

Development Information and Knowledge Services at the Local-level — From a Need to Practice

Background

The UNDP Capacity 2015 Africa Programme (C2015-Africa) has elaborated a concept for the development of a Local-level Integrated Information System (LIIS) within the framework of a global Information and Learning Network (ILN) to support capacity development in Africa. LIIS is designed with the aim to enhance the capacity of various stakeholders to access, share, and utilize information and knowledge necessary for developing locally-inspired strategies and plans towards the achievement of the Millennium Development Goals (MDGs).

The approach implementation of ILN/LIIS involves the building of partnerships with various organisations and institutions across Africa, and providing information and knowledge support services to these partners to enable them to support local development activities, supporting a bottom-up development of capacity for local authorities, civil society organisations, and community-based groups, as well as top-down processes through the more formal mechanisms.

This write-up provides a snap-shot of the challenges being addressed, pilot implementation process to date, and some early lessons – and surprises.

The issue

The information revolution is often said to be Africa's last chance to catch up with the developed world. The information and communication technology (ICT) revolution has created a seamless global economy which transcends geographical distances and sovereign boundaries, providing tremendous opportunity for poorer regions of the world to experience unprecedented growth. However, the situation in Africa is very different. There are daunting challenges in harnessing the full potential of ICT for development, particularly in rural communities where the majority of the people live and scrape livelihoods from natural resources. There is information related to the improvement of livelihoods in Africa. However, in addition to infrastructural constraints, often the relevance of content and the format in which much of the information is available is also not readily usable by communities. Also, the capacity to utilise information effectively remains a serious challenge. Thus, in an era of ICT-driven knowledge economy, one major development challenge is how such a knowledge-base scattered among various sources including research centres, government ministries and agencies, the UN and other development partners, the private sector, and NGOs, could be made useable and accessible to improve livelihoods in rural communities.

Cognition as capacity issue

A major challenge of the local development process is what might be termed a 'cognitive gap'. Put simply, a person cannot aspire to be 'something', or do things in a particular way, which he or she does not know anything about. Capacity implies knowledge, ways, and means – i.e., know-how, existence and understanding of systems, processes and an enabling environment in which the know-how functions, and the resources to put know-how and system to work for the benefit of society. Thus 'capacitating' people to escape poverty must start with knowledge – knowledge constructed from experience as well as relevant and meaningful content.

Local communities need to be assisted with information and knowledge that opens up new vistas and opportunities, and enable them to use available assets efficiently and sustainably to tackle development challenges. For instance, information and knowledge about, and the application of new farming techniques, prices of produce, new markets or even weather systems, communicated in a timely and usable manner could enable farming communities to adapt to environmental and market changes which would enable them derive optimal benefits from their labour.

Voice and participation

There is also need to facilitate engagement among members of communities, and with the global information society from which they can learn and derive value from the experiences of others, explore and construct new realities, and highlight their own achievements. At the same time, it is also necessary to provide a platform for communities to have a voice, and to be able to engage with the structures of governance on a variety of issues, including service delivery and expressing their opinion on matters that affect them. Thus, the availability of, access to, and ability to use information and knowledge resources effectively by local communities represent empowerment, and socio-economic independence. Ensuring this is a powerful way for communities to be able to participate effectively towards their own development, and the achievement of the MDGs at their level, as perceived and internalized by them.

Action planning

Local communities also need to be enabled and supported to identify and properly characterize their assets, explore and recognise the economic and social development opportunities that such assets may present, and chart appropriate courses of action. As stakeholders in the development process communities need information collected from the perspective of the beneficiary of development, and made available in simple and useful formats. However, for most of the continent this kind of “disaggregated information” often does not exist in the form, level of detail, or coverage (extent) for which it is required.

