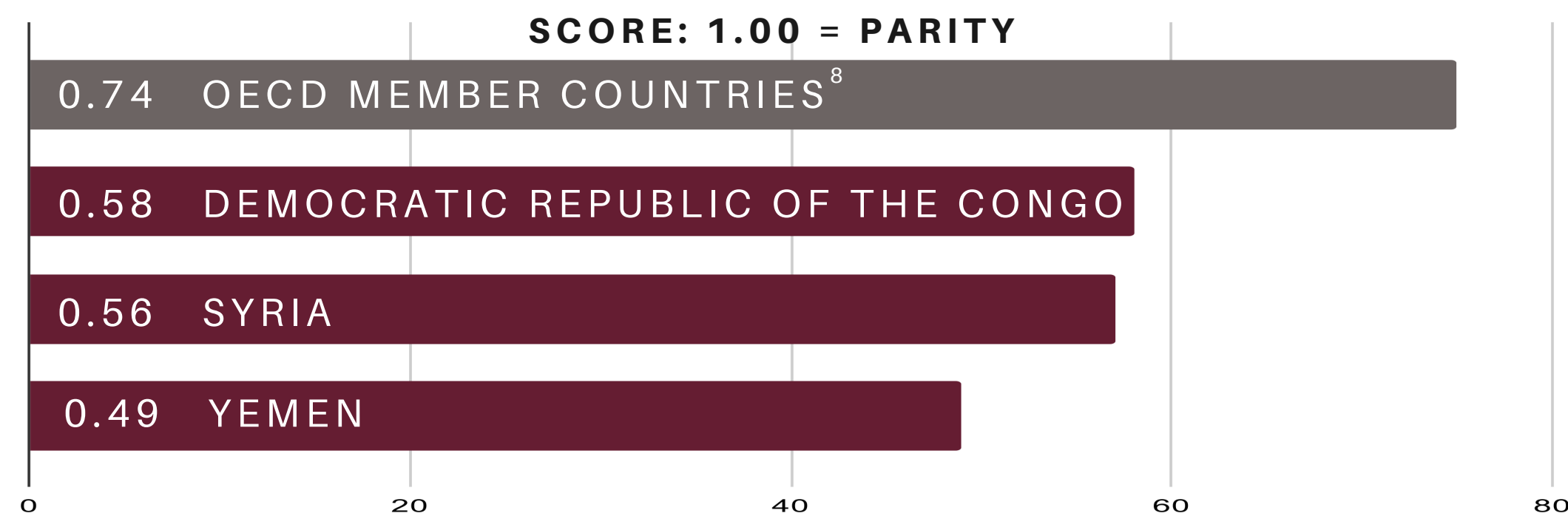
Gender Equity: Women-led Teams



The CHIC program strives to encourage and fund women-led innovations through targeted outreach and regional engagement.

Cumulatively, **29% of CHIC innovations are led by individuals who identify as women.** In terms of comparison, 46% of innovations from the broader GCC portfolio are women-led.

GLOBAL GENDER GAP SCORE 2018: WORLD ECONOMIC FORUM



Within the broader humanitarian sector, women continue to have limited access to leadership positions.⁷

Regionally, according to the World Economic Forum's 2018 Global Gender Gap, Yemen, Syria and the Democratic Republic of Congo (three of CHIC's top five countries of implementation) are among the lowest ranking countries in women's economic participation and opportunity.

⁷ Source: <https://humanitarianadvisorygroup.org/women-in-humanitarian-leadership-where-are-they/>

