

Investor toolkit with a focus on girls and young women

Product of SPRING Accelerator | Draft

Impact guide by region and sector



SPRING





Only around 20% of donor funding for gender equality includes a focus on girls and/or young women. Africa receives more of this funding than Asia, both in total and per capita. Healthcare is the largest sector recipient, followed by education.⁷⁰

This appendix summarises regional and sector-specific considerations for high-potential business opportunities that can make a lasting impact on young women and girls. SPRING focuses on nine countries (Bangladesh, Pakistan, Myanmar, Nepal, Ethiopia, Kenya, Rwanda, Uganda and Tanzania) in two regions (South Asia and East Africa). These countries were selected according to the programme's funding partners' priorities and the urgent need for gender equality and youth empowerment, combined with an emphasis on countries with an adequate measure of economic and social stability. These factors are important to investors and make them a high-potential market for impact investing.

This section is divided into five sectors: 1) health and sanitation; 2) education; 3) agriculture; 4) information and communication technology; and 5) energy. The first three sectors were chosen as there is credible evidence on impact potential on girls and young women and viable business models. Technology was included as an enabler of better outcomes in health and education. The energy sector was included as there is strong evidence of reduced time spent on energy-related tasks, and also of improved health. Evidence of linkages between energy and educational impact remains limited.

It is also important to consider the financial services sector. Financial services include access to bank accounts, financial literacy and ability to get loans. Similar to technology, it is a cross-cutting theme and there are financial service components in agriculture and education.

Each sector is discussed in three parts: first, the big picture, looking into the overall issues prevalent in these sectors in both regions; second, exploring the importance of the sector for girls and young women; and third, potential opportunities for investment, with case study examples, demonstrating 'best bets'. While these opportunities are specific to each sector, our research has identified an investment opportunity that cuts across all sectors, which is to provide girls with role models as well as safe spaces and opportunities to connect with other girls. However, it is important to note that these opportunities are based on the experience of SPRING, rather than documented research.

As investors are increasingly aligning their portfolios with Sustainable Development Goals (SDGs), this section also highlights which SDGs a business solution can contribute to achieving. The overarching SDGs that a focused intervention on girls and young women can help achieve are goals 1 and 5 – of eradicating poverty and achieving gender equality.



Health and sanitation

SDG 3 (Good health and well-being), 6 (Clean water and sanitation) and 13 (Climate action)

The big picture

Low-income households are not able to invest adequately in their children's health. Girls in the poorest households are also the ones most likely to be married and bear children at the youngest age: the pregnancy rate for girls under 18 in developing countries is 19%, and as high as 24% in Uganda and 33% in Bangladesh. Girls under 15 account for two million of the 7.3 million births among adolescent girls aged under 18 every year in developing countries. Pregnancy and childbirth complications are the leading cause of death among girls aged 15–19, with 60,000 to 70,000 deaths every year. This is also due to adolescent girls' lower use of maternal health care services: data from 15 countries on nearly 100,000 deliveries showed significantly lower use of prenatal and delivery care for mothers under 17 compared to 19–23-year-olds.

In East Africa, young women aged 15–24 are two to four times more likely to be infected with an STI than men of the same age.⁷² In 2007, 75% of HIV-positive youth in Africa were girls.⁷³ Studies on sexual violence in Ethiopia, Kenya, Namibia, Tanzania, Zambia and Zimbabwe estimate that 14–59% of women have experienced sexual violence at some point in their lives, though this is likely to be an underestimation due to cultural stigma surrounding the report on sexual violence. One aspect of violence derives from sanitation needs: in many cultures, the only time of day that girls and women can defecate is after dark, if they don't have a latrine. According to a 2010 Amnesty International report, a high number of women in slum areas in Kenya are raped when they resort to open defecation.⁷⁴

Throughout the South Asian region, inequality arising from discrimination based on caste, religion and ethnicity affect girls and young women disproportionately as they also face severe gender-based discrimination, negatively impacting their development, wellbeing, voice and agency. For example, lack of decent sanitation and washing facilities can impact a girl's education; it not only places a greater burden on girls (than boys) as collectors of water, potentially interfering with school attendance, it also discourages girls who are menstruating from attending school full time, often adding up to a significant proportion of school days missed.