Monitoring

Monitoring and reporting on progress towards the MDGs requires an approach that would track issues and opportunities for intervention, interactions (e.g., policy conflicts), as well as outcomes at the local level. Localizing the MDGs requires that information for monitoring would be available at sub-national or localised levels to ensure that there is sufficient detail to highlight the heterogeneity and variation of under-development that occurs — at the level of localities, municipalities, districts, provinces, and national (e.g. income inequality, access to primary education, access to health, gender imbalances, etc.), and which needs to be addressed in order to achieve the Goals. However, available information and national-level indicators tend to characterise achievements towards ‘development’ differently, reflecting the “official view”, even on the basis of the MDGs. These indicators do not often capture local issues and the real concerns of the local communities which are “too detailed” for national-level representation. Very often evaluation of the development effort and the information generated rarely involve the beneficiaries, because the prevailing development paradigm sees local communities as “objects” at which development was targeted, and about which information is collected for planning and decision-making. There is therefore the need for more detailed local-level data than is currently generally available, a requirement that calls for a framework for the systematic collection and sharing local MDGs-related information and experiences that reflect community-level aspirations.

Global commitments

Prevailing global declarations and actions suggest strong political support for exploiting the potential of ICTs to advance development. This provides an opportunity for local-level information mechanisms to grow. International efforts such as the UN actions to accelerate development that resulted in the African Information Society Initiative in 1996, and the Acacia Initiative launched in 1997, the two Global Knowledge conferences held in 1997 and 2000 to promote development through the use of ICTs, the formation of the UN ICT Task Force for implementation of actions, and the recent initiatives under the New Partnership for African Development, all demonstrate a commitment to bridge the 'digital divide'. However, this high-level political support and goodwill towards development through information and communication are yet to be translated into local-level action.

Access to communication and information has improved dramatically in Africa in recent years. Governments increasingly consider provision of public information as a critical component of improving transparency and accountability as well as increasing citizens' participation in programs that are geared towards poverty eradication, and are doing what they can to improve ICT infrastructure, including community-operated FM radio stations and the internet. On the supply side the evidence on the ground is that government ICT projects and private-sector investments are addressing infrastructure problems. However, a huge gap remains between what exists in urban areas, and what is available in rural communities. Also, the experience from the many projects and efforts to improve access to information shows that current models for delivering information and knowledge services to rural communities have not triggered an 'information culture' essential for bringing about transformation despite the perceived need by these communities.

There is no investment on the demand side to drive the development of relevant content and provision of information and knowledge services in rural communities. As a result infrastructure that is put in place is not effectively utilised. There is little evidence to suggest that the information obtained is oriented towards development at the local level. An important lesson that has emerged from these projects is that facilitating access to information without paying attention to the content and supporting communities to use it for their benefit would not automatically lead to the improvement in livelihoods. In addition many barriers remain, including user (access) fees, language, relevance, formats, illiteracy, timely availability, and accessibility of facilities such as government-run multi-purpose Community Information Centres. Even when information has been 'disseminated', there is the challenge of assessing whether the information is useful, is assimilated, and does make a difference in the life of the recipients.

Information platform

The information that communities need address immediate needs, such as the availability or status of land for cultivation and grazing, wood stock for firewood and building material, water resources for domestic and agricultural uses, market prices, or financial services, etc. Communities have also expressed a need for information on other livelihood aspects including education, health (especially HIV/AIDS), gender and environment. Although very basic, this information is very critical for empowerment and self-emancipation.

Capacity 2015-Africa is working with a number of partners to meet these needs through the establishment of the ILN/LIIS 'platform' for the exchange of information, experience and expertise to facilitate ongoing learning at the local level, and the efficient and effective implementation of development initiatives. ILN/LIIS provides a platform for the effective participation by local communities in the development process through the access and exchange of information. It aims to work within government frameworks and in partnership

with CSOs and the private sector towards the achievement of MDG attainment. Improved access to information will also ensure transparency and accountability, promote good governance, and thus empower communities to exercise their rights and act responsibly at their respective levels.

The platform is designed to provide a mechanism to extend and deliver development services that lend themselves to the use of ICT processes to communities beyond the physical reach of individual organisations. Structurally the platform comprises various elements that are intended to act together transparently to facilitate access to knowledge resources and provide a shared space within which communities¹ can interact and engage each other, capacitate and empower, and create value and opportunities for integrated development, with a focus on the MDGs.

At the very local level, ILN/LIIS is also designed to facilitate the collection of data, and to document progress, provide information services on a variety of development issues, facilitate debate and consensus-building, serve as a tool for planning and resource mobilization, and for characterising and managing community assets. When fully implemented it will also provide a means for assessing and reporting on various aspects of the MDGs at the local level.

