

Measuring Social Impact in India

Report by Duke CASEi3 Research Team

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About the Duke CASEi3 Research Team



From left: Ayush Mansingh, Kelly Froelich, Asmi Patel, Anu Sundaravel, Yulia Gumeniak, Tim Yoon

Launched in 2011, The CASE Initiative on Impact Investing (CASE i3) is the first comprehensive global program at a leading business school in the US to blend academic rigor with practical knowledge on the emerging field of Impact Investing.

CASE i3 operates the CASE i3 Fellowship, only two-year fellowship in impact investing for MBA students in the world, which includes requirements for class-room engagement, alongside opportunities for top-notch academic research, hands-on consulting experience, and leadership roles within a swiftly evolving program. Through the CASE i3 Fellowship, students can support CASE staff at international conferences, interact with leaders in the impact investing field, and actively shape the future of CASE i3 and this emerging field.

QUICK IIC MEMBER FACTS

\$40M

Average total assets per member

70%

of members founded within last 10 years

77%

Focus on earlystage investing

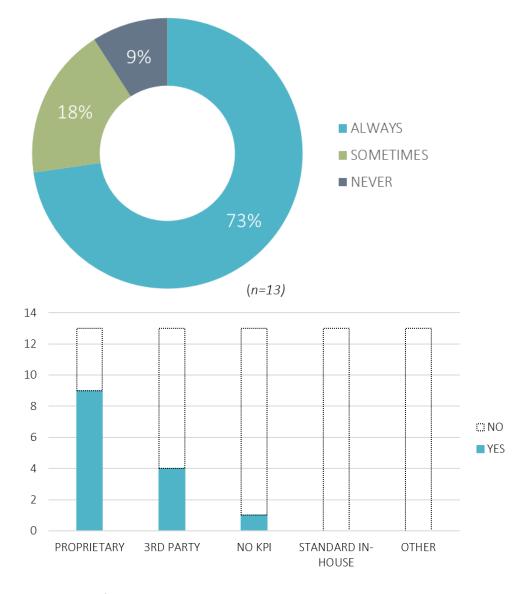
5.4yr

Average holding period

India Impact Investing Landscape: Results from the IIC Member Survey

How and how often is impact measured?

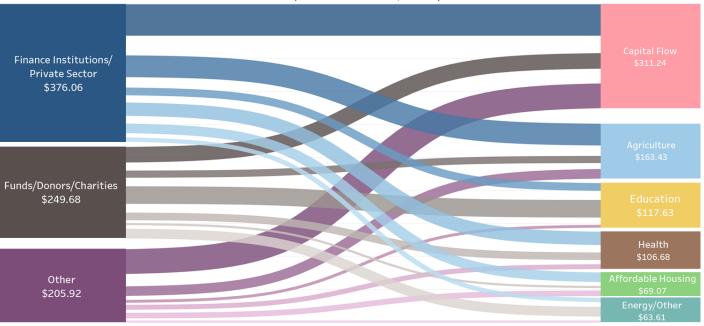
(n=11)



The majority of members incorporate impact measurement into their deals (ex. as part of due diligence work), as well as capture data on a regular basis. They often use their own proprietary impact metrics that may borrow elements from standards (ex. GIIRS).

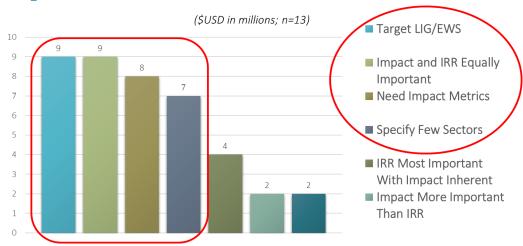
Top funding sources and impact areas invested

(\$USD in millions; n=13)



IIC members are mainly funded by Finance Institutions/Private Sector (ex. development finance institutions and banks) and largely invest in Capital Flow (ex. microfinance) and Agriculture.

Impact Investment Considerations



The top considerations surveyed members make when making an impact investment are targeting primarily the LIG/EWS segment and equally valuing social impact commitments & financial returns.

IMPACT INVESTING TRENDS

Two major trends within the current impact investing landscape have shaped the recommendations by the team:

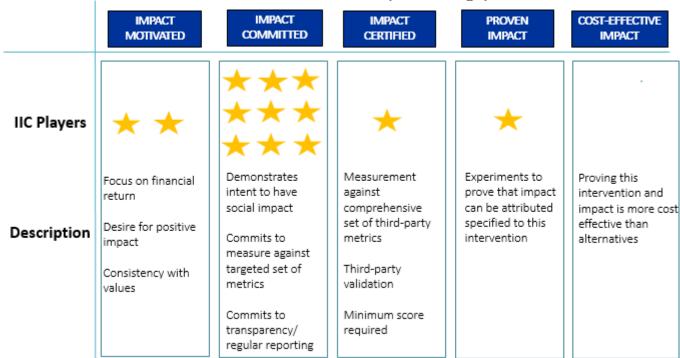
- 1. Impact Investing Spectrum
- 2. Customization of Standard Metrics

Impact Investing Spectrum

The Impact Investing Spectrum helps identify the types of impact evidence collected by funds and ventures. Using this framework, funds can identify how to more effectively make improvements to their impact measurement processes while maturing with the market.

