



Corridors for Shared Prosperity

Spotlight on India-Africa
Inclusive Business Transfer

TECHNICAL NOTES

This assessment was conducted and document written for the International Finance Corporation (IFC) by Intellectual Capital Advisory Services (Intellectap).

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The Inclusive Business Transfer Framework presented in *Corridors for Shared Prosperity* was designed to guide small and medium inclusive businesses for systematic transfer to Africa. The framework was built based on a hypothesis of the drivers of successful transfer, and was then validated, improved and refined based on experiences of eleven Indian inclusive businesses that have replicated in Africa. The framework is currently focused on agriculture, healthcare and renewable energy as focus sectors, with country focus being limited to Kenya, Tanzania, Uganda, Nigeria and Ghana.

Metrics used in the framework

The Framework is able to provide insights to inclusive businesses as a result of quantitative and qualitative data fed into it, which are derived from a set of shortlisted metrics. The broad categories of the metrics are as follows:

- Metrics to understand intent
- Metrics to measure transfer-readiness
- Metrics to compare the relative attractiveness of 5 African countries as transfer destinations

Metrics to understanding intent

Table 1: Metrics to understand Intent

Metric	Definition
Sector	A distinct subset of a market, society, industry, or economy, whose components share similar characteristics
Sub Sector	A distinct subset of a sector
Product or Service model	Product: A tangible or distinct physical or virtual item that may be purchased to answer a specific need or demand Service: A valuable action, deed, or effort performed to satisfy a need or to fulfil a demand
B2B	Trading between firms (and not between businesses and consumers), characterized by (1) relatively large volumes, (2) competitive and stable prices, (3) fast delivery times and, often, (4) on deferred payment basis. In general, wholesaling is B2B and retailing is B2C
B2C	Selling individual products to individual buyers, usually on cash payment basis; retailing
Year of establishment	Year of incorporation of the organization
Profit Orientation	A term used to describe a business that operates under the primary objective of making money. Although most commercial enterprises have some form of profit orientation to motivate employees to maximize revenues, the most successful producers also incorporate a customer orientation into their corporate philosophy to protect the company's reputation and facilitate client satisfaction with its products
Asset-light or asset-heavy model	Asset-light: Business can be started and scaled with little investment in fixed assets such as land and machinery, or in assets such as a large field staff Asset-heavy: Business operations necessitate high investments in fixed assets such as land and machinery, or in assets such as a large field staff
Legal Structure	Organization framework legally recognized in a particular jurisdiction for conducting commercial activities, such as sole-proprietorship, partnership, and corporation

Metrics to measure internal readiness to transfer

Metrics were identified across 3 areas of management capacity, financial capacity and operational capacity to measure transfer-readiness (Table 2, Table 3, Table 4). Each metric was awarded a binary score of 1 or 0 based on an inclusive business's specific capacity in that area. For instance, while

measuring management bandwidth, availability of 20 percent or less bandwidth was given a 0 score, while availability of more than 20 percent bandwidth was given a score of 1. The binary score gates were adapted to suit the context of small and medium inclusive businesses.

To establish readiness on a specific area (management, financial, operational); binary scores for each metric were weighted and summed. If the sum is greater than 60 percent of the total score, then an inclusive business is transfer-ready from that perspective. With the exception of knowledge sharing as a format, for all other transfer formats an inclusive business must score above 60 percent on management, financial and operational capacity in order to be deemed transfer-ready. The weightages awarded to different metrics were arrived at based on the experiences of the sample set and feedback from industry experts.