As in East Africa, violence against women is widespread in South Asia: in low-income countries of the region, 40% of women have experienced general physical or sexual violence by an intimate partner or non-partner, and sometimes both.⁷⁵

Importance of health and sanitation for girls and young women

Good health and safe sanitation are vital to improving adolescent girls' developmental outcomes and breaking intergenerational poverty cycles. Overall, poverty affects health status while poor



health can also exacerbate poverty. Chronic poor health and health shocks drive households into deeper poverty and further reduce girls' chances to build human, social and economic assets.

Good physical and mental health during adolescence is critical for girls' life chances, and the life chances of their future children. For example:

- Well-nourished adolescent girls have a higher chance of maintaining attendance and learning at school.
- Avoidance of early pregnancy can enable adolescent girls to build up stores of micro and macro-nutrients needed in later in life, particularly when going into childbearing.
- Support to maternal mental health can reduce incidence of clinical depression and even suicide in mothers, and also benefit the growth and development of children.⁷⁶
- Clean water and sanitation reduces the risk of opportunistic infections and diarrhoeal diseases among people living with HIV and AIDS.
- Providing sanitation facilities at school can lead to increased school attendance among girls.⁷⁷

Potential opportunities for investments or 'best bets'

Based on SPRING's experience, there are market-based approaches to improving access to water, sanitation and health services for girls and young women:

1. Improving access to information and sexual/reproductive health education and services (including improving nutrition and WASH) through digital, mobile and/or media
2. Reducing the cost of health services and care with innovative solutions
3. Providing useful products such as different types of contraceptives, emergency contraceptives, clean delivery kits and maternity health management products

Two SPRING ventures specifically working in this area are described below.

- **Babyl**⁷⁸ (a subsidiary of global healthtech corporate Babylon Health) is the first-of-its-kind digital health service in Rwanda, accessible by smartphone and feature phone, with services including medical triage, nurse and doctor consultations, e-prescriptions and electronic medical records, so that patients no longer need to walk or travel long distances to receive high quality, affordable healthcare. A high number of consultations received by Babyl have been related to reproductive health. Through SPRING, Babyl aims to increase its reach among girls and young women as end users (clients). Girls and young women benefit from Babyl in the following ways:
 - Users of the digital healthcare service and free hotline receive high-quality healthcare and advice, including on sensitive topics such as sexual and reproductive health
 - Service and hotline are private/confidential and convenient

The aim is that they will feel comfortable knowing they have somewhere to turn for advice when they need it, will save time on getting quality healthcare, and will be healthier and more informed as a result of services they receive. This derives benefit for the end patient but also for the



Rwandan government, who has contracted with Babyl for national implementation and aims to use digital services to help to improve lives for all Rwandans. Babyl is innovating ways to reach last mile customers including those without their own access to digital devices.

- **SmartPaani**⁷⁹ is a private company in Nepal that provides sustainable water management solutions, including rainwater harvesting, water filtration and wastewater treatment, in order to tackle the shortage of clean, safe water. Through SPRING, the company developed a business model to reach base of pyramid (BOP) communities and enable girls and their families to get easier access to clean water. To do this they provided an improved clean water solution to schools, which can serve as a community water filtration and purification hub, combined with Water, Sanitation and Hygiene (WASH) education. Positive impacts are as follows:
 - Girls get access to safe, clean drinking water at school
 - Girls exposed to WASH messages increase their awareness and share information with their families, leading to better WASH practices and reduced illness among girls and their families
 - Families may also be persuaded by girls in sharing WASH messaging to buy SmartPaani's filters for home use

By July 2017, SmartPaani had installed filters and tested the 'Filter Plus' model (which includes filter, WASH education and five years maintenance built into up-front costs) at 47 schools in earthquake-affected areas of Nepal, reaching 14,337 students, of whom 6,105 were girls aged 10 to 19. In addition to focusing on installation, the SmartPaani team are currently working on a new model to improve the maintenance of water pipes, as less than 50% of water pipes are functioning well. Girls are most impacted by water issues in the family: if the water systems break down, they suffer the greatest inconveniences and risks.