A majority of interviewed IIC members fell under the Impact Committed evidence path. Impact Committed firms are mostly output focused showing commitment to measuring against a set of targeted metrics. Therefore, the sector recommendations focus on how to improve within the impact committed evidence path.

IIC Member Distribution on Impact Investing Spectrum

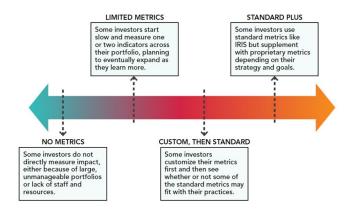


^{*}Impact Evidence Cheat Sheet, CASE Smart Impact Capital, Cathy Clark: https://casesmartimpact.com

Customization of Standard Metrics

According to a GIIN study, a majority of respondents "customize metrics for each investment, and use some metrics across entire portfolio (37% of respondents)"*. These findings are consistent with data gathered from interviews with IIC members, which revealed that most members fell between "Custom, Then Standard" and "Standard Plus" as shown on the Toniic graph.

The most popular taxonomy members borrowed from was IRIS. Using IRIS metrics has many advantages, such as helping funds improve their due diligence and impact tracking processes. On other hand, IRIS metrics can be perceived as being too burdensome, especially for early stage ventures. Additionally, IIC members have found that some IRIS metrics are not applicable to the Indian ecosystem. Therefore, many funds choose to combine propriety metrics with any applicable IRIS metrics.



*Toniic Early Stage Global Impact Investing E-Guide: https://www.toniic.com/step-6-assessing-and-achieving-performance

Impact Investing in India: General Takeaways

India has a number of features that makes it unique in the impact investing world. First, social impact is at the heart of business models of most impact ventures in India, so collecting business metrics is often closely aligned with impact outputs. Second, the focus on bottom-of-the pyramid segments often creates unique business opportunities, since these segments are not as crowded as upper-market segments, and the numbers of unserved customers are high. This also largely removes the risks of mission drift. Finally, impact investing is attracting capital to these underfunded business areas and populations.

However, many funds are concerned with "burdening" their investees with elaborate reporting, thus they focus on business metrics reporting, which are closely aligned with impact goals. In addition, most funds do not have dedicated resources for tracking impact, as it is embedded into the scope of work with portfolio companies.

In terms of impact measurement in India, the majority of impact investors use proprietary metrics to assess impact. IRIS metrics are often integrated, but none of the interviewed companies use IRIS exclusively. Ultimately, one of the common challenges for funds is the difficulty to aggregate metrics across sectors and funds.



The **key sectors** in impact investing in India are Financial Inclusion, Affordable Housing, Education, Healthcare, Energy, Food & Agriculture

Key Sectors Overview

				**	#	
Number of IIC members	17	9	16	17	10	17
Impact Capital Invested* *Based on 13 survey respondents	\$155.6M+	\$34.5M+	\$58.8M+	\$53.3M+	\$5.2M+	\$81.7M+
Established impact metrics						
Challenges	Simple, common metrics but without standardized metrics across sector	Home loans may not be enough; inconsistent metric definitions	Difficulty measuring outcomes vs outputs, high cost, variety of metrics based on investment type	Aggregating metrics is difficult due to a diversity of the health sector.	Barriers to accessing end-user for data	Difficulties in data collection, interpretation and aggregation – remote areas, high cost
Recommendations	Implement high-level standardized metrics (IRIS) for affected LIG and EWS* population	Look for expanded housing aid initiatives; adopt standardized metrics adjusted to India context	Investment level metrics using IRIS, Fund level metrics around total lives touched	Consider aligning metrics with the needs-based SDGs to mitigate the challenge of diversity.	Use of mobile devices to collect data. Aeris Metrics based on IRIS framework	Specific Investment- level metrics; aggregated to fund- level metrics

Why Measure Impact?

- To help perform prescreening / due diligence
- To assist with portfolio allocation and strategy
- To inform exit decisions and/or timing
- To benchmark key metrics against the industry / country
- To help Investees drive revenue growth by better understanding customers
- Proven impact can lead to lower cost of capital (see Danone example)

Why Measure Impact?