Table 2: Metrics to measure management readiness

Metric	Definition	Weightage	Conditions for score of 0 (not ready)	Conditions for score of 1 (ready)
Senior management bandwidth	The amount of time that senior management can allocate to expansion-centric activities	50 percent	<ul style="list-style-type: none"> Less than 20 percent bandwidth available to focus on expansion No second line of leadership No business verticals, senior management share all responsibilities 	<ul style="list-style-type: none"> More than 20 percent bandwidth available to focus on expansion Second line of leadership groomed Senior management have specific roles and responsibilities, do not manage more than 3 critical areas
Relationships and networks in Africa	Any relationships and networks in Africa, either at the organization of individual level	25 percent	<ul style="list-style-type: none"> No relationships in Africa 	<ul style="list-style-type: none"> Indian partners/clients do business in Africa Institutional linkages with African firms Individual team members have networks in Africa
Senior management experience	The quantum of experience that the senior management has accumulated in the sector as well as in expansion	15 percent	<ul style="list-style-type: none"> Less than 5 years of average experience No expansion experience 	<ul style="list-style-type: none"> Expansion experience in India Expansion experience in overseas markets
Talent management practices	Firm's expertise in hiring and retained skilled talent	10 percent	<ul style="list-style-type: none"> No specific talent management practices 	<ul style="list-style-type: none"> Have a talent management lead or manager Have experience in incentivizing skilled talent through fast track opportunities, ESOPs, and performance-linked variable salaries

Table 3: Metrics to measure financial readiness

Metric	Definition	Weightage	Conditions for score of 0 (not ready)	Conditions for score of 1 (ready)
Profitability	The state or condition of yielding a financial profit or gain. It is	25 percent	<ul style="list-style-type: none"> Loss-making in the past 1 year 	<ul style="list-style-type: none"> Profitable or shows surplus in the past 1 year

	often measured by price to earnings ratio			
Gross profit margins	The percentage of revenues left with a firm after covering the cost of delivering a product or service	10 percent	<ul style="list-style-type: none"> • Less than 15 percent gross profit margin 	<ul style="list-style-type: none"> • More than 15 percent gross profit margin
Access to funding for transfer	Determines if a firm has access to sufficient capital to invest in transfer – either through internal capital reserves or external debt/equity funders	25 percent	<ul style="list-style-type: none"> • Do not have access to funding for transfer 	<ul style="list-style-type: none"> • Have access to funding for transfer (in-principle commitment from external funders is included)
Revenue predictability	The level of predictable revenue that a firm can generate on the basis of predictable lead generation, revenue development systems, and customer satisfaction	15 percent	<ul style="list-style-type: none"> • Irregular revenue cycle • Less than 20 percent sales conversion rate • Less than 20 percent recurring sales • One-time customer engagement model with a single sale and no subsequent follow-up 	<ul style="list-style-type: none"> • Regular revenue cycle • More than 20 percent sales conversion rate • More than 20 percent recurring sales • Customers are engaged multiple times
Cash flows	Incomings and outgoings of cash, representing the operating activities of an organization	15 percent	<ul style="list-style-type: none"> • Creditor days ratio is less than debtor days ratio • High risk payment model – product/service is partially or completely delivered before receiving payment 	<ul style="list-style-type: none"> • Creditor days ratio more than debtor days ratio • Low risk payment model – payment received ahead of or just after delivery of product/service
Presence of an institutional investor	Past history of raising external capital from a bank or an equity investor	10 percent	<ul style="list-style-type: none"> • No history of raising capital from an external investor 	<ul style="list-style-type: none"> • Have raised funding in the past from an external investor

Table 4: Metrics to measure operational readiness

Metric	Definition	Weightage	Conditions for score of 0 (not ready)	Conditions for score of 1 (ready)
Decision-making model and standardization	Measure of the level of standardization in business processes/operations, and the degree to which decision-making approaches are transferrable to a new market	40 percent	<ul style="list-style-type: none"> • No specific processes and policies • Decision-making is done by founders or senior management, who cannot be relocated to Africa • Operational model is dynamic and has changed within the past years' time 	<ul style="list-style-type: none"> • Follow well-documented processes and policies • Have a quality control strategy, such as specific department, certification • Operational model has been stable for more than 1 year
Asset utilization and efficiency	Measures what percentage of fixed assets (plant and machinery in case of product companies and people in case of	25 percent	Product: <ul style="list-style-type: none"> • Operating at less 40 percent utilization OR do not own assets • Frequent stock outages on account of internal or 	Product: <ul style="list-style-type: none"> • Operating at more than 40 percent utilization • Stock outages are rare Services: <ul style="list-style-type: none"> • Less than 30 percent

