

iX



BRASTORNE[®]
CONNECTING THE UNCONNECTED

SOCIAL IMPACT REPORT

An Overview of the Company's Impact Performance & Potential through 2026



September 2022

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Impact Performance & Potential on Smallholder Farmers in Botswana through 2026:
An Analysis of Brastorne's mAgri Platform



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EXECUTIVE SUMMARY

Of Botswana's 2.6 million people, nearly all of them own mobile phones - yet most lack meaningful digital access. Increasingly, the path to economic opportunity is through the internet. The digital gap between those with and without access to the internet reinforces and exacerbates existing social inequities. The digital divide leaves Africans without internet access disproportionately disconnected from the tools, opportunities, and services they need to thrive. In many African countries, mobile phones are the primary access point to the internet. In Botswana (2020), there are more mobile data subscriptions than people (164 per 100 people). Still, 34% of the population lacks access to the internet.

Brastorne's mAgri is a USSD mobile application that helps transform the way the farming community interacts by allowing all farmers (including the mostly underserved in remote villages) to market their products and services across the country. It provides access to weather and market data for smallholder farmers at just \$1.40/month, an 85% cost savings compared to the cost of alternatives.

KEY OUTCOMES

Outcome 1: Increased access to communications for Smallholder Farmers

Outcome 1.1: Increased Crop Yield

Outcome 1.2: Increased revenue for Women Smallholder Farmers



THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS



END POVERTY IN ALL ITS FORMS EVERYWHERE

Target 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day



ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases



PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

Target 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors;

KEY INSIGHTS



34%

Population not connected to the internet in 2022



24%

Increased connectivity over 5 years with mAgri



60%*

Population cannot afford data



6%

Percent of average monthly income for 1GB of mobile data



69%

of Farmers currently access weather info via Print media, Radio and word of mouth.



\$38M

Total impact value unlocked through 2026 in Increased yield, income for women Smallholder farmers, and communications savings.

1. The World Bank
2. Data Reportal, 2022
3. Statista
4. * Assumption

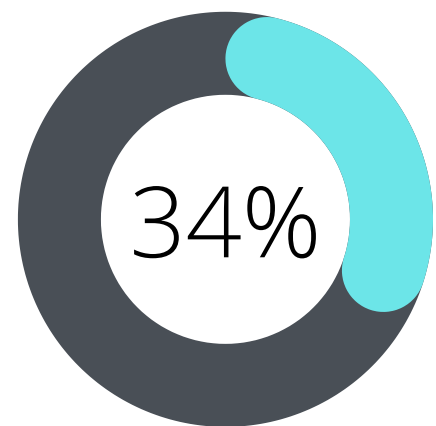
OUTCOME 1

Increased Access to Communications for Smallholder Farmers

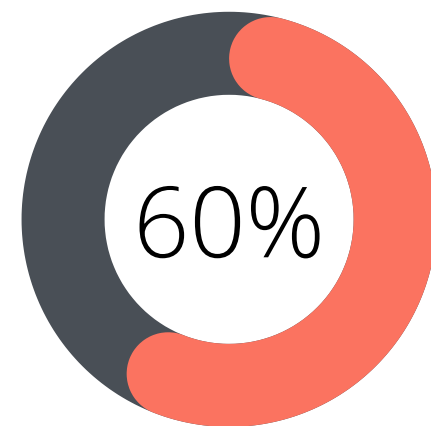
To calculate additionally for mAgri, ImpactableX looked at the percentage of mAgri subscribers who would otherwise not be able to afford the cost of communications (an estimated 60% or 24,000 of the 60,000 subscribers in 2021), resulting in 36,000 gaining access to communications. Each of these subscribers saves \$7.96 monthly using mAgri compared to the \$9.36 average cost of alternatives. Across all 36,000 subscribers gaining access to communications, mAgri saves a total value of \$3.4M annually

BASELINE

WITH mAgri



Lack access to the internet¹



Cannot afford Mobile Data*

1. Data Reportal, 2022
2. *Estimate

2021

+2.4%

36,000 people gain access to information, markets, & communication in 2021

85%

Monthly Savings compared to alternatives, which cost \$15+/mo

\$3.4M

Total annual savings across all 60,000 subscribers in 2021

2021 - 2026

+24%

357,477 people gain access to information, markets, & communication over 5yrs, increasing access compared to 2022 baselines.