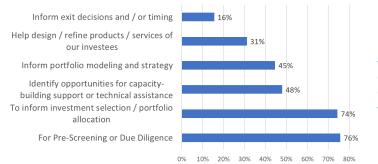
1. Impact Data can help inform a wide range of Business Decisions

While most funds use impact data primarily in the pre-screening and due diligence phase, impact data can actually help inform a wide range of business decisions. Funds can use the data to make strategic decisions around the portfolio allocation, and also help make exit decisions.

"Because of the early stage nature of our companies, the assessment illuminated some topics that will be important in the future enabling the companies to put policies in place in advance"

- IIC Member





Source: GIIN Impact Management Survey

2. Funds can use Impact Data to Benchmark Key Metrics

Impact Data can also be used to benchmark key metrics across the sector or country, giving funds and investees further insight into the sector. Below is an example of using IRIS metrics to benchmark profitability across various sectors.

"When every organization has a different method for demonstrating impact, it becomes difficult for an investor to compare opportunities to one another with any confidence."

- Serge LeVert-Chiasson (Sarona Asset

SOCIAL IMPACT OBJECTIVES

	ORGANIZATIONS	PERCENT PROFITABLE*
ACCESS TO FINANCIAL SERVICES	6	67%
AGRICULTURAL PRODUCTIVITY	11	64%
CAPACITY BUILDING	9	89%
EMPLOYMENT GENERATION	31	84%
FOOD SECURITY	6	67%
HEALTH IMPROVEMENT	16	81%
INCOME & PRODUCTIVITY GROWTH	16	69%
ANY SOCIAL IMPACT OBJECTIVE***	161	76%

SAMPLE IRIS METRICS

ACCESS TO FINANCIAL SERVICES

Clients PI7094

Non Performing Loans (Portfolio at Risk) FP2635 Social Responsibility to Microfinance Clients 017783

AGRICULTURAL PRODUCTIVITY

Cultivated Land Area O11937 Supplier Individuals: Smallholder P19991 Purchases from Supplier Individuals: Smallholder P17852

CAPACITY BUILDING

Education Services P1873 Technical Assistance P15325 Enterprise/Business Development Training P11193

3. Impact Data can help drive revenue growth

By asking detailed questions around the customer base, Impact Data can also help investees better understand their customers, and help drive revenue growth.

To the right is an example of using impact data in the financial inclusion sector to gather further data about customers and make strategic decisions to drive revenue growth based on that data.



Every CFO Should Know This: 'The Future Of Banking' Ties Verified ESG Performance To Cheaper Capital



4. Proven Impact Can Lower Cost of Capital

Another great example of the business benefits of measuring impact comes from Danone, which has worked with 12 leading global banks to lower its cost of capital based solely on its B-Certification status & scores.

This is great example of impact & business goals being aligned.

Source: Forbes

5. Reporting Impact allows to Identify as High-Impact, High-Returns Fund

There is also a growing global trend of Impact Investing funds targeting "high-impact, high returns" investing. This trend is breaking the previously held sentiment that impact investing can not yield market returns.

One such example of this is the Impact Capital Managers, which is an organization representing \$5B in capital, with more than two-dozen market rate impact investing funds.

"Accountability is important in part to ensure that "impact" is not merely marketing window dressing. More importantly, it's a strategic necessity if impact is indeed central to a fund's investment thesis."



Smarter Money | April 2, 2018

Managers of over \$5 billion aim for high-impact, high-returns investing



IIC Member Perspective

"First, what is the impact that these companies are creating. Second, when satisfied with the impact measurements, we conduct financial due diligence, such as minimum return expectations. Third, based on financial and impact, we decide to invest. Once we invest, we will be continuously asking for metrics, including impact."

Financial Inclusion Sector Overview

Sector Overview

Primary asset class: Direct, Private Equity/

Venture Capital

Primary security type: Equity

Primary IRR: 0-20%, dependent on capital

source

Primary investment stage: Seed Series, Se-

ries A, Series B

Type of impact metrics: Proprietary

Average investment size: \$1M - \$5M

Average time period for data tracking: Quar-

terly

Common Metrics

Number of lives affected

Number of lives affected of target population

Number of women affected

Number of employees

Number of people new to financial credit

Amount of capital deployed

Depth of impact in dollar value per capita

Amount of carbon emissions reduced

Case Study: Financial Inclusion Impact Metrics

One member of IIC has been able to combine breadth and depth when measuring impact metrics in the financial inclusion sector. There are three main focuses in the measurement: value, clients, and organization. In terms of value, the fund tracks the total loan portfolio and the average outstanding loan. For clients, the fund tracks total number of clients but also tracks female clients, urban clients, and rural clients to ensure the target populations are being reached. Finally, the fund tracks the investee itself, including full time employees, female employees, and organization size in terms of number of branches, total branches, and number of states or UTs where the investee is located.