Metric	Definition	Weightage	Conditions for score of 0 (not ready)	Conditions for score of 1 (ready)
	services companies) are used for revenue generation, and the efficiency of assets		external challenges Services: <ul style="list-style-type: none"> • More than 30 percent of the team is benched or on stand-by • Do not have a well-structured training program 	of the team is benched or on stand-by <ul style="list-style-type: none"> • Have a well-structured training program
Competitive edge	Measures whether the inclusive business has built significant barriers to protect their market share and compete effectively, by – significant value addition, barriers for customers to shift to competing products/services, market entry barriers	15 percent	<ul style="list-style-type: none"> • No specific competitive edge 	<ul style="list-style-type: none"> • At least one competitive edge
Technical prowess	Measure of the presence/absence/need of an intellectual property ownership, research and development capacity, and technology partners	20 percent	<ul style="list-style-type: none"> • No specific technical strengths 	<ul style="list-style-type: none"> • At least one technical strength

Analysis of destination markets

The relative attractiveness of 5 African markets, i.e. Kenya, Tanzania, Uganda, Nigeria and Ghana was analyzed using quantitative metrics as well as qualitative metrics using the following approach.

Step 1 – Identifying Metrics: Quantitative metrics were considered only for the Sub Saharan African region, with a focus on 35 frontier markets only. Hence, South Africa was not considered as part of the data set. Metrics were then converted into standardized z-scores and checked for normal distribution. Metrics that were not normally distributed was replaced with metrics that were. Finally, the degree correlation between metrics was analyzed, and in cases where metric pairs showed a correlation of more than 0.6, only one metric deemed most relevant to the project was considered. As a result of this exercise, 37 quantitative metrics across 13 categories were identified to compare markets based on the overall macro-economic environment, ease of doing business, investment climate, and specific organization-level business dependencies.

Step 2 – Creating a sector-agnostic ranking of countries: In order to consider the impact of all metrics together on a country’s suitability for transfer; each category was given a composite z-score. All categories were assigned weightages based on the relative importance that the 20 inclusive businesses analyzed for this project accorded to each for selecting target countries (Table 5). In cases where the z-scores were negative, the country was deemed “below the average” of the general Sub Saharan African trend and awarded a binary score of 0. In cases where the z-scores were positive, the country was deemed “above the average” of the general Sub Saharan African trend and awarded a binary score of 1. Binary scores across 13 categories were then summed to arrive at a relative ranking of countries.

Table 5: Weightage accorded to general market environment and business dependencies

Category	Weightage
Macro-economic growth of destination country	5 percent
Market Maturity – import reliance, informality, size of private sector	10 percent
Strength of regulatory and judicial system	5 percent
Corporate tax rate	2 percent
Ease of doing business	10 percent
Investment climate	15 percent
Economic risk	5 percent
Social and political risk	3 percent
Specific business dependencies ¹	15 percent
Overall weightage for general market environment and business dependencies	70 percent

Step 3 – Bringing in sector-specific metrics: In the final step, quantitative and qualitative metrics to measure sector-specific business environments were added to the analysis to create sector-specific rankings of countries. Quantitative metrics were treated in the same manner as in steps 1 and 2. Qualitative metrics were identified on the basis of primary research done with inclusive businesses and industry experts. Each qualitative metric was also given a binary score based on whether the country was above the Sub Saharan African Average or below. Sector-specific metrics contributed 30 percent of the weightage for overall country ranking and prioritization.

The long-list of all quantitative and qualitative metrics considered is as follows:

Table 6: Metrics to measure state of general macro-economic environment

Variable	Definition	Source	Vintage
GDP growth (annual percent)	Annual percentage growth rate of GDP (2009-2013) at market prices based on constant local currency	World Development Indicators	2013
Gini Coefficient	Gini Coefficient (or index) measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution	World Development Indicators	2012
Gross domestic savings (as percent of GDP)	Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption)	World Development Indicators	2013
Bank non-performing loans (as percent of total gross loans)	Bank nonperforming loans to total gross loans are the value of nonperforming loans divided by the total value of the loan portfolio (including nonperforming loans before the deduction of specific loan-loss provisions)	World Development Indicators	2013
Uneven Economic Development	This indicator measures the unevenness of the government with regard to its social contract, in the presence of ethnic, religious or regional disparities. The	Fragile States Index	2014

