

The Scan-ICT-2: Methodology - Developing the Tool Kit

**The Premise, Guiding Principles, and the Core
Requirements**

Alex Braimah-Lawani, INIIT

The Ghana Scan-ICT-2 Technical Workshop
GSS Conference Hall, Accra, 30th March 2006

www.iniiit.com www.scan-ict.org

The Digital Divide: Scoping the 'Which Indicators' Question

- The concept of the 'digital divide' and its implications is often defined in terms of the degree of access to ICTs in general and in particular to the Internet and its related emerging advanced communication technologies.
 - Statistics like: the number of Internet hosts and subscribers, the level of PC penetration among others are often used as a rough indicator of a measure of the digital divide between two countries.
 - ----- Based on these estimates, most developing countries including African countries are generally regarded as having comparatively less or inadequate access to these technologies.
 - The Contention is that: The problem of the digital divide is NOT a technological one; --- it is not merely an issue of a divide between 'technological-haves' and the 'technological-have-nots'.
- The threat posed by the digital divide to African countries is more of an economic development problem than a mere technological one.

- The digital divide and its implications has more to do with the inability of a number of countries including those in Africa to **deploy, harness** and **exploit** the developmental opportunities of the emerging digital information and technological revolution to advance the process of their socio-economic development.
- The deployment, exploitation and the development of ICTs to support the process of *transforming* the predominately agricultural economies of African countries and move them towards **information and knowledge economies** is the central issue ----
- *To answer the 'which indicators' question... there is a need to go beyond looking at the implications of the digital divide purely in terms of access to and the use of ICT resources and services to examine its wider implications in socio-economic development terms.*

The Argument is that:

- African countries and other developing countries will eventually narrow the **‘digital numbers divide’** (DND) as the technology advance and becomes more portable and affordable
- But narrowing the ‘digital numbers divide’ will not necessary translate into narrowing (or for that matter bridging the **‘developmental digital divide’** (DDD))
- African countries will require more efforts to bridge or narrow the DDD than will be required to address the DND...
- Putting in place and implementing relevant policies (NICI policies, strategies and plans) with a view to bridge the DDD and developing suitable indicators to guide this process will be one such effort.

The Tool Kit: An Introduction

- The development of the details of the IS/ICT4D Tool Kit is based on a specific *premise* and a number of *guiding principles* and *core requirements*.
- The *premise* establishes the rationale for the development of methodology – the Tool Kit as well defines its scope
- The *guiding principles* defines the key issues that need to be taken into account in the development of the components of the methodology.
- The *core requirements* based on the guiding principles crystallizes the constituent building blocks and the frameworks of the Tool Kit.

The Premise

- The basic premise underlying the development of the methodology is that:
- African countries in their effort to develop their information society and economy will need to develop and compile suitable IS/ICT4D indicators that will:
 - guide their ICT4D policy and plan development and implementation process
 - monitor and assess progress towards the development of their IS/IKE and monitor
 - assess, evaluate and measure the impact of the development of the their IS/IKE on the socio-economic well-being of their citizens (*households*) as well as on the performance of their *businesses* (the economy) and on their government systems and operations.

The Scan-ICT-2 Methodology identified three broad categories of IS/ICT4D based on this premise:

Broad Category of Indicators	Scope and Purpose
<p>Category 1: ICT4D Status Indicators</p>	<p>Measuring the status of the ICT capacity, usage/exploitation deployment and development</p>
<p>Category 2: IS/IKE Development Monitoring Indicators</p>	<p>Monitoring, Assessing and Measuring progress towards the development of the IS/IKE</p>
<p>Category 3: <u>Impact Monitoring, Assessment & Measurement</u> Indicators</p>	<p>Monitoring, Assessing and Measuring the social, economic and the institutional impact of the development of the IS/IKE on <i>households, businesses</i> and on <i>Government</i> systems and operations</p>

The Guiding Principles Underlying the Development of the Tool Kit

Guiding Principle 1:

- The methodology – Took Kit is not be aimed at producing a '*basket of ICT4D indicators*' which all African countries will have to compile irrespective of the level of their socio-econ development and the stage of the development of their information society/economy but rather...
- ...to provide a *framework* that will guide these countries in *identifying and compiling those IS/ICT4D indicators* that meet their specific developmental requirements, circumstances and priorities as well as support their respective ICT4D process.