Gross Loan Portfolio

Average Loan Outstanding

Number of Active Clients

Women Clients

Urban Clients

Rural Clients

Number of Full Time Employees

Women Employees

Number of Branches

Total Branches

Number of States/UTs



LIG and EWS Populations

Under RRY, Economically Weaker Section (EWS) is defined as households having an average annual income up to Rs. 1,00,000/- while Low Income Group (LIG) is defined as households having an average annual income between Rs.1,00,001/- and up to Rs.2,00,000/-

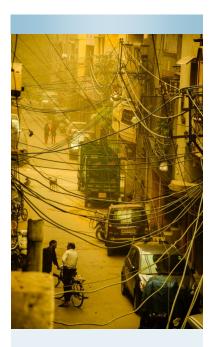
"Most of companies have been having impact, but unable to track in standardized manner. We do not have any standard metrics on impact created. There needs to be someone to guide this or have some standardized metrics to easily track those metrics." - IIC Member

Recommendations for Financial Inclusion Sector: Implement high-level standardized metrics (IRIS) for affected LIG and EWS* populations

The financial inclusion industry is a mature impact investing industry (c. 1970s) with simple, common metrics used across impact investing organizations, but without standardized metrics across sector. Therefore, the recommendation is to track five common IRIS metrics for each investment that can be rolled up by fund.

These metrics are meant to be supplemental to the current metrics that are being tracked across the sector and not to purely replace the proprietary metrics. The first two Iris metrics align around capital with the number of loans disbursed and value of loans disbursed. The following three metrics align around lives impacted, particularly the total number of clients, the number of female clients, and the

Iris Aligned Metric	Iris Definition
Number of Loans Disbursed (PI8381)	Number of loans disbursed by the organization during the reporting period.
Value of Loans Disbursed (PI5476)	Value of loans disbursed by the organization during the reporting period.
Client Individuals: Total (PI4060)	Number of unique individuals who were clients of the organization during the reporting period.
Client Individuals: Female (PI8330)	Number of unique women who were clients of the organization during the reporting period.
Client Individuals: Low Income (PI7098)	Number of unique low income individuals who were clients of the organization during the reporting period.



Case Study: Affordable Housing

SEWA Grih Rin Limited is India's first housing company to provide small loans to help low -income women in India improve their living situations by helping build their credit histories

- Funded by Acumen starting in 2014
- Served 1750 customers in 2017 and aiming for 8000 by 2018 with a majority earning monthly incomes ranging from \$80 to \$350
- SGR requires women to contribute capital to access the loans

Affordable Housing Sector Overview

INDUSTRY TRENDS:

Urban housing shortage:

Current urban housing shortage in India estimated at 19 million homes (96% EWS/LIG)

Government encouraging growth:

Pradhan Mantri Awas Yojana (PMAY) program launched in 2015 to build 20 million urban homes by 2022

Pressure to measure impact:

Increasing competition in affordable housing microfinance market is putting more pressure on even smaller firms to measure impact to differentiate.

"The new customer segment is low-income...
[the housing microfinance industry] has to
provide more than just lending services given
how competitive it's becoming..."- IIC Member

Sector Metrics

Outputs:

HOUSEHOLD:

- # of loans
- Time from loan to disposal
- # of first-time house owners
- # individuals housed

HOUSING:

- # of housing units built
- Value of housing units financed

Outcomes:

HOUSEHOLD STATUS IMPROVE-MENT:

- Turnover rate
- Client cost savings
- % change of household income spent on rent/mortgage

HOUSING QUALITY IMPROVEMENT

% of housing units rehabilitated



Challenges and Recommendations

How should housing metrics be defined?

Standardized definitions (ex. IRIS) may be too general compared to more specific definitions in India (ex. Ministry of Housing & Urban Poverty Alleviation)

Will policies continue to encourage affordable housing growth?

Policies already have helped, from government tax exemptions on affordable housing focuses to mortgage loan securitization (which has helped with coterminous funding)

Is financing homes enough?