⁸ This score represents the average score of all OECD member countries

KEY SECTOR FEATURES

AN ANALYSIS AND IDENTIFICATION OF KEY
FEATURES THAT CHIC'S INNOVATION
PORTFOLIO ADDRESS ACROSS EACH SECTOR

LIFE SAVING INFORMATION

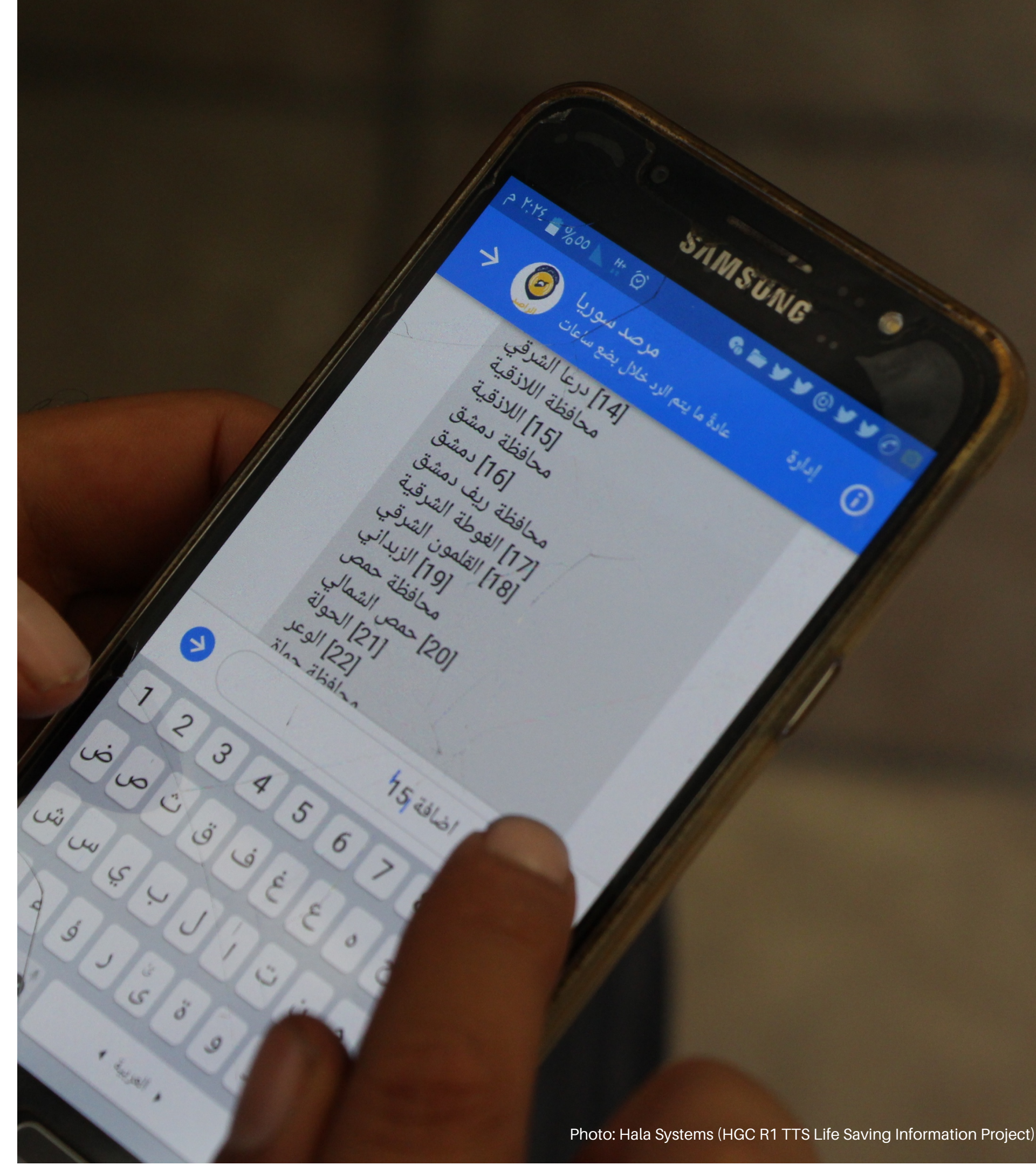
Data collection tools are a recurring trend across this sector. Solutions include:

- Qualitative research tools
- Chatbots to better identify community needs
- Forecasting, mapping and/or modelling tools.

Critical information resources feature within this sector. Solutions include:

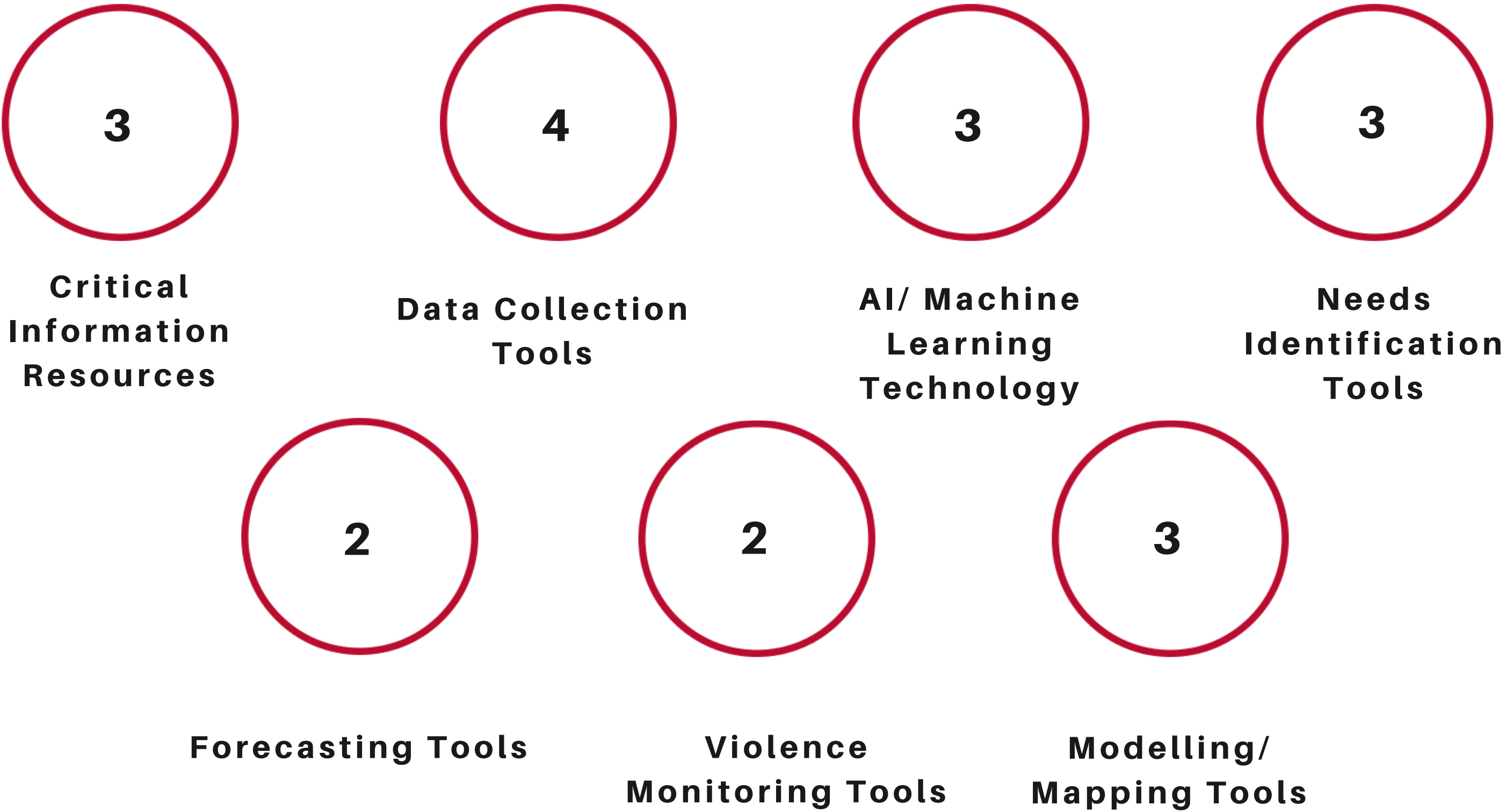
- Early warning system
- Misinformation management system,
- Dynamic legal digital content.

Artificial intelligence and blockchain technologies are being integrated to enhance violence monitoring and forecasting tools.



LIFE SAVING INFORMATION INNOVATIONS

Sub-Portfolio Key Themes: Number of Projects⁹



⁹ Projects in the portfolio may address multiple sub-portfolio key themes, so number of projects will not equal 100% of total projects



HEALTH

Digital health solutions feature within this sector.

Solutions include:

- Telehealth platforms
- Mobile health platforms
- Diagnostic tools.

Technical capacity building of frontline healthcare providers is a key theme in the sector. Solutions incorporate the provision of training to:

- Fill essential primary care, specialist and mental health service gaps by training community health providers
- Effectively and safely use novel technologies such as: diagnostic tools, wound care treatments, malnutrition detection and disease management tools.

HEALTH

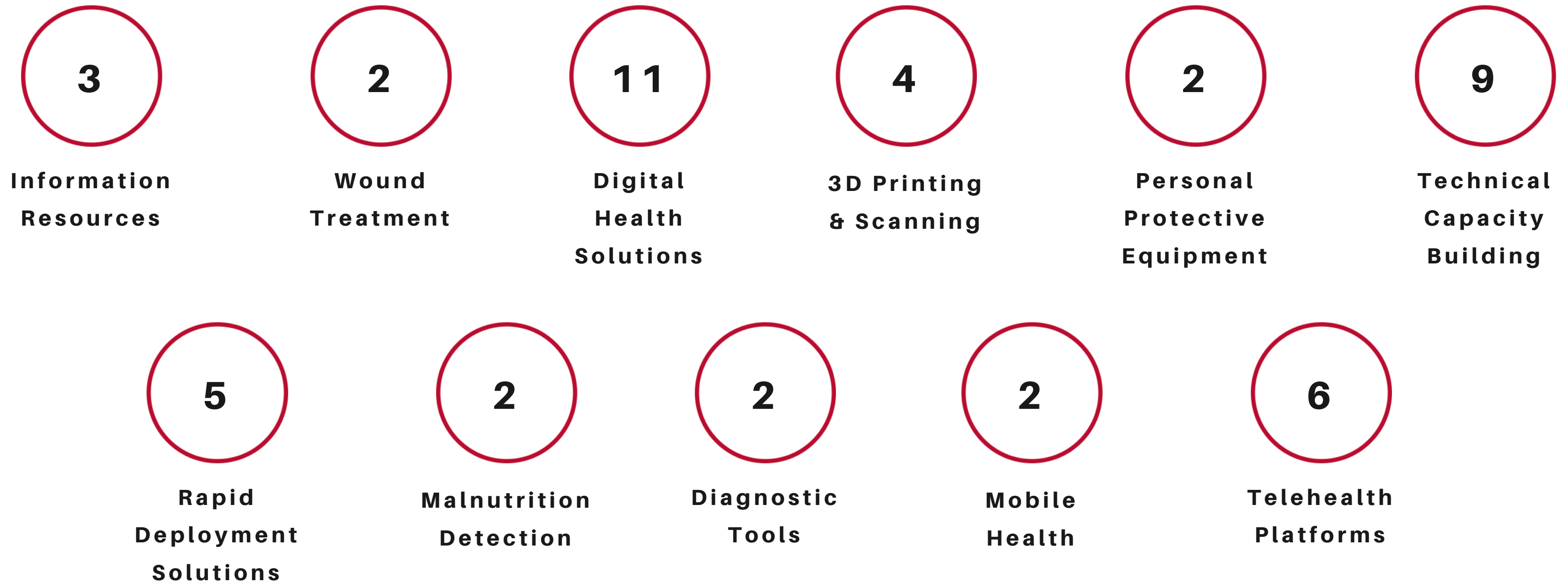
3D printing/scanning innovations also feature within the sector. Solutions include:

- Local production of cost-effective assistive devices for uneven terrains
- Child body measurements
- Lower body prosthetics.



HEALTH INNOVATIONS

Sub-Portfolio Key Themes: Number of Projects¹⁰



¹⁰ Projects in the portfolio may address multiple sub-portfolio key themes, so number of projects will not equal 100% of total projects



ENERGY

Climate smart technologies are a recurring trend in 60% of innovations across the Energy sector.

Solutions include:

- Solar powered energy solutions
- Portable energy systems.

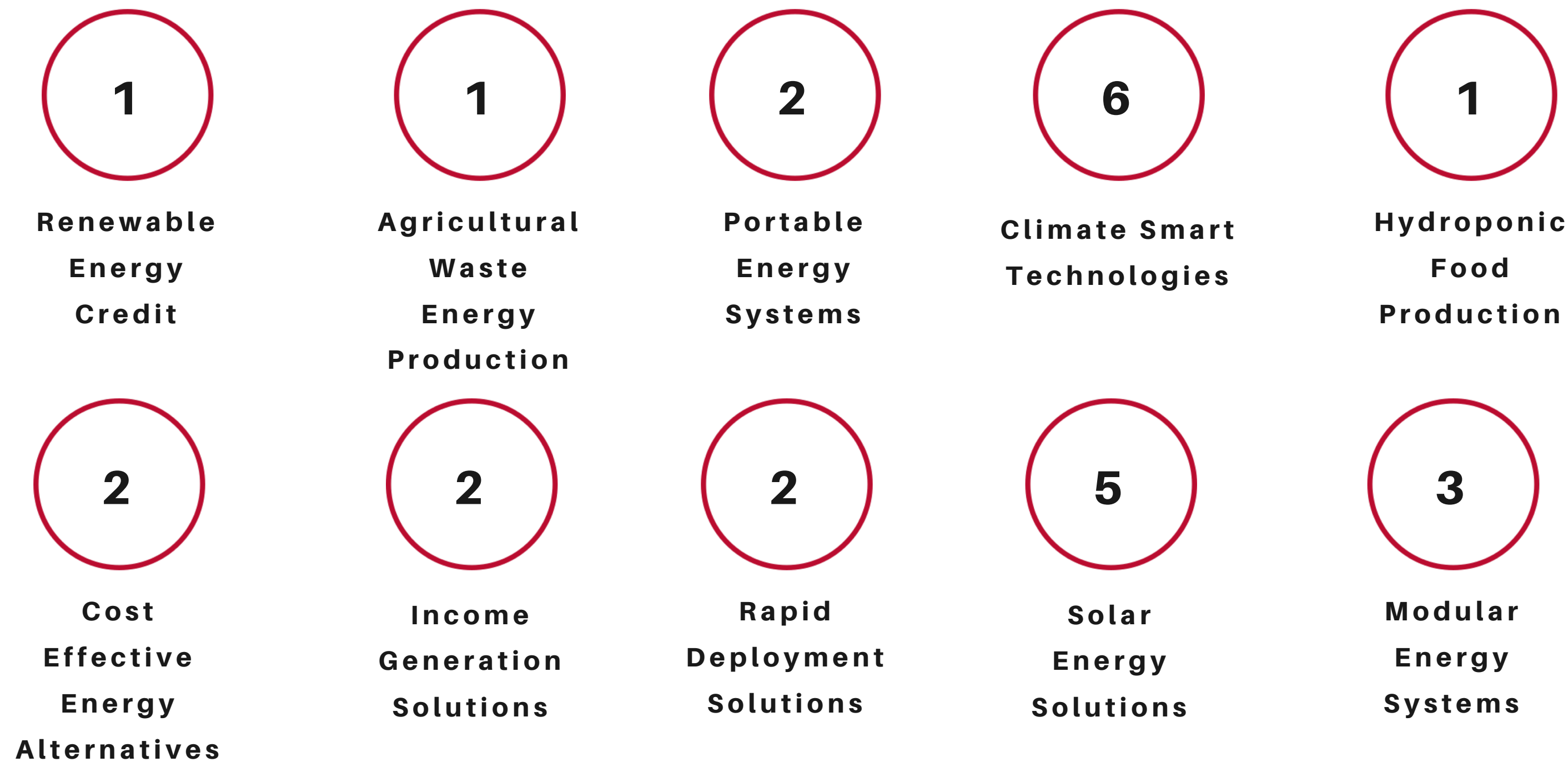
Modular energy systems feature in the sector.