Guiding Principle 2:

- The Tool Kit is to take into account the fact that African countries are at different levels of the development of their respective information society and economy and as such will differ in the types of ICT4D indicators they will need to compile, analyse and use.
- This guiding principle re-emphasize the need to move away from the ‘one-size-fits-all’ basket of indicators approach to adopt an approach that...
- guides the respective African countries in addressing the ‘which indicators’ question that takes into account their respective circumstances, stage of development and their development priorities

Guiding Principle 3:

- The Tool Kit should take into account the fact that African countries are at an early stage of the development of their information society and economy and as such there is a need to **develop broad IS/ICT4D indicators**
- rather than just targeting those indicators that only reflects the capacity and the development of their ICT sector and industry.
- To support the development, and the monitoring of their information society and economy through the implementation of relevant ICT4D policy initiatives, ...
-**African countries will need to go beyond the standard core telecommunication/communication capacity and access indicators to adopt a broader set of IS/ICT4D indicators.**

Guiding Principle 4:

- The Tool Kit is to be based on the premise that African countries apart from being consumers of ICTs will also target the production of ICTs to support the development of their information society and economy; ..
-as such the IS/ICT4D indicators should reflect both the demand-side (usage and exploitation of ICTs) and supply-side (production of ICT goods and services).

Guiding Principle 5:

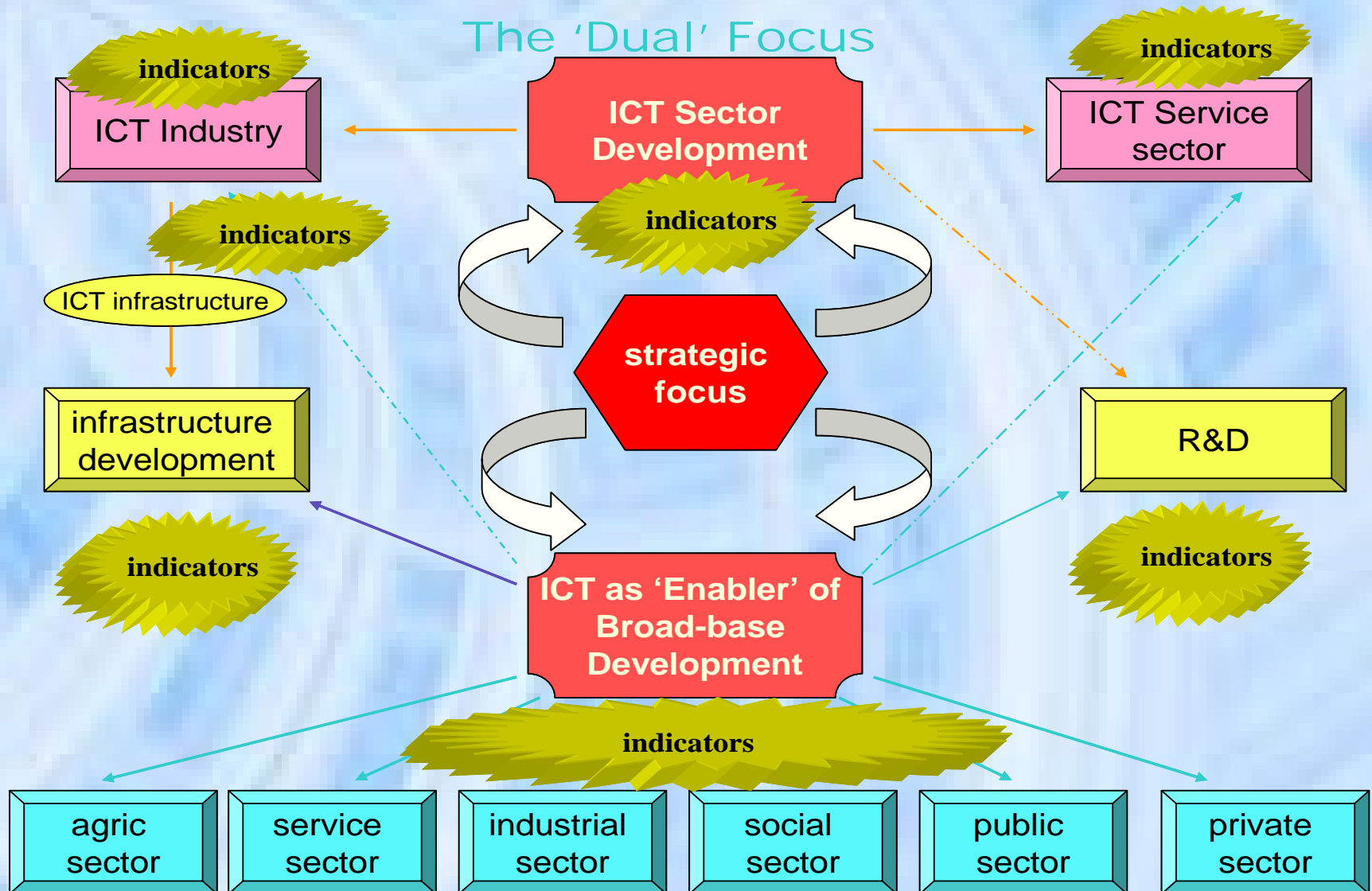
- The Tool Kit is to provide an indication of suitable core indicators that each African country will need to include in its list of IS/ICT4D indicators to facilitate international comparison of the level development of the information society in various countries.
- But as per the stipulations of the guiding principle 3, African countries will need to go beyond these core indicators and adopt a broader set of IS/ICT4D indicators to facilitate and support the process of the development of their information economy and society.