¹ E.g. Inclusive business relies on specific technology infrastructure and hence can only thrive in countries with good tech infra, or needs access to ports etc.

	factors taken into consideration include Gini Coefficient, income share of highest and lowest 10 percent of the population, urban-rural service distribution, access to improved services, and slum population		
Human Development Index	Composite statistic of life expectancy, education, and income indices used to rank countries into four tiers of human development: low, medium, high, or very-high	UNDP Human Development Index	2014
Import reliance - Imports of goods and services (percent of GDP)	Imports of goods and services represent the value of all goods and other market services received from the rest of the world	World Development Indicators	2013
Overseas aid reliance - Net ODA as percent of GNI	Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients	World Development Indicators	2012
Degree of informality in market	Percentage of firms competing against unregistered or informal firms	World Bank Enterprise Surveys	2013
Gross fixed capital formation, private sector (percent of GDP)	Private investment covers gross outlays by the private sector (including private non-profit agencies) on additions to its fixed domestic assets.	World Development Indicators	2013
Maturity in payments and transactions - M1 as percent of GDP	Money inclusive of currency in circulation, travelers checks of non-bank issuers, demand deposits, and other checkable deposits consisting primarily of Negotiable Order of Withdrawal (NOW) accounts at depository institutions and credit union share draft accounts	World Development Indicators	2013
Age-dependency ratio, young (percent of working-age population)	Age dependency ratio, young, is the ratio of younger dependents--people younger than 15--to the working-age population--those ages 15-64	World Bank Population Estimates and Projections	2013
CPIA transparency, accountability, and corruption in the public sector rating (1=low to 6=high)	Transparency, accountability, and corruption in the public sector assess the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for administrative decisions, use of resources, and results obtained. The three main dimensions assessed are the accountability of the executive to oversight institutions and of public employees for their performance, access of civil society to information on public affairs, and state capture by narrow vested interests	World Development Indicators	2013
Profit Tax (percent)	The time it takes to prepare, file and pay (or withhold) the corporate income tax, the value added tax and social security contributions (in hours per year)	World Bank Ease of Doing Business	2013
Access to electricity (percent of population)	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys and international sources	World Development Indicators	2011
Improved water source (percent of	Access to an improved water source refers to the percentage of the population using an improved drinking	World Development	2012

population with access)	water source	Indicators	
Time required to build a warehouse (days)	Time required to build a warehouse is the number of calendar days needed to complete the required procedures for building a warehouse. If a procedure can be speeded up at additional cost, the fastest procedure, independent of cost, is chosen	World Development Indicators	2013
Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)	Eight markets are evaluated on six core dimensions on a scale from 1 (worst) to 5 (best). The markets are chosen based on the most important export and import markets of the respondent's country, random selection, and, for landlocked countries, neighboring countries that connect them with international markets	World Development Indicators	2012
Mobile cellular subscriptions (per 100 people)	Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service using cellular technology, which provide access to the public switched telephone network. Post-paid and prepaid subscriptions are included	World Development Indicators	2013
Internet users (per 100 people)	Internet users are people with access to the worldwide network	World Development Indicators	2013
Starting a business- Ease of establishment index (0-100)	This index evaluates the regulatory regimes for business start-up. It focuses on the areas of requirements forcing the use of a third local party, possibility to expedite establishment procedures through an official channel, requirement of an investment approval, minimum capital requirements etc.	World Bank – Investing Across Borders	2010
Cost of starting a business (percent of income per capita)	Cost of starting a business is recorded as a percentage of the economy's income per capita. It includes all official fees and fees for legal or professional services if such services are required by law	World Bank Ease of Doing Business	2013
Access to electricity	The number of days to obtain a permanent electricity connection. The measure captures the median duration that the electricity utility and experts indicate is necessary in practice, rather than required by law, to complete a procedure	World Bank Ease of Doing Business	2013
Baseline profitability index	Baseline Profitability Index (BPI), helps predict the total pre-tax return investors might expect in countries around the world: economic growth, financial stability, physical security, corruption, expropriation by government, exploitation by local partners, capital controls, and exchange rates	World Bank Ease of Doing Business	2012
Time(years) to resolve Insolvency	The average time to close a business	World Bank Ease of Doing Business	2013
Cost to resolve insolvency (percent of estate)	The average cost of bankruptcy proceedings. The cost of the proceedings is recorded as a percentage of the estate's value	World Bank Ease of Doing Business	2013
Business impact of FDI rules	Measures the extent to which rules governing foreign direct investment (FDI) encourage or discourage it	World Economic Forum – Global Competitiveness Index	2013
Foreign direct investment, net (BoP, current \$)	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an	World Development Indicators	2012

	economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments		
Strength of investor protection index (0=low, 10 = high)	This index is an average of the Extent of Disclosure index, the Extent of Director Liability index, and the Ease of Shareholder suit index. Extent of Disclosure index is a measure of the transparency of transactions has 5 components Extent of Director Liability index is a measure of liability for self-dealing by directors has 7 components Ease of Shareholder suit index is a measure of shareholders' ability to sue officers and directors for misconduct has 6 components	World Bank Ease of Doing Business	2013
School enrollment, tertiary (percent gross)	Gross enrolment ratio. Tertiary (ISCED 5 and 6). Total is the total enrollment in tertiary education (ISCED 5 and 6), regardless of age, expressed as a percentage of the total population of the five-year age group following on from secondary school leaving	World Development Indicators	2012
CPIA Gender Equality Rating (1=low to 6=high)	Gender equality assesses the extent to which the country has installed institutions and programs to enforce laws and policies that promote equal access for men and women in education, health, the economy, and protection under law	World Development Indicators	2013
Inflation, consumer prices (annual percent)	Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly	World Development Indicators	2013
Prevalence of HIV, total (percent of population ages 15-49)	Prevalence of HIV refers to the percentage of people ages 15-49 who are infected with HIV	World Development Indicators	2013
Measure of state sponsored political violence (1 to 5, with 1 = low and 5 = high)	The scale defines whether the countries are under a secure rule of law (or) limited political imprisonment (or) extensive political imprisonment (or) a high level of civil and political rights violations (or) if the terror has expanded to the whole population	Political Terror Scale	2012
Intentional homicides (per 100,000 people)	Intentional homicides are estimates of unlawful homicides purposely inflicted as a result of domestic disputes, interpersonal violence, violent conflicts over land resources, inter-gang violence over turf or control, and predatory violence and killing by armed groups	World Development Indicators	2012
Legitimacy of the State (scale of 0 to 10)	The validity and legality of the government is measured by looking at corruption levels in the country, the effectiveness of the government, political participation of the population, the country's electoral process and levels of democracy. Others are illicit economy, trade in drugs, power struggles as well as protests and demonstrations	Fragile States Index	2014
External Intervention (scale of 0 to 10)	This indicator looks at internal pressures of a country that may lead to interventions by other states requiring Foreign Assistance, Foreign Military Intervention, Presence of Peacekeepers, Presence of UN Missions and Sanctions. The Credit Rating of the country is also taken into consideration	Fragile States Index	2014