Solutions include:

- Battery module filled with locally-sourced, refurbished car batteries
- Swarm grids.

ENERGY INNOVATIONS

Sub-Portfolio Key Themes: Number of Projects¹¹



¹¹ Projects in the portfolio may address multiple sub-portfolio key themes, so number of projects will not equal 100% of total projects

WATER, SANITATION & HYGIENE (WASH)

Human waste management products feature in the sector. Solutions include:

- Pre-fabricated, foldable membrane septic tank
- Pit latrine liners
- Portable, evaporative toilets.

Solar energy powered water treatment systems feature in the sector.

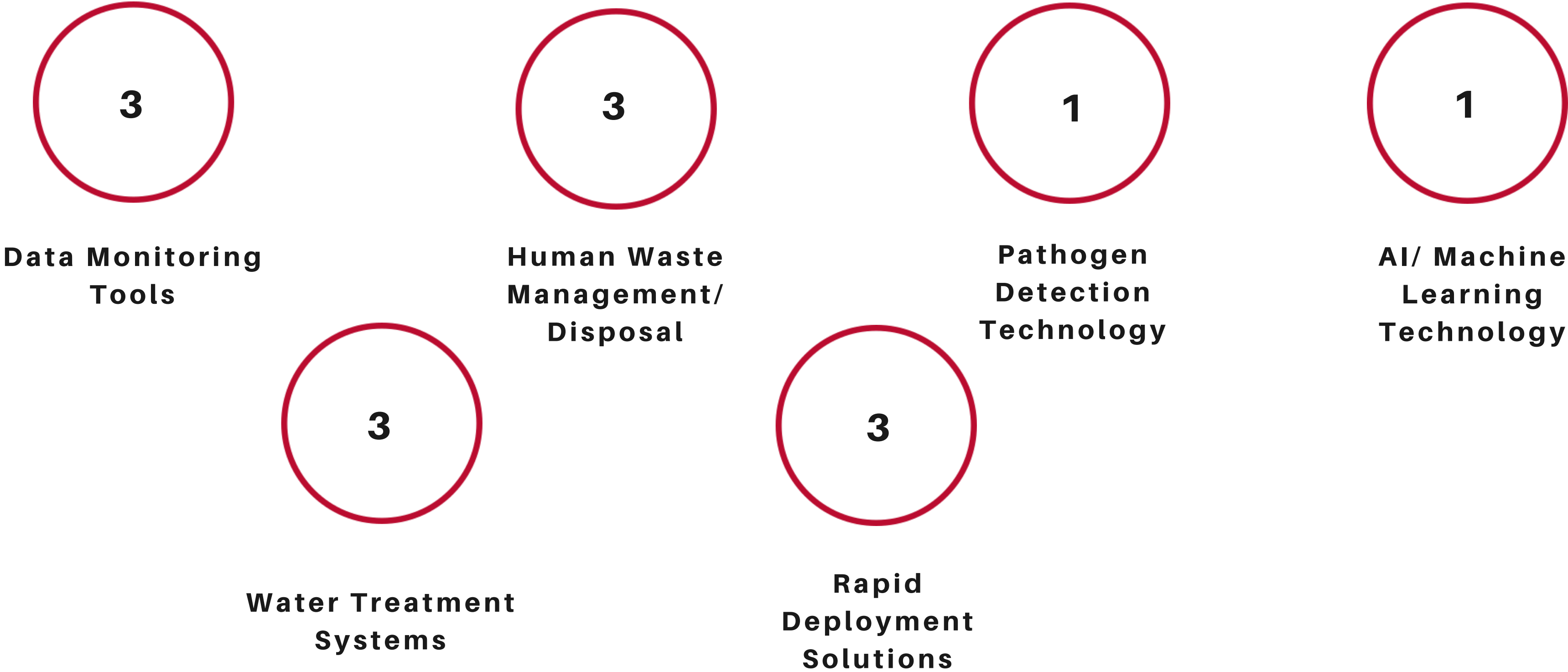
Data monitoring tools feature in the sector. Solutions include:

- Early warning system using real-time data
- IoT, cloud-enabled platform to monitor key WASH indicators
- Safe water optimization tool.