Guiding Principle 6:

- The Tool Kit should provide a framework for integrating the compilation of the IS/ICT4D indicators into the national statistical system and processes of African countries.
- The basis for this guiding principle is that, given that the goal of the ICT4D process in African countries is to develop the information society and economy, ...
-the bulk of the statistical data collection exercise of the NSOs will over time be shifting away from collecting purely socio-economic related data (as is now the case) to...
-collecting data that reflects the development of the information society and economy and assessing its impact on economic units like households, businesses and government entities and operations.
- The goal therefore is to provide a framework that facilitates the process of integrating the collection of data on the IS/ICT4D indicators into the existing national statistical system to facilitate the process of this envisaged shift in focus in the future.

Guiding Principle 7:

- The Tool Kit should be designed to reflect the dual strategic focus of the ICT4D policy initiatives in a number of the African countries.



- Indicators should be developed to take into account the fact that:
 - the strategic focus of the ICT4D policies in a number of the African countries is to both develop the ICT sector and industry and as well as use ICTs as an enabler of a broad-based development of other sectors of the economy.
- The indicators to be developed should therefore not only target the ICT sector but also
 - reflect other sectors of the economy. – **the broad IS/ICT4D indicators** (for facilitating ICT4D process and the development of the IKE as well as for monitoring its impact on socio-economic units) as against the narrow ICT sector/industry related indicators

The Core Requirements (CoreReqs)

- The seven *guiding principles* forms the basis, for specifying the *core requirements* of the Tool Kit.
- These requirements defines the scope of the methodology – the Tool Kit and crystallizes its constituent frameworks ...
-to guide the process of the identification and the development of the IS/ICT4D status and impact monitoring, assessment and measurement indicators.

Core Requirement 1:

- In line with the basic premise of the methodology and guiding principles 6 and 7, the Tool Kit is to provide:
 - a framework for the identification and development of suitable indicators to support the ICT4D policy and plan development process in African countries and
 - make provisions for the integration of the IS/ICT4D indicators into the ICT4D/NICI process in these countries.
- The basis for this requirement is that: African countries planning to develop their information society will need to develop and implement suitable ICT4D policies and plans to facilitate the process of transforming their societies and economies to that of an information and knowledge based economy (IKE).

- The policy and plan development process will need to be based on ICT4D Baseline/e-readiness studies that focuses on the analysis of the *status* of the development, deployment and the exploitation of ICTs within the economy and society.
- This will facilitate the process of identifying and crystallizing policy initiatives and to provide a basis for setting targets and projections for the various programmes and initiatives of the ICT4D Plan.