Education and climate

SDG4 (Quality education) and 13 (Climate action)

The big picture

Girls' education has long been identified as an extremely powerful developmental force, a key route out of poverty, and a critical pathway to women's advancement. However, in most developing countries girls still face a number of constraints and barriers to accessing education. For example, the secondary school completion rate for girls exceeds 15% in only eight of 37 sub-Saharan countries.⁸⁰

Equal access to education is a key component of equal access to employment, positive health and birth outcomes.⁸¹ In East Africa, while access to and quality of education is improving, progress varies across countries. Poorer girls, especially from rural areas, are most likely to lack access to education across all five analysed countries (Ethiopia, Kenya, Rwanda, Uganda and Tanzania).⁸² Overall, there are large gaps in educational attainment between urban and rural populations, especially between girls and boys: for example, in Uganda, 42.4% of urban women and 10.7% of rural women have at least some secondary or higher education (compared to 48.5% urban men and 15.8% rural men). Gender gaps are also largest in the poorest quintile: for example, in Tanzania 45% of women compared to 33% of men in the lowest income quintile have no education.

South Asia has the highest number of out-of-school girls in the world.⁸³ While both boys and girls are affected by discrimination based on caste, class, religious and ethnic divisions, girls additionally face gender-based discrimination which limits their ability to attend school, as they are forced to marry early, put in charge of household chores or are not seen as a worthy investment compared to boys.⁸⁴ Moreover, girls' needs require them to have access to hygiene and sanitation facilities. Of the region's out-of-school girls, 81% are unlikely to ever start school, compared to 42% of out-of-school boys. The poorest young women attended school for less than a year compared to about two years or more for the poorest young men.⁸⁵ Girls from the poorest families will, most likely, never set foot in a classroom.

Importance of education for girls and young women

There is a clear relationship between a girl's educational attainment and improved outcomes in other areas such as health, income, self-confidence and knowledge of legal rights. In particular:

- There is good aggregated evidence that girls' education leads to increased earnings in adulthood. Each extra year of education a girl receives, her adult income increases by 10–20%.⁸⁶
- Education helps close gender wage gaps. In sub-Saharan Africa, men earn twice as much as women on average, but education has a strong effect on closing the earnings gap.⁸⁷

- Education is associated with delayed marriage, sexual debut and childbearing. If all girls had secondary education in Sub-Saharan Africa and South and West Asia, child marriages (under age 15) would fall by 64%, from almost 2.9 million to just over one million per year.⁸⁸
- Education is associated with increased self-confidence, mobility, aspirations and stronger social networks. School allows girls to focus on their own development and learning, to interact with peers and form social networks, and to explore and prepare for a broader range of possibilities in their adult life.

Potential opportunities for investments or 'best bets'

Based on SPRING's experience, there are various approaches to maximising educational outcomes for girls and young women:

1. Providing girls role models who inspire them, as well as safe spaces and opportunities to connect with other girls, to build confidence and sense of empowerment
2. Alternative education, such as homebased tutoring, distance learning, or night school for girls
3. Innovations in improving girls' safety on the way to/from school
4. Vocational or skills-training programmes, including a practicum module that allows girls to start businesses and economically sustain participation
5. Improving the quality of education through teacher training programmes
6. Strengthening curricula



Examples of SPRING ventures dedicated to promoting or achieving gender parity in education

- **JBS⁸⁹** is a microfinance institution that established a number of girl-only savings clubs called 'Nawa Bihani' ('New Morning') in secondary schools in the Terai region, Nepal. Financial literacy and independence are often not encouraged among girls, and the idea of this programme is to inspire girls to earn and save. JBS tracks the savings and school retention rate of the members of its girls' savings clubs. Early anecdotal evidence suggests that participating in Nawa Bihani savings clubs has allowed girls to earn and save, to take on leadership roles in their communities for the first time (e.g. by organising health camps), to improve their own self-image, and in some cases to help convince parents to allow them to remain in school.
- **AcceleratED⁹⁰** was founded in January 2016, and it provides schools primarily in Ethiopia and across the region with services that boost teacher performance and student learning outcomes. It is building a data-driven teacher-coaching platform from the ground up for the African context. The model leverages best-in-class coaches and evidence-based strategies, so that any school can maximise teacher performance. Through SPRING, AcceleratED is focusing specifically on improving girls' educational and economic outcomes by enabling teachers to access a platform called TeachEasy which includes personalised teaching strategies, allowing them to identify at-risk students, especially girls, to better address learning gaps. The goals are:
 - Teachers experience increased motivation and self-confidence due to the improvement in their teaching skills, while girls improve their learning outcomes and play a more active role in the learning process, boosting their own confidence, curiosity and courage.
 - Girls secure improved educational and economic opportunities, ultimately leading to empowerment and human capital development in Ethiopia and beyond.