Table 7: Agriculture sector metrics

Variable	Definition	Source	Vintage
Total area equipped for irrigation (percent of agricultural area)	Area equipped under irrigation refers to the area equipped to provide water to crops, including areas equipped for full and partial control irrigation (surface, sprinkler, localized), equipped lowlands (wetlands, inland valley bottoms, mangroves, plains, etc.), and areas equipped for spate irrigation (diverted seasonal flood waters)	FAOSTAT	2010
Cereal yield (kg per hectare)	Cereal yield, measured as kilograms per hectare of harvested land, includes wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded	World Development Indicators	2012
Arable land (hectares per person)	Arable land (hectares per person) includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded	FAOSTAT	2011
Fertilizer consumption (tones of nutrients per 1000 Hectares)	Fertilizer consumed in tones per 1000 hectares	FAOSTAT	2010
Pesticides consumption per hectare	Pesticides consumed per hectare	FAOSTAT	2014
Net Import of Agriculture commodities(Import-Export) (in 1000 \$)	Net import of Agricultural commodities (an agricultural Commodity can be defined as grain, livestock, poultry, fruit, timber or any other items produced from agricultural activities) by a country. It is computed as import - export.	FAOSTAT	2011
Crop Production Index	Crop production index shows agricultural production for each year relative to the base period 2004-2006. It includes all crops except fodder crops.	World Development Indicators	2012
Land under cereal production(hectares)	Land under cereal production refers to harvested area, although some countries report only sown or cultivated area. Cereals include wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded.	World Development Indicators	2012
Percent of Population economically active in agriculture w.r.t total economically active population	Percent of Population economically active in agriculture w.r.t total economically active population.	FAOSTAT	2013
Milk yield(Hg/An)	The quantity of milk produced each year by an animal	FAOSTAT	2011
Per capita milk availability(in Kg)	Milk available per person in the country. It is computed by milk production divided by total population	FAOSTAT	2011

Arable land (percent of land area)	Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.	FAOSTAT	2011
Percent net sown area/ total area	Net Sown area is the total area sown with crops in a country.	FAOSTAT	2011
Presence of Major Distribution Companies (Y/N)	Significant presence of distribution companies in the country	Intellectap Analysis	2014
Presence of Food Processing Exporters (Y/N)	Significant presence of Food Processing Exporters in the country	Intellectap Analysis	2014
Presence of cooperatives and trade associations(Y/N)	Significant presence of cooperatives and trade associations in the country	Intellectap Analysis	2014
Level of Subsistence Farming (H/L)	Subsistence agriculture is self-sufficiency farming in which the farmers focus on growing enough food to feed themselves and their families. Level of subsistence farming determines the percentage of farming population practicing subsistence farming	FAO	2014
Agricultural Losses (Post Harvest) (H/L)(anything more than 20 percent is high)	Post-harvest agricultural losses" means a measurable quantitative and qualitative loss in a given agricultural produce	FAO	2014
Presence of agricultural/dairy research and industry organizations(H/L)	Organizations and Institutions which carry out research in agriculture sector	Intellectap Analysis	2014
Access to farm loans (Y/N)	Availability of farm loans to farmers for agriculture	Intellectap Analysis	2014
Input Subsidies (Y/N)	Presence of government schemes and programs which allows subsidies on agricultural inputs	Intellectap Analysis	2014
Import Duties (Y/N)	Presence of government regulations which states import duties on agriculture related commodities	Intellectap Analysis	2014

Table 8: Healthcare Sector metrics

Variable	Definition	Source	Vintage
Out of pocket as a percent of private expenditure	Level of out-of-pocket expenditure expressed as a percentage of private expenditure on health	WHO Health Indicators	2014
Government expenditure on health as percent of total expenditure	Level of general government expenditure on health (GGHE) expressed as a percentage of total expenditure on health (THE)	WHO Health Indicators	2014
Hospital Beds per 10,000	The number of hospital beds available per every 10 000 inhabitants in a population.	WHO Health Indicators	2014
Density of	Number of pharmaceutical personnel per 10 000	WHO Health	2014

Variable	Definition	Source	Vintage
pharmaceutical person	population	Indicators	
Doctors per 10,000	Number of medical doctors (physicians), including generalist and specialist medical practitioners, per 10 000 population.	WHO Health Indicators	2014
Density of nurses and midwifery	Number of nursing and midwifery personnel per 10 000 population	WHO Health Indicators	2014
Health Insurance coverage in the country of Operations	Percentage of population covered under some Health security scheme in the country	Intellectap analysis	2014
Mortality Rate of top 5 Communicable/NCD Diseases	Measure of the number of deaths in a population, scaled to the size of that population, per unit of time. This metric is measured for both: communicable diseases (which spread from one person to another or from an animal to a person) and non-communicable diseases (NCDs, also known as chronic diseases, are not passed from person to person)	Qualitative, WHO Health Indicators	2014
Extent of public intervention in the healthcare market	Analysis of the extent to which public healthcare infrastructure is used by BoP populations in order to determine if there is a viable market for private healthcare services	Intellectap analysis	2014