Lack of home maintenance could lead to "new urban slums"

Adopt common metrics tailored for India, such as:

- Turnover rate (ex. # tenants evicted vs. # moving to market-rate housing)
- # of housing units built (using EWS/LIG definitions), # improved, and # financed

Look into more wholistic offerings for families (in addition to loans):

- Home technical assistance during construction and maintenance (ex. water and toilet facilities)
- Helping track informal income



Food & Agriculture Sector Overview

Sector Overview

Primary Asset Class: Direct, Private Equity / Capital

Primary Security Type: Equity

Primary IRR: 10—20%, dependent on capital

Primary Investment Stage: Seed Series, Series A, Series B, Series C

Type of impact metrics: Standard (IRIS, GIIRS), Proprietary

Average Investment Size: \$3M-\$12M

Average time period for data tracking: Quarterly, Half-Yearly, Yearly

Investment Focus

Agricultural Technology

- Precision Agriculture, Internet-of-Things
- Storage Technologies, Supply Chain Tools

Sustainable Agriculture

- Crop Renovation and Rehabilitation
- Sustainable inputs for small holder farms

Innovative Food

- New Food Processing Technologies
- Branded Products, Novel Ingredients

These investments are primarily focused on increasing the profitability and sustainability for small holder farmers.

Case Study: Khedut Agro Engineering¹

Kehdut Agro Engineering is India's largest manufacturer of automatic seed drills and innovative planting machinery. Khedut's solutions optimize resource usage while increasing farm yields significantly.

Metrics used to measure impact caused by Khedut Agro Engineering

- Reduced savings from labor
- 34% reduction in seed wastage
- 59% reduction in fertilizer use
- 15% increase in farm output
- 90,000+ farmers across 19 states benefitted
- \$10.47M benefit passed on to customers in FY2016—17 alone

Sector Impact Metrics & Challenges

One of the best practice seen in this Industry is the use of detailed specific impact measurement on investment-level basis, based on the investment focus area mentioned above and finding common metrics across the different investments and aggregating the metrics to sector-level.

Some of the challenges faced in Impact measurement in this Industry include:

- Difficulty in tracking the income level of the farmers
- Farmers are hesitant in disclosing their "real" income due to their fear of losing government subsidies
- Since farmers use cash for their transactions it is hard to measure the increase in the income level of the farmers
- There is no one recommended impact measurement framework to use for the agricultural sector.
- Since the farmers live in rural areas, there is high cost associated in data collection, interpretation and aggregation.



Smallholder Farmer in India

Recommendations

The diverse investment focus areas in Food & Agriculture requires that funds define specific metrics on investment-level and roll up to more general sector-wide metrics, depending on the investor goals. Some examples of aggregated Fund-Level metrics are listed on the right.

Having a standardized definition for smallholder farmers across the different funds will help in aggregating metrics both on sector-level and fund-level.

Since these investments are primarily focused on Smallholder farmers, it is suggested to use IRIS metrics that help measure the impact made to Smallholder farmers through the portfolio products and services. Some of the metrics² that could be considered include:

Agricultural Technology	Sustainable Agriculture	Innovative Food
Value of payments made to Smallholder farmers who sold to organization during the reporting period (P17852)	Area of land directly controlled by the organization and treated with pesticides (O12569)	Number of contracts/purchase agreements that the organization holds for purchase of its products/services (P19988)
Percentage of payments made to Smallholder farmers suppli- ers compared to total payments made to all suppliers of the organization during the re- porting period (P18632)	Area of land directly controlled by the organization and under sustainable cultivation or sus- tainable stewardship (O16912)	Units/Volume purchased from Smallholder farmers who sold to organization during the re- porting period (P14982)

²https://iris.thegiin.org/metrics

Fund-Level metrics

Specific metrics across the three different investment focus areas can be aggregated into more general sector-wide metrics.

Examples of fund-level metrics include:

- Number of Smallholder farms benefitting from the products and services of portfolio companies.
- Number of Smallholder farmers who are able to increase their farm productivity (gross output) as direct result of consuming the products and services of portfolio companies.
- Number of Smallholder farmers who are able to increase their income as a direct result of consuming the products and services of portfolio companies.
- Number of Smallholder farmers
 who are able to reduce their
 consumption of natural re sources, including fresh water,
 as a direct result of utilizing the
 products and services of portfolio companies.

Education Sector Overview



The Education sector for Impact Investing in India is still relatively young, with investments primarily spanning three sectors:

- Affordable Private Schools
- Services for Affordable Private Schools
- ♦ Education Technology

Investments in the Education Sector range from \$3M-12M, and are mostly in earlier stages, Seed, Series A and Series B.

Key Statistics of the Education Sector:

- Total Enrollment of students in primary & secondary education vs population: 259M of 299M (86.6%)
- Primary School Attendance Rate: 69.7%
- Secondary School Attendance Rate : 55%
- Ratio of Public : Private Schools : 7:5
 Source: India Ministry of HRD, Unicef

v After a year in school, four in five [Indian] kids ... have sat through an entire year of

Case Study: Benchmarking Education in India¹

A study that benchmarked education level in India with international standards was completed by an IIC

Some of the impact metrics covered:

- Benchmarking language & math skills
- Student performance vs teacher qualification
- Gender distribution of students& teachers
- District / location of school by income level
- Rural vs Urban schools performance

Sector Impact Metrics & Challenges

Currently in the education sector there are a variety of metrics being measured, ranging from measuring pure outputs, such as total number of students, to more detailed proven impact control vs intervention studies.