SABAQ is a digital service with a mission to vastly increase access to education in Pakistan by developing fun and engaging digital content that students genuinely enjoy. The Muse product is a tablet-based, low cost, offline/online solution with high quality digital academic content available in local languages for K-5 primary grade students. Launched in 2015 under Multinet Pakistan (a large Pakistani telco) through DFID grant funding, the company built several mobile apps with Math, Science, Urdu and Sindhi content aligned with national and widely-used school curricula.

SABAQ's material is currently used in 500 non-formal education centres for out-of-school children (called SABAQ Centres, and supported by grant funding and nominal fees paid by parents) and in 500+ public and low-cost private schools through cross-sector partnerships. In an independent evaluation with students in grade K-1, conducted by Coffey International, the meraSABAQ product showed a 300% improvement in learning levels for Math & Urdu compared to standard educational materials/teaching. The product has been used by more than 75,000 students.

Noting that only 40% of users in SABAQ centres were female, it increased efforts to reach girls and created prototypes through SPRING which targeted female students aged 10–12 as well as female teachers. Girls will have regular access to interactive digital content, leading to increased engagement in learning, improved attendance at school, and improved learning outcomes – ultimately making them more likely to progress/stay in school. For female teachers, using Muse will expose them to modern educational methods and technology, giving them a more diversified skill set, and improving their confidence and career prospects.

Apart from SPRING ventures, Educate Girls, an Indian NGO, launched the world's first Development Impact Bond in education⁹¹ in collaboration with UBS Optimus Foundation and Children's Investment Fund Foundation, in 2015. Results released in 2018 have demonstrated success and the promise of mobilising private capital to achieve development outcomes.

Agriculture

SDG 8 (Decent work and economic growth), 12 (Responsible consumption and production) and 15 (Life on land)

The big picture

In sub-Saharan Africa and South Asia, at least 70% of the labour force works in agriculture. African women undertake about 80% of the work in food storage and transportation, 90% of the work of hoeing and weeding, and 60% of the work in harvesting and marketing of products.⁹²

In East Africa, more than 50% of workers in the agriculture sector are female.⁹³ The share of employed girls aged 15–19 working in agriculture varies by country, ranging from 28.6% (Kenya) to 73.4% (Tanzania), and totals more than 7 million in the region.⁹⁴ Younger girls typically take care of poultry or other small livestock on their family's smallholder farm, while older girls of legal working age may be employed in bigger farms.

In South Asia, agriculture accounts for almost one-third of the region's GDP.⁹⁵ It is an important source of employment for women, as data shows that in South Asian countries like Bangladesh, Bhutan, India, Nepal and Pakistan, a particularly high percentage - more than 60% and up to 98% - of women are employed in the agriculture sector.⁹⁶ Nevertheless, women's access to and control over financial resources remains limited, resulting in high levels of unpaid labour and less land and livestock control. For example, in India, 74.8% of rural women in India are agricultural workers but only 9.3% own the land.⁹⁷

Importance of agriculture for girls and young women

Wage-earning jobs in agriculture can provide income for girls and young women but also negatively affect them in a number of ways:

- Girls engaged in domestic agriculture-related work on their family farms may be hindered or prevented from attending school, especially during harvest time.
- While some laws in the region are changing so that women may own, control and/or inherit resources such as farm animals or lands, very often cultural norms supersede these laws, continuing to make it very difficult for girls or young women to become financially independent or start their own business.



- Girls' contribution to agricultural production is often underpaid or unpaid. Women and particularly adolescent girls tend to provide unpaid labour, and control less land and livestock.

Providing safe, fair and regular earning opportunities can increase girls' aspiration to pursue careers in agriculture. Training and lending for girls makes agriculture a more attractive path. It could, in turn, help mitigate against early marriage or sexual abuse.