Table 9: Renewable Energy sector metrics

Variable	Definition	Source	Vintage
Gap in Electricity Production and Demand (percent)	Difference in the quantum of electricity generated in the country and the quantum of electricity demanded/required by the population	U.S. Energy Information Administration	2013
Percentage spend on energy consumption	Quantum of a household's spend on energy needs	U.S. Energy Information Administration	2013
Percentage of energy production from renewable sources	Electricity production from renewable sources includes hydropower, geothermal, solar, tides, wind, biomass, and biofuels.	World Development Indicators	2012
Transmission and distribution losses (percent of output)	Electric power transmission and distribution losses include losses in transmission between sources of supply and points of distribution and in the distribution to consumers, including pilferage	World Development Indicators	2011
Presence of renewable energy portfolios targets or quotas	Whether a destination country in Africa has as part of its policies or national/regional/local development plans, targets for achieving higher level of renewable energy output as part of its installed power capacity	Intellectap analysis	2014
Presence of RE sector industry associations	Presence of networks/associations in the country that direct efforts for strengthening the RE sector in the country with regard to production and adoption	Intellectap analysis	2014
Availability of 3rd party distribution partners or platforms	Presence of firms/organizations in African countries that have the capacity to function as a channel between RE producers and end-consumers	Intellectap analysis	2014
Commercial financing for RE sector companies	Presence of banks, NBFCs, private equities, impact investors, venture capital funds, angel investors and other actors that have the ability to finance RE sector companies in focus African country	Intellectap analysis	2014

Availability of raw materials	Presence of an a substantive amount of raw materials for different sectors: solar PV panels, inverters etc., for solar energy; animal waste and construction materials for biogas generation etc.	Intellectap analysis	2014
Consumer awareness	Whether the focus product/service has a significant presence in the country and the end-users are aware of the benefits/drawbacks of the product/service, or would efforts needed to be directed at building consumer awareness	Intellectap analysis	2014
Feed-in tariffs	An economic policy created to promote active investment in and production of renewable energy sources. Feed-in tariffs typically make use of long-term agreements and pricing tied to costs of production for renewable energy producers. By offering long-term contracts and guaranteed pricing, producers are sheltered from some of the inherent risks in renewable energy production, thus allowing for more diversity in energy technologies	Multiple sources – country official releases	2013
Presence of facilitative policies at the sub-sector level	Presence of policies that encourage activity in the sub-sectors: biomass/biogas, solar, hydro etc.	Intellectap analysis	2014

World Bank Group

The World Bank Group plays a key role in the global effort to end extreme poverty and boost shared prosperity. It consists of five institutions: the World Bank, including the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA); the International Finance Corporation (IFC); the Multilateral Investment Guarantee Agency (MIGA); and the International Centre for Settlement of Investment Disputes (ICSID). Working together in more than 100 countries, these institutions provide financing, advice, and other solutions that enable countries to address the most urgent challenges of development.

International Finance Corporation

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries. Established in 1956, IFC is owned by 184 member countries, a group that collectively determines our policies. Our work allows companies and financial institutions in emerging markets to create jobs, generate tax revenues, improve corporate governance and environmental performance, and contribute to their local communities. IFC's vision is that people should have the opportunity to escape poverty and improve their lives.

Intellectap

Intellectap is a pioneer in providing innovative business solutions that help build and scale profitable and sustainable enterprises dedicated to social and environmental change. Our unique positioning at the intersection of social and commercial business sectors allows us to attract and nurture intellectual capital that combines the business training of the commercial world with the passion and commitment of the social world to shape distinctive solutions.

We seek to build institutional capacity and channel investments in the development sector through consulting services, investment banking services, and knowledge and information services. Examples include innovative and focused initiatives such as capital advisory services, intermediating impact investment capital, innovation management, strategy design, market research, stakeholder engagement and policy advocacy.

Founded in 2002, Intellectap has grown into a Group with more than 600 employees and 300 engagements across 23 countries around the world.

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