82%

In 2026, 82% of the population (from 2022 figures) will have access to information, markets, & communication

\$34M

Projected savings over 5yrs for nearly 600,000 subscribers

OUTCOME 2

Increased Yield

Crop

Total Smallholder Farmers in Botswana: 454,864¹
 Brastorne will serve 33% of them from 2021 - 2026

With mAgri, crop yields are estimated to increase by a net of 7% annually, resulting in an increased annual harvest value of \$19.34 for men, and \$17.84² for women, at an average of \$5.44/kg. Most smallholder farmers live off of their harvest, selling only a fraction for income. Men sell appx. 26% and women sell appx. 20%.³ With mAgri, their income increases by an estimated \$5.03 and \$3.57 respectively, roughly 0.15% of their baseline annual income of \$3,360.⁴ To calculate projections, ImpactableX applied this annual increased yeild and harvest value per farm across all farms projected to enroll in mAgri through 2026.

Yearly

+7%

Estimated Increased Net Annual Yield*

125,729 kg

Total increased yield across all crop farmers

\$161,877

Value of Total increased yield

2021 - 2026

+7%

Estimated Increased Net Annual Yield*

1,248,477 kg

Total increased yield across 595,795 crop farmers

\$1,607,423

Value of Total increased yield

Livestock

Total Smallholder Livestock Farmers in Botswana: 340,550⁵
 Brastorne will serve 38% of them from 2021 - 2026

With mAgri, livestock yields are expected to increase by a net of 7% annually, resulting in an increased annual harvest value of \$364.27 for men and \$185.16 for women at \$27/kg.⁶ Men sell appx 26% and women sell 20%,³ so their income increases by an estimated \$94.71 and \$37.03 respectively or roughly 43% and 13% of their baseline annual income of \$3,360.⁴ To calculate projections, ImpactableX applied this annual increased yeild and harvest value per farm across all farms projected to enroll in mAgri through 2026.

Yearly

+7%

Estimated Increased Net Annual Yield*

567,354 kg

Total increased yield across all crop farmers

\$3,932,801

Value of Total increased yield

2021 - 2026

+7%

Estimated Increased Net Annual Yield*

5,567,502 kg

Total increased yield across 595,795 crop farmers

\$38,592,956

Value of Total increased yield

1. 649,806 Total Households in Botswana [Source](#), 2017; 70% of Households derive livelihoods from agriculture. [Source](#), 2012

2. Annual Agricultural Survey, 2019, pg 85, 86

3. Estimate

4. [Salary Explorer, 2022](#)