Potential opportunities for investments or 'best bets'

Based on SPRING's experience, there are various approaches to positively impact girls and young women in this sector:

1. Products and services that relieve the burden on the girl's time
2. Improving access to information, technologies or techniques which can improve crop resilience, yields or sustainability
3. Teaching girls and young women how to use machinery to fortify or add value to basic grain crops
4. Equipping girls and young women to deal with changing family circumstances
5. Providing credit and financial services to girls and young women; improving financial inclusion by creating programmes that target girls and give them access to micro credit loans and savings mechanisms

There are innovative SPRING ventures dedicated to increasing agricultural productivity and which have the potential to achieve rural women's empowerment and greater inclusion in the agriculture sector.

- R&D Innovative Solutions is creating economic opportunities among Nepali farming communities by converting traditional, low-profit agriculture occupations into sustainable inter-connected entrepreneurial ventures. R&D is providing agricultural inputs, training and market access to rural farmers, which can save girls labour and time and increase their families' income.
- Shekina Enterprise is a Rwandan agro-processing company that specialises in dry goods. It is a pioneer firm in the dried cassava leaves market, an African staple. Shekina has increased demand and price for the plant. In addition, its collection centres employ young women for sorting and cuts down travel for farmers.



Information and communication technology (ICT)

SDG 9 (Industry, innovation and infrastructure)

The big picture

Impacting multiple aspects of daily life, information and communication technology (ICT) presents a wide range of issues around gender and empowerment. There are several facets to consider here: girls and young women working in technology; girls and young women using technology for jobs and learning; and girls and young women as customers benefiting from technology.

In East Africa, access to technology occurs primarily through mobile phones, although access varies significantly by country. Ethiopia's technological infrastructure is among the least developed in the group of analysed East African countries; mobile phones are found in less than 25% of homes (compared to 86% in Kenya) and there is only one government-owned cellular network provider.⁹⁸ In Ethiopia, 62% of girls aged 15–19 have no access to any mass communications (compared to 18% of girls in Uganda and 30% in Tanzania) and 85% of poorest girls have never used the internet.⁹⁹ By contrast, Rwanda's mobile infrastructure is one of the best, with 22% internet penetration and 63% mobile phone penetration. There, 87% of surveyed girls living on less than \$2/day had used the internet.¹⁰⁰

South Asia still lags far behind in terms of internet access: less than 20% of the population in each country has used mobile internet services.¹⁰¹ National level official statistics show that the digital gender divide in South Asia persists regardless of income, age, and geographical location, with many women and girls unable to access technologies such as mobile phones and computers.¹⁰² In parts of the region, women make up 25% or less of the online population. When it comes to mobile access in the region as a whole, 72% of women are disconnected and they are 38% less likely to own a phone than men.¹⁰³

Importance of technology for girls and young women

While few studies examine the link between technological use and girls' advancement, most acknowledge there are significant barriers to girls' access of technology.¹⁰⁴ Technology is increasingly a way for people to search for job opportunities as well as educational, vocational and financial resources, and to call for help in emergency situations.

Gender issues relating to the use of technology in East Africa are based on existing stigma around girls and young women accessing mobile phones and the internet or earning a disposable income and making financial decisions. However, some research such as African Women and ICTs¹⁰⁵ have also shown that women in Africa utilize ICTs to facilitate their empowerment - through the mobile village phone business, internet use, new career and ICT employment opportunities.

In South Asia, entrenched cultural and gender norms limit women and girls from forming independent connections outside their home or communities. In South Asia's digital sector, mobile



phones are largely owned by husbands, fathers and brothers who require girls and women to ask for permission to make calls.¹⁰⁶ Moreover, English and IT skills are highly desirable skills in the labour market. Limited access to technology therefore means that girls are unable to develop these skills, resulting in a digital gender divide that reduces girls' and young women's job and life prospects.¹⁰⁷

Potential opportunities for investments or 'best bets'

Given that technology is a cross-cutting theme, the main focus is to improve access to technology among girls and young women. This section highlights some innovative SPRING businesses that are dedicated to achieving this.

- **Women in Digital**¹⁰⁸ was founded in 2013 as a social enterprise aiming to empower women and girls in Bangladesh through training and employment opportunities in the IT sector. It offers a variety of introductory and advanced online and offline digital skills workshops and training courses, as well as career counselling, mentorship and access to an online career centre. Following training, Women in Digital hires talented young women for project-based and permanent work in their digital agency. The agency offers a range of products and services to international clients, such as digital production and marketing, graphic design and animation, game design and development, software development, website development, and mobile and web applications.