WATER, SANITATION & HYGIENE INNOVATIONS

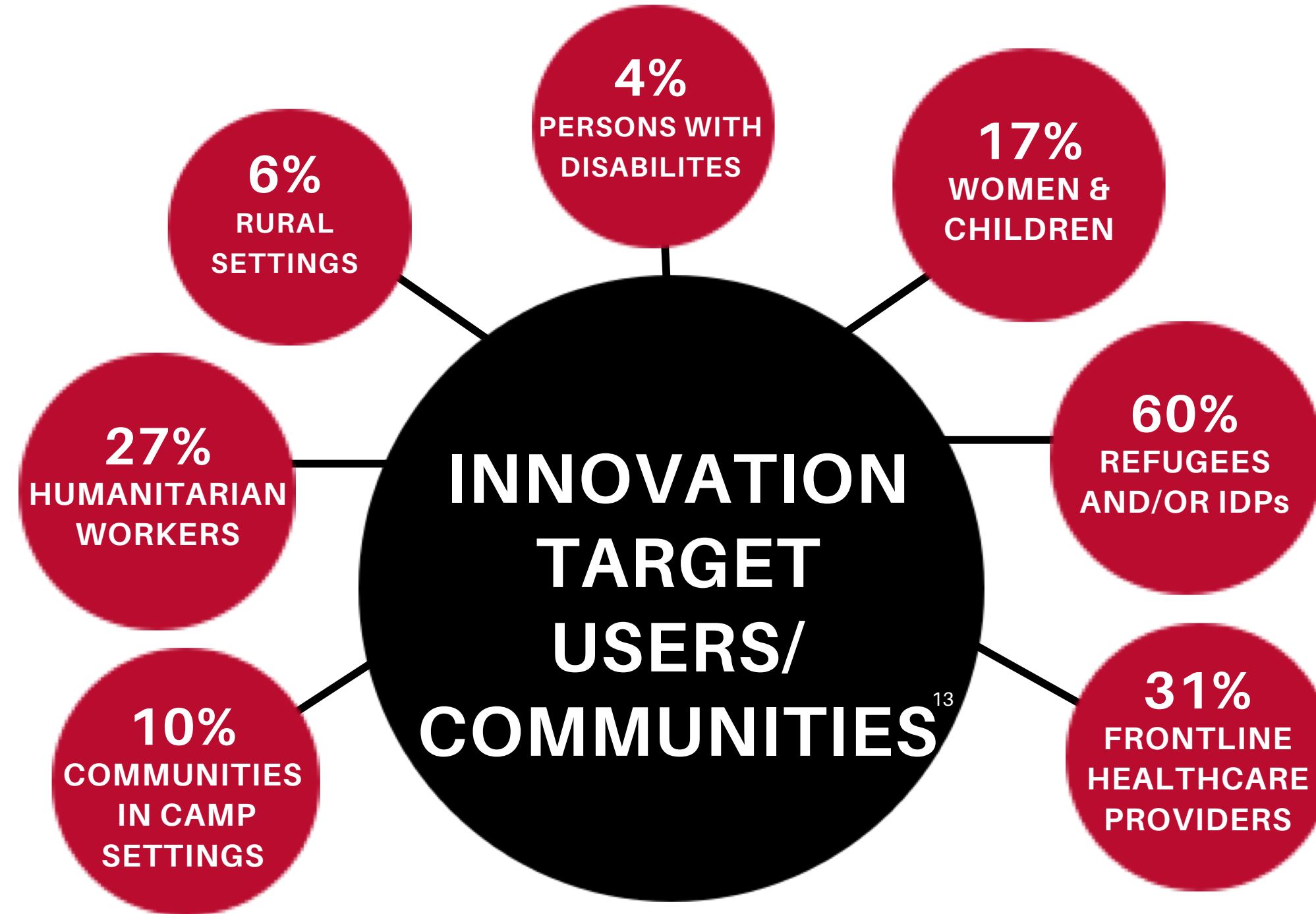
Sub-Portfolio Key Themes: Number of Projects¹²



¹² Projects in the portfolio may address multiple sub-portfolio key themes, so number of projects will not equal 100% of total projects