Key Metrics covered included: Total number of students & teachers, total number of students from low income populations, transition rate to next class level, number of loans given (to schools), and employment created.

Challenges in Impact Management:

The Education sector often faces a lot of challenges while measuring impact, due to the various background factors that impact students learning. As a result, it is often easier to measure outputs (such as enrollment and attendance) as opposed to true outcomes. Here are some of the top challenges faced in measuring impact:

- ♦ Lack of consistency in metrics across different education levels.
- Lack of technology in schools, which limits the use of technology for managing impact and removing biases.
- ♦ Lack of transparency around income level of student's families.
- Cost & time associated with impact measurement beyond outputs, and the sensitivity of data collected.
- Lack of a clear benchmark to national education standards (due to different national and state education boards)



An Affordable Private School in Jaipur, India

Recommendations:

Given the challenged with measuring true outputs, and the cost & time associated with detailed control vs intervention reports, the best practice in education is to measure sub-sector level outputs, using the IRIS taxonomy. It is important to adapt these metrics to Indian standards, such as measuring low income as the EWS (Economically Weaker Segment) or the LIG (Low Income Group).

In addition to the firm and sub-sector level metrics, the best practice is to measure a fund level metric, **total lives touched.**

Below are examples of best practices across the three largest sub-sectors in Education, Affordable Private School, Services for Affordable Private Schools, and Education Technology.

Fund-Level metrics

Specific metrics across the three different investment focus areas can be aggregated into more general sector-wide metrics.

Examples of fund-level metrics include:

- Total enrollment of students from low income populations
- Total number of teachers employed
- Gender distribution of students& teachers
- Total women employed
- Economic benefit created
- Total value of educational materials (or leans) provided

Affordable Private Schools	Services for Affordable Private Schools	Education Technology
Number of low income students enrolled as of the end of the reporting period. (PI2173)	Average school fee per student per month during the reporting period. (PI2718)	Number of low income students enrolled as of the end of the reporting period. (PI2173) Value of new educational instructional
Rate of teacher attendance during the reporting period. (PI3651)	Value of new educational instructional materials provided to students by the organization during the reporting period. (PI5736)	materials provided to students by the organization during the reporting period. (PI5736)
Rate of student attendance during the reporting peri-		Number of students enrolled as of the end
od. (PI3786)	Scholarships provided (PI3499)	of the reporting period (PI2389)
Percentage of students advancing from one level of	Number of students enrolled as of the end of the	
schooling to the next. (PI4924)	reporting period (PI2389)	Total Employment created (OI5896)
Total Lives touched: Number of students & teachers		Total Lives touched: Number of students &
during reporting period	Total Lives touched: Numbers of students & teachers at all schools receiving services	teachers at schools receiving services, and total employment created by firm



Healthcare Sector Overview

There are two main areas within the healthcare sector in India: **Healthcare services** (e.g., disease prevention) and **Pharmaceuticals**.

INDUSTRY CHALLENGES:

Shortage of Skilled Workers:

Need for 2+M doctors and 6M nurses

Affordable Access to Healthcare:

50% travel more than 100km for access higher level of care

Urban Bias of Skilled Workers:

80%+ doctors are in urban areas

Government Spending:

Spending on healthcare is only 1% of GDP

*Caspian Impact Investments: Social Performance Report 2017

INDUSTRY TRENDS:

Private Sector Involvement:

72% share in total healthcare spend 74% of hospitals

Growth in Prevention of Noncommunicable Diseases:

A diversion from the focus in communicable diseases in the past

The healthcare sector's diverse set of services creates barriers to aggregating a set of common metrics for this industry.

Case Study: Healthcare

Drishti Eyecare is an enterprise that provides affordable eye care in underserved regions of the country. It has set up hospitals (hubs) in Tier Y&Z locations and eye care centres (spokes) in taluka locations. In addition to hospitals, it sends mobile eye testing clinics (buses) into villages where it conducts awareness camps and preliminary eye testing.

Some metrics that are used in measuring impact:

- OPD eye care patients
- Eye care hospitals/clinics
- Eye surgeries conducted
- Children treated/consulted
- Eye camps conducted

Along with these metrics, the fund aligns the work with SDG (Sustainable Development Goal): Good Health & Well Being.