The agency has already trained 4,700 young women and has created employment opportunities for more than 3,318 girls through its different projects. Women in Digital operates eight centres in Bangladesh and one in Nepal. Before participating in SPRING, Women in Digital was reaching adolescent girls aged 12 and up as trainees (recipients of free IT training) and young women aged 18–30 as trainers and suppliers/employees in their value chain (coders). As part of assistance from SPRING, Women in Digital has now expanded its reach to girls and young women aged 14–22 as paying end users for their training services (career development training course).

- **Cherehani Africa**,¹⁰⁹ founded in May 2014, is a social enterprise that aims to increase financial inclusion through asset financing (e.g. sewing machines and agricultural tools) and provision of business loans to girls and women in emerging markets. The girls and women are members of saving groups. Cherehani's model combines technology and human intervention; first, women get access to vital financial literacy training through Cherehani's network of field officers, with training augmented with mobile based content disseminated via SMS and social media; second, girls and young women access business loans or productive assets. Business loans are disbursed through mobile money and all loan repayments collected via mobile money. And third, Cherehani provides business support to the savings groups, building a community network of supportive micro-entrepreneurs. The group members co-guarantee each other for access to the business loans. Sewing machines and other asset loans are repaid over 12 months in monthly instalments, with a mark-up of up to 36%. Business support loans range from 50 to 1,000 USD at a monthly interest rate of between 2–4%. Around 10% of loans and assets Cherehani issued were to girls aged 16–19. Through SPRING, Cherehani expanded their service to girls and young women as end users through multiple assets and working capital loans, and lowered the target user age range to reach younger girls.

Energy

SDG4 (Quality education) and 13 (Climate action)

The big picture

Energy poverty across South Asia and sub-Saharan Africa is both a chronic and an acute problem. While hundreds of millions of people across the world have gained access to electricity for the first time over the last decade, there are still 1.2 billion people without a power connection in their home. More than 95% of them live in sub-Saharan Africa and Asia, and 80% of them are in rural areas.¹¹⁰ Even in areas with electricity access, supply is often highly unreliable.

Instead of electricity, many of these households use a combination of biofuels and kerosene for heating, cooking and lighting. But these fuels are health hazards as children are more likely to suffer burns and household members will suffer from the effects of smoke they inhale from indoor kerosene lanterns. And while this is a problem that affects everyone, as girls and young women spend most of their time at home, they are more susceptible to such health hazards.

In East Africa, approximately 9 out of 10 rural homes lack access to electricity, and access to piped gas is even rarer. As a result, women and girls spend valuable time collecting resources like charcoal and wood for cooking. If girls have to collect fuel during the day in isolated areas, this both puts them at risk of sexual violence and increases school drop-out rates. Moreover, cooking with these traditional fuels contributes to health hazards.¹¹¹

In South Asia, women and girls bear the primary responsibility of fetching firewood, cooking and other domestic work, making them disproportionately affected by energy poverty. Generally, urban centres fare better than rural areas in terms of energy access (urban electrification rate ranges from 88% in Pakistan to 97% in Nepal, and rural electrification rate ranges from 48% in Bangladesh to 57% in Pakistan). Often, electricity is only supplied during the hours of darkness, so its use for productive purposes is limited.¹¹²

Importance of energy for girls and young women

Providing equal access to energy for girls and young women leads to reduced time spent on energy-related tasks, and also to improved health. Moreover, energy poverty perpetuates many negative circumstances facing girls and young women. Without light, girls are at a higher risk of violence if they have to walk through unlit areas to get to their destination.

Potential opportunities for investments or 'best bets'

The first three examples presented below are not SPRING ventures, but are included as they provide evidence of impact for girls and young women.¹¹³