Core Requirement 2:

- In line with the basic premise of the methodology and the guiding principles 1,2,3 and 7, the Tool Kit is to provide a framework for the identification of suitable indicators ...
- *to support the monitoring and evaluation of progress towards the development of the information society and economy of the respective African countries.*
- The ultimate goal is not only to develop their information society but also to transform their industrially weak, subsistence agriculture based economies into an IKE.
- Key set of IS/ICT4D indicators will therefore need to be developed to assess and measure progress towards achieving the IKE goal in these countries.

- There is a need for specific types or categories of IS/ICT4D indicators aimed at assessing and measuring the progress of each of these African towards achieving the goal of developing their respective information society and for that matter their information and knowledge based economy.
- These indicators will be required to monitor and assess the implementation of the ICT4D policy initiatives with a view to ensure that targets set as per the development of the IKE are being met.
- Specifically there is a need to monitor the implementation process using specific indicators to establish the extent to which the policies and corresponding action plans are actually achieving the desired and intended policy objectives of developing the information economy and society.

Core Requirement 3:

- In line with the basic premise of the methodology and the guiding principles 1,2,3 4 and 7,
 - ... the Tool Kit is to provide a framework for the development of suitable indicators for monitoring, assessing and the measurement of the impact of the development of the IKE on economic units, namely: households, businesses and on governments systems and operations.
- The basis for this requirement is that:
 - given that a number of African countries are now in the process of implementing their ICT4D policies and plans, it is recognized that for most of these countries,
 - the next stage in the process apart from developing indicators to assess and measure their progress towards achieving the goal of developing their IKE (as per core requirement 2) is
 - *to develop suitable indicators for monitoring, assessing and measuring the impact of the development of their information economies.*

- These indicators are required to measure the social and the economic impact of the development of the IKE on the outcomes of households, businesses and on government operations and systems.
- The premise is that since the ultimate goal as per the ICT4D process is to improve the socio-economic well-being of their citizens (households) it is essential that:
 - *specific ICT4D impact measurement indicators be developed to assess and measure the extent to which the ultimate goal is directly and indirectly is being achieved.*

The Expected Output: An IS/ICT4D Indicators Toolkit

- Unlike in the case of the Scan-ICT pilot project methodology which was aimed at developing a ‘basket of indicators’ the Tool Kit (in line with the guiding principles 1 and 2) is designed to **guide national efforts in the identification, development and the compilation of data on those IS/ICT4D indicators that meets their specific national requirements, circumstances and development priorities.**
- The goal is not to develop a ‘one-size-fits-all’ basket of indicators which all African countries will have to adopt in totality without regards to their specific requirements and developmental priorities.
- The aim is to guide on how to identify, compile and analyze the requisite IS/ICT4D indicators to achieve specific objectives guided by the broad *guiding principles* and the *core requirements*..
- The respective African countries will decide on which indicators to focus on at each stage of their ICT4D process

Why a Tool Kit not 'Basket of Indicators'

- African countries are at different levels and stages of development in term of their level/stage of socio-economic development; the development of their respective ICT sector/industry; and the stage of their respective ICT4D process.
- African countries differ in terms of the availability of resources that each could deploy to facilitate the IS/ICT4D indicators development and data collection process. There is lack of resources in some countries compare to others
- For each African country, the relevance of some specific set of indicators will be determined by country's development priorities and other circumstances. What is relevant to one country may not be relevant to another.

- African countries are at different levels/stages of the development of the capacity of their national statistical data collection systems and NSOs. While some have a well-developed statistical system others have systems that is yet to be developed
- Statistical legislations, laws and regulations guiding the activities of NSOs and those relating to data protection and obligations of citizens to provide data do vary from country to country
- African countries are at different levels/stages of the development of key sectors of their economies. For example, the private sector is less developed in some compared to others. Hence some of the private sector related indicators that may be of interest some countries may not be on interest to others
- Since no two African countries are the same given these factors, it is not realistic to aim at coming out with a 'basket of indicators' that meets all the information society data requirements and needs of every African country.
- The Tool Kit is therefore designed to **guide national efforts in the identification, development and the compilation of data on those IS/ICT4D indicators that meets the specific national requirements, circumstances and development priorities of each country.**

**THANKS FOR YOUR
ATTENTION**

.... AND PATIENCE