*Caspian Impact Investments: Social Performance Report 2017

Sector Metrics

Below are sample healthcare metrics from IIC members divided into three main need areas: Affordability and Access, Services, and Operations/Personnel

Affordability and Access

- # of patients from low income households (LIG/EWS)
- # of primary healthcare clinics operating in Tier Y/Z clinics
- Costs savings from treatment, wages and living costs

Services

- # of patients served
- # of patients served with critical diseases

Operations/Personnel

- # of full-time employees
- # of female employees
- # of operational healthcare facilities

Challenges and Recommendations

Since healthcare is predominately a service delivery sector, a variety of factors can influence the outcomes. As a result of this, it is difficult to track proven impact generated by the ventures. Additionally, the healthcare sector is vastly diverse in the services provided. This creates barriers to aggregating a set of common metrics for this industry.

As a result of both of these challenges, it is recommended to further investigate the sector for the next 2-3 years. The purpose of further research would be to learn best ways to segment the sector and identify an appropriate set of common sectors for each sub-sector.

In addition to further research, consider aligning projects with the UN Sustainable Development Goals (SDG). The SDGs are need-based which will allow for more flexibility and can mitigate the challenge of the diversity in services offered. Since the SDGs are globally reputable and well-respected, another advantage of focusing projects on SDGs include being able to attract more funding. On the left, a case study from **Caspian** shows how they align one of their healthcare projects to the SDG: Good Health & Well Being.



Energy Sector Overview

There are two main areas within the energy sector in India: Access to Energy and Clean Energy. It is a very young sector, which is growing as demand for clean energy in India increases. Currently, only about 18.8% of total renewable energy capacity in India has been reached showing there are many opportunities for growth in this sector. Along with utilization of clean energy, access to energy is a major concern in India since about 50 million rural households still have little or no access to grid-based electricity.

Sector Metrics

Below are sample healthcare metrics from IIC member funds and divided by outputs versus outcomes:

Outputs:

- # of products sold (e.g., cook stoves)
- # of low-income consumers (LIG/EWS)
- # of first time technology owners
- # of Kwh/Units generated
- # of households electrified
- # of female employees
- # of employed people
- # of clients
- Certifications, if any

Outcomes:

- Energy ladder movement
- Tons of reduction in carbon emissions/ fossil fuel usage
- % change in employee income
- % change in productivity
- Costs savings

Challenges and Recommendations

Aside from this sector being very young, a major challenge in tracking impact is accessing end-user data. For instance, gaining physical access to rural areas in India is very difficult making it harder for ventures to gather data from customers to better understand the impact of their product in those regions.

The second major challenge is the difficulty in standardizing and capturing data due to the fact that such a large variety of factors influence energy sector outcomes. This variability in influencers creates barriers to achieving proven impact on the Impact Investing Spectrum.

In order to combat these challenges, we are recommending two solutions:

- In India, most people have access to mobile devices, which can be used to send surveys via SMS and ultimately
 gain useful end-user data. Currently, Acumen is successfully using this method through their Lean Data approach (Case Study: Energy). In order to effectively implement this method, it is important to encourage ventures to build infrastructure around capturing customer contact information.
- Aeris has created a common set of metrics for the energy sector by borrowing metrics from the IRIS taxonomy.
 These common set of metrics (shown below) incorporate the two main energy areas discussed above: access to energy and clean energy. By adopting these metrics, funds will be able to create useful benchmarks for the impact investing industry in India.

Case Study: Energy

d.Light is a leader in delivering affordable solar-powered solutions for people in the developing world without access to reliable energy. They provide distributed solar energy solutions for households and small businesses. The project has been bunded by Acumen starting in 2007

By utilizing mobile tech and their Lean Data approach, Acumen has been able to successfully gather data for impact outputs and outcomes. Below are metrics collected for this project:

- # of lives empowered
- # of school-aged children reached with solar lighting
- # of GWH generated from a renewable energy source
- Money saved in energy-related expenses
- # of tons of carbon dioxide offset
- # of productive hours created for working and studying

*Acumen: https://acumen.org/ investment/d-light/

Metric	Aeris Definition	IRIS Aligned Metric
MBTU Energy Saved/Conserved	The estimated energy conserved as a result of the investment.	Energy Conserved (OI6697)
MWh Renewable Energy Produced	# of megawatts of renewable energy generated as a result of the investment.	Energy Generated for Use: Renewable (OI2496)
Tons in GHG Reduction	Reduction of GHG emissions as a result of improvements in change in energy source, energy efficiency, or transportation policy.	GHG Emissions: Total (OI179)

Recommendations



Figure X. Iterative Impact Management Process, defined by Scopos Impact Fund and Bridges Impact+

1. Holistic Approach to Impact Management

Adopt Impact Management Framework (IMF) as recommended approach for IIC members to not only measure impact, but also align with and engage stakeholders, promote transparency and culture of continual improvement.

Iterative nature of this model highlights the need for continual feedback loops, balancing goals, strategies and metrics for measuring both impact and financial performance.