5. Assumes 75% of Crop Farmers manage livestock as well

6. Annual Agricultural Survey, 2019, pg 50, 58, 64

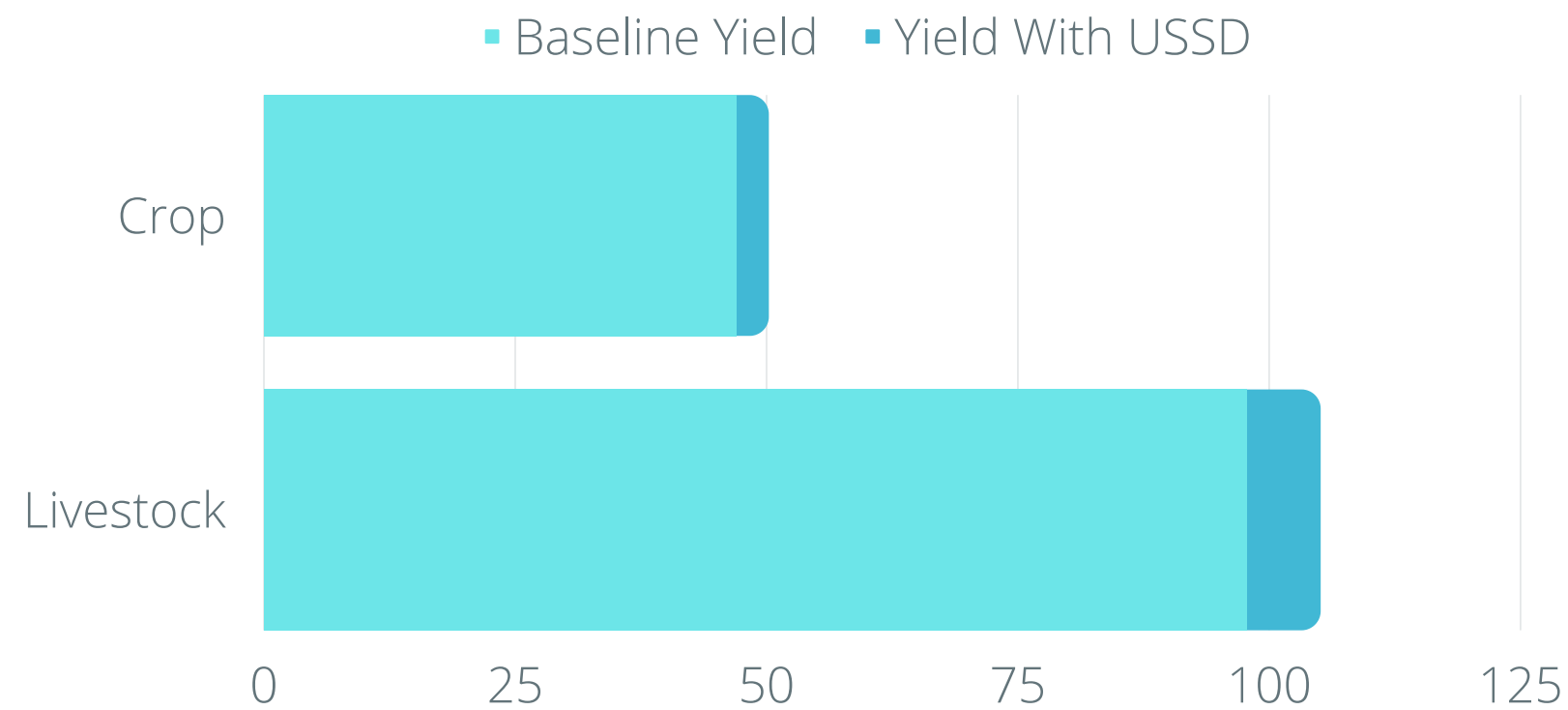
OUTCOME 3

Increased Income for Women Smallholder Farmers

Women play a major role in the Agriculture sector in Botswana. While men still dominate, women represent nearly 40% of crop farmers and 23% of livestock farmers. With access to farming data, they are able to better manage their holdings, increase their harvest, and sell at fair market value. This is a major priority. Botswana Vision 2016, a government-driven initiative, recognizes the need to "develop the role of women in the mainstream." ¹

To calculate projections, ImpactableX applied the analysis of its impact on one female smallholder farmer across all farms projected to enroll in mAgri through 2026.

Expected Increased Yield for Women



Per Subscriber

mAgri enables female smallholder farmers to generate enough crop and livestock yield to feed their family and friends and still have enough surplus to sell

\$209

Value of Increased Crop & Livestock Harvest

\$40.60

Annual Increased Harvest Sold

All Subscribers 2021 - 2026

\$257,279

Total New Income for 20,656 Women in 2021

\$2,554,757

Total New Income for 51,400 Women over 5 years

¹. UN Food and Agricultural Organization, pg15



ABOUT IMPACTABLEX

ImpactableX was launched in 2020 after 3 years of testing and development by an award-winning accelerator founded by ex-VCs. We now offer impact measurement & management (IMM) tools to world-class companies, & the accelerators & funds that support them. We pride ourselves on setting the standard for transparency, integrity and credibility, offering tools so intuitive and valuable that they become an integral part of operations, and democratize access to rigorous impact insights.

Superior Credibility

Our reports feature data & analytics that are evidence based, reviewed & fully aligned with global standards



Proven Track Record

We offer a legacy of success with award-winning founders, backed by leading Impact Funds and Accelerators.

\$180M

Total raised by customers within 1 year of working with us.

53%

Of customers are referrals

Accessible to All

We offer an affordable, start-up friendly point of entry for customers at all levels, and tools to evolve as they grow.

90%

Less expensive than alternatives

90%

Faster than alternatives





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