- **IDCOL**¹¹⁴ is a Bangladeshi social enterprise that has devised a credit scheme for marketing Solar Home Systems (SHS) and making these an affordable alternative to grid electricity in remote areas. IDCOL extends loan-support to its partner organisations across the country. These partner organisations (which include microfinance institutions and non-governmental organisations) extend micro-credit to consumers to buy their solar home systems and in turn, obtain re-financing from IDCOL for up to 80% of the loans given to their customers. Households are required to pay at least 10% of the system cost as down-payment. Some leading partner organisations accomplished impressive achievements, such as the non-profit social enterprise Grameen Shaki, which accounts for almost 55% of the SHS installed in Bangladesh. Used mainly for lighting, SHS have contributed to improved educational outcomes as school attendance rate among girls – as well as boys – are higher in households with SHS in Bangladesh, as they spend less time collecting fuel and can spend more time studying.
- **Greenlight Planet**¹¹⁵ (GLP), operating out of India, provides a range of solar-light products to base of pyramid customers in Africa and Asia. GLP's main mission is to revolutionise rural energy access for the 1.5 billion off-grid villagers who use primal and hazardous sources of light, such as kerosene lanterns. GLP has sold 1.6 million solar lights to off-grid families in South Asia and Africa. GLP commissioned a local market research agency in India to measure its social impact on girls and young women. Comparing baseline to end line results, the research found an increase in girls' ability to study after dark, from 20% to 87%, and a relatively smaller shift among girls regarding their educational ambitions (at baseline, 13% of girls wanted to become graduates, compared to 20% at end line).¹¹⁶
- **Frontier Markets**¹¹⁷ is an online, offline, rural distribution company. Its network of women entrepreneurs, 'Solar Sahelis', have been catalytic in stopping child marriage in Indian villages through economic empowerment. All 1,000 women in the network have been working with Frontier Markets for the last 2 years, and in that time have helped 30,000 girls avoid marriage at the age of 14. Sahelis, aged 30–35 years old, have daughters and nieces that are 14. To prevent them from getting married, Sahelis started pooling their money to invest in these girls' private education away from their village. This has been an influential disruption in the community, where girls not only drop out of school by the age of 14 but are married and start having children while still in adolescence. When speaking to Sahelis, their reaction has been, 'I look at my life today, and what it was when I was my daughter's age. I do not want my daughter to wait 15 years to understand freedom and opportunity. She will do it now, in a way that I could not.' Sahelis have also been bringing opportunity to adolescent girls early by onboarding them as 'Sahelis-in-Training', who work alongside Solar Sahelis to start understanding business and earning income.

Within SPRING, there are also examples of ventures that seek to reduce energy poverty:

- **Village Energy**¹¹⁸ is a Ugandan solar startup founded in 2009 that is now focused on productive use of energy: custom solar installations (200W–10kW) for rural businesses, institutions and agriculture that enable improved incomes, job creation and access to services. Through its network of six branches across Uganda, Village Energy offers in-house design, procurement, PayGo financing, installation, remote monitoring and on-site servicing, thus de-risking solar adoption for rural customers. Since 2015 the company has completed more than 100 custom installations ranging up to 5kW, as well as sold over 2,700 pico solar products.

SPRING support enabled Village Energy to develop its model and integrate girls as end users of their solar installation services (e.g. in schools where solar systems are installed). The company also works towards gender equality through its staff: 50% of the 30 employees are female, as is



their new CEO, a Kenyan gender and development specialist, making Village Energy one of the first solar companies led by an East African female. In addition, its last-mile training activities have now spun out as a separate for-profit social enterprise, Enlight Institute, focused on skill development for the solar industry, starting with a travelling solar technician academy in rural Uganda funded by Signify (formerly Philips Lighting) Foundation. Longer term, Enlight seeks to develop and scale better skill assessments for training providers and last-mile solar employers to use in training, hiring and assessing rural youth for sales, technical and operational roles. Their lead technical trainer is a female Ugandan with a masters in physics, and of the first class of 14 solar technicians who completed the eight-week training in May 2018, five were young women.

Further areas for consideration

Financial services sector will be examined closely in the next version of the toolkit. Another area for consideration is the connections between gender and climate change/ the environment. SPRING's Investment Director, Suzanne Biegel¹¹⁹ draws on Paul Hawken's research and highlights that a two-pronged strategy of girls' education and family planning is highly efficient in reducing carbon levels. According to Hawken's research, they help break the cycle of intergenerational poverty, while mitigating emissions by curbing population growth. The research calculates that this will result in a reduction of 119.2 gigatons of CO₂ by 2050 at an estimated cost of \$44 billion. As the field for investing with a girl and young woman focus grows, there will be more examples of new, investible opportunities based on synergies between SDG 5 and other SDGs.