While some adaptation to Indian realities might be needed, IMF will promote a strategic long-term view of impact as an integral part of business model for social ventures, and encourage planning and measuring impact as tools for improving efficiency and making better business decisions.

Goals and indicators within IMF can be mapped to UN Sustainable Development Goals (SDGs) to create common language for all stakeholders involved.

Considering an investment's impact targets pre-investment help us choose strategies that are likely to achieve our goals. Post-investment, performance against targets enables us to understand whether they are doing so.

- Skopos Impact Fund

Lives Touched—

Financial inclusion	Client Individuals: Total Client Individuals: Low Income
Food & Agri- culture	Smallholder Farmers: Total * Avg rural house- hold size (4.7)
Afforda- ble Housing	Individuals housed by affordable housing (incl. borrowers and family members housed)
Educa- tion	Number of students and teachers: Total Number of students: Low Income Total students impacted by services
Health- care	Patient Individuals: Total
Energy	Client Individuals: Total * Avg household size (4.7)

2. Multi-tier Impact Metrics Structure

The multi-tier metrics structure helps reconcile the need for aggregate fund-wide and sector-wide impact measurements with unique nature of each impact venture.

Adoption of three levels of metrics will address diverse impact measurement needs:

- 1. Fund or organization-level. This highest level of impact measurement needs to encompass the diversity of impact investing activity in India from financial inclusion and housing to energy, agriculture and healthcare. A common high-level metric used for this purpose is Lives Touched. To streamline approaches of various players, IIC will provide its members with a framework for defining Lives Touched for key impact investing sectors. With input from IIC members, fund-level metrics cam be implemented starting 2019 and serve as a pilot project for implementing other common metrics in the industry.
- 2. Industry-level. As impact investing practices in an industry become more established, top impact metrics are often consistent among majority of investors. IIC will engage top investors in each sector to define key impact metrics, align on the level of granularity and possibilities for data aggregation. According to research findings, the industries that are ready to converge on common impact metrics starting 2019 are financial inclusion, affordable housing and agriculture. Learnings from these pioneering industries will encourage development of common industry metrics for less mature sectors, allowing sector-level data aggregation and better positioning India as it competes for impact capital with other markets.
- 3. Venture-level. Proprietary metrics that can be either based on standard taxonomies or unique to the particular business model. Standard metrics can be used for benchmarking, while proprietary metrics help capture important insights and evaluate success of the venture in delivering on its social mission.

IIC will collect annual member feedback on the implementation of fund-level and industry-level metrics, which will allow to iterate and improve practices to ensure continuous improvement and information sharing with other sectors to implement learnings across all members.



3. Technology Adoption

IIC can become a trusted advisor for members on embracing technology for improved impact tracking. The following steps can help IIC realize this goal:

- •Formation of IIC Technology Subcommittee to coordinate efforts. Members with most experience in implementing technology solutions to manage impact are encouraged to join the subcommittee to aggregate best practices and drive programming. Monitoring of member progress can be done via annual survey.
- Promoting experience sharing and best practices among members (i.e. Acumen's Lean Data toolkit) and partners though workshops, webinars, case studies, white papers and effectiveness studies.
- Establishing partnerships with IT vendors and specialty service platforms, as well as other impact investing associations across the world.

4. Fostering Communication and Transparency

- •Feedback. Annual IIC survey will be administered to collect member input and evaluation of IIC performance on key pillars. This will allow to measure progress and capture feedback on key initiatives and empower IIC leadership and program managers to iterate and improve its services to members. Additional member forums can be initiated throughout the year to address specific issues, such as standards in impact management.
- •Engagement. IIC strives to become the platform of open and transparent communication among members. To provide value, it needs members' input to the key initiatives and programs. Members are encouraged to engage with the organization and participate in events in person or remotely providing timely input will ensure that all member suggestions and concerns are heard and addressed in relevant programming.
- Ongoing Communication. In the spirit of transparency and cooperation IIC will keep the members informed on progress of all initiatives, promote best practices and ask for inputs via member newsletters. Additional initiatives will be focused on member experience sharing via case studies and IIC events. With members encompassing extensive experience from across the globe, such information sharing can be a strong catalyst towards faster growth and maturity of the impact investing industry in India.

About Duke University Research Project

This research project was conducted by Duke Fuqua Daytime MBA students, Associates at Duke's Center for the Advancement of Social Entrepreneurship (CASE) i3 Initiative on Impact Investing.

Research scope included the following stages:

- Members digital survey
 (N=13, input from 11 members)
- In-depth interviews with 18 members and non-member organizations, focused on impact investing in India.
- Desk research of current trends, best practices, study of impact reports of IIC member organizations.