KEY PORTFOLIO FEATURES

AN ANALYSIS AND IDENTIFICATION
OF KEY FEATURES OF CHIC'S
INNOVATION PORTFOLIO

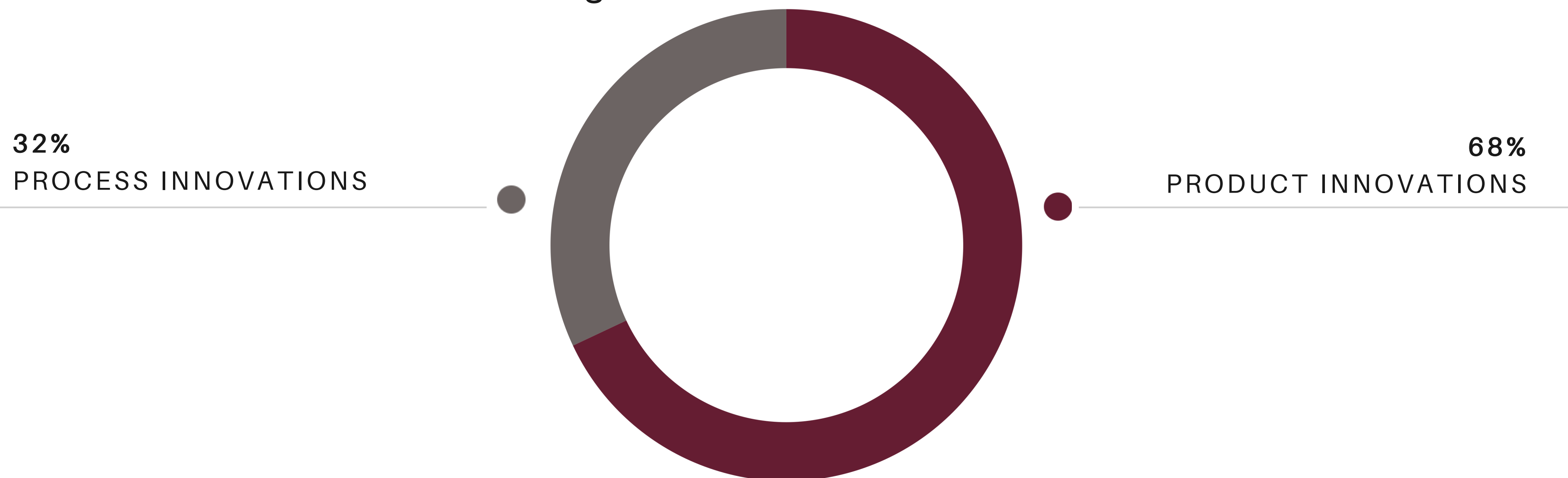


The CHIC portfolio is tailored to meet the unique and often overlapping needs of a variety of target users and/or communities. Although all innovations are designed to incorporate the needs of women and children, **17% of innovations** are specifically designed and tailored to **directly address the unique needs of women and/or children**. Thirty-one percent of innovations are specifically designed to **support the capacities of frontline healthcare providers** to deliver critical services to communities affected by conflict, and 27% of innovations are designed to **directly support humanitarian workers** to better serve populations in humanitarian settings.

¹³ Many projects in the portfolio target multiple and/or overlapping target users/communities, so percentages will not equal 100%.

INNOVATION CLASSIFICATION

Products, Processes and Paradigm-shifts



CHIC supports a range of product and process innovations. None of the innovations explicitly describe paradigm-shifting innovations; however, the question remains whether or not truly transformational system-level change can be observed during the life-time of a two-year (maximum) grant award, particularly when the majority of innovations are using the grant to attempt to prove a concept works.

Despite this, there are several areas of investment that could represent paradigm-shifting innovations in the future. Specific types of partnerships, funding and support will be necessary to support innovations addressing these types of problems.

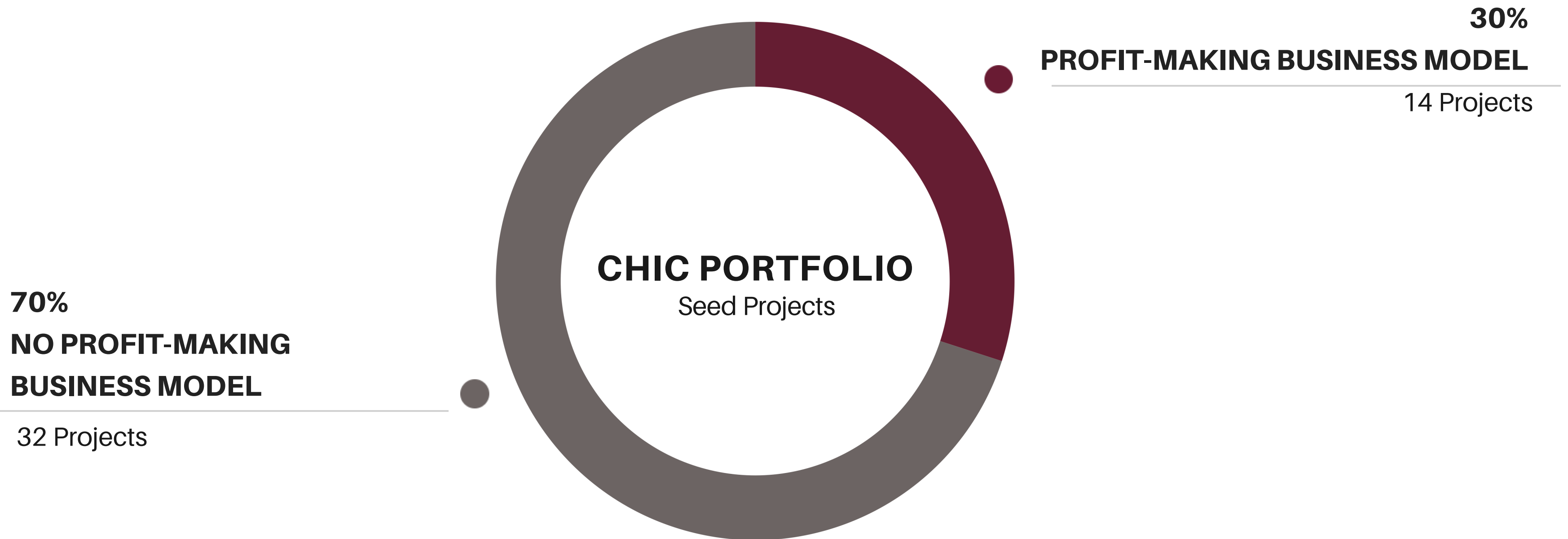
PROJECT RISK LEVELS



As part of the due diligence process, selected CHIC innovations undergo an institutional risk assessment to identify project risks and mitigation strategies. Based on this internal assessment, 44% of innovations have a high institutional risk level. Twenty-five percent of innovations have a medium risk level, and 13% have a low risk level. Since round two negotiations are still in progress, the risk levels for 17% of the portfolio have yet to be determined.

CHIC PORTFOLIO

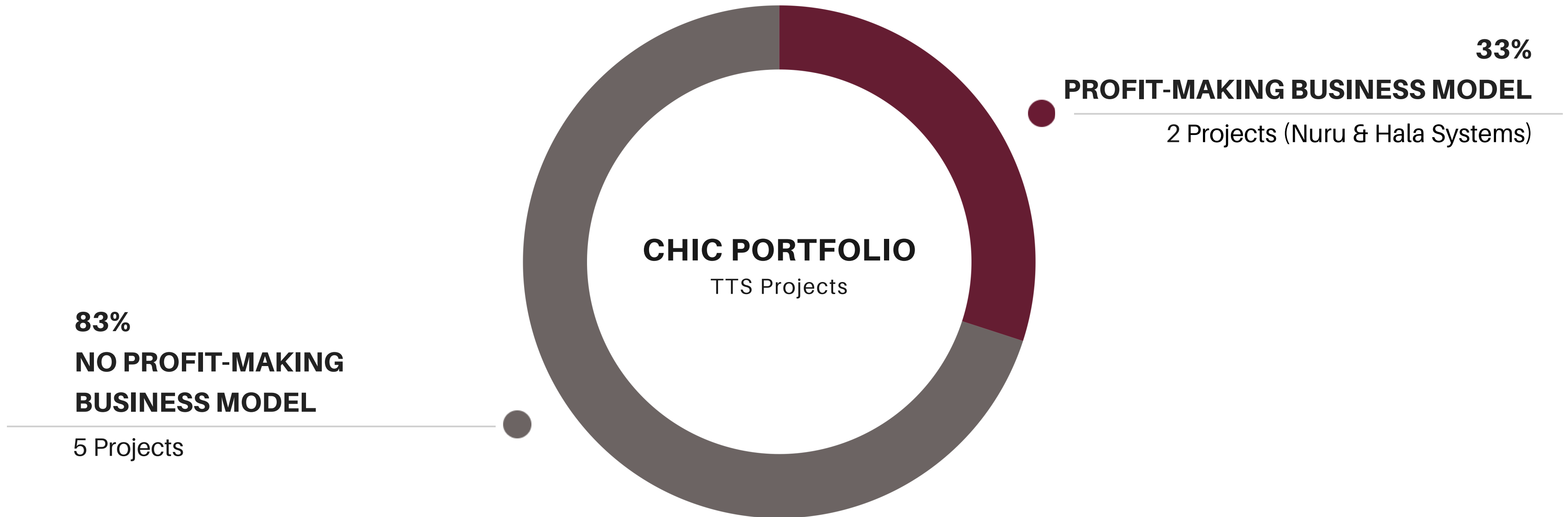
Seed Innovation Revenue Models



Thirty percent (14/46) of seed innovations encompass a revenue generation stream. At scale - assuming the projects achieve proof of concept - these projects encompass sustainable business models that are not dependent upon donor funding.

CHIC PORTFOLIO

TTS Innovation Revenue Models



Two out of 6 (33%) Transition to Scale projects encompass a revenue generation stream. At scale, Nuru and Hala Systems encompass sustainable business model that are not dependent upon donor funding.

A woman in a red and green patterned shawl is holding a young child. They are both looking down towards a hillside in the background. The hillside is covered with small, simple houses, some with red roofs. The sun is setting or rising, creating a warm, golden light across the scene. The sky is a pale, hazy blue.

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