Knowledge network

Capacity 2015-Africa and its implementation partners are developing a coherent framework, methodologies and procedures that will assist local communities to access and utilize valuable knowledge services that will enable them to identify and derive value from local assets and opportunities in practical ways, with the support of a global network from which they can learn from the experiences of others, and in which their achievements towards sustainable livelihoods are recognized and highlighted.

ILN/LIIS has been developed on the premise that in order for knowledge to be of value local communities need to be supported to be able to “make sense” of such ‘knowledge’ in the context of their peculiar circumstances and opportunities, and assisted to combine the knowledge and available assets efficiently and sustainably to tackle the challenges they face. Thus, the focus of the development and implementation of LIIS is *capacity* to use information and knowledge resources towards local-level development by exploring with stakeholders ways for generating, sharing, and using *content* that is appropriate and relevant to the priority development issues of communities.

Therefore, at the heart of the platform is a knowledge network driven by ‘communities’ that foster peer learning and the sharing of experiences, and is supported by various technologies, systems and processes. The ILN/LIIS platform builds on, wherever appropriate, infrastructure that is being put in place as part of the roll out of ICT strategies by governments and the private-sector. A regional portal to provide support infrastructure to facilitate the exchange/sharing of information has been launched (www.iln-africa.net). LIIS provides a 'local' link through various online and off-line channels of communication, procedures, and approaches that serve to provide a unifying and organic platform to support the delivery of a range of development information and knowledge services across the continent by various stakeholders, support networking, the exchange of ideas and knowledge, sharing of experiences, learning, and facilitating the intelligent use of information and knowledge.

¹ Defined in a broad sense as interest groups, local communities, development practitioners, thematic experts, etc.

Putting a concept into practice

Forging partnerships

The establishment of active partnerships is central to the ILN/LIIS platform because such partnerships serve as a key mechanism for extending the reach of capacity development activities through horizontal and vertical networking, learning, and the exchange of ideas and knowledge from the global to the local level. Forging such partnerships and networking is also an effective way to provide the 'infrastructure' that leverages existing networks and create the enabling environment to facilitate access to diverse knowledge resources and reach out to local communities.

A partnership has been established with the Pan-Africa 2000 Network (A2N) to pilot concepts and approaches for the development of the platform, leveraging A2N's experience in local-level participatory development methodologies. Knowledge networks or communities of practice (CoPs) on various aspects of local-level development are also being established to contribute thematic content relevant to development at the local level. One such CoP is the Sustainability, Education and the Management of Change in Africa, which aims to promote tertiary education reform that will contribute to rural development.

Pilot implementation of LIIS

The Capacity 2015-Africa programme is supporting the pilot implementation in four countries through the partnership with A2N, with funding from the UNDP Regional Bureau for Africa. The LIIS concept has been adapted and implemented with different emphasis in the various countries.

Supporting rural livelihoods

In Ghana, the implementation of LIIS is already being mainstreamed as a support platform for, and as a result of the opportunity provided by a 5-year Sustainable Rural Livelihood Project (SRLP) being implemented by A2N-Ghana, with funding from the UNDP Country Office. The project covers in 37 communities spread across the three northern regions of Ghana, which are generally the most deprived and have the highest poverty levels.

Scoping has been undertaken to identify key stakeholders, existing ICT assets in the project area, relevant projects as well as partnership or linkage opportunities. Stakeholders include Ministry of Information (through the Community Information Centres and District Information Officers), UNESCO, the UNDP ICT for Development project, GTZ, and GIFTEL (the Ghana Investment Fund for Telecommunication Development, set up by government to offer sustainable universal access to ICT, providing common telecommunication infrastructure and services to under-privileged areas where individual service providers would individually would not find an economic incentive to extend their services). As a result of the immense interest shown by the various stakeholders in the concept during the scoping process, and also the community-driven development model adopted for the SRLP the original 'LIIS pilot model' has been re-defined. In response to concerns expressed by a number of stakeholders about the sustainability of the information delivery and access model(s) being currently implemented, social business models that define how information, communication and technology services and products will be offered to community consumers, are being developed.

The goal for incorporating LIIS into SRLP is to ensure that the intended multisectoral, holistic and integrated impact would be achieved. Regional Coordinating Teams, District Coordinating Teams and Village Development Committees have been established in all the three regions to support the SRLP. These will provide oversight and implementation support for LIIS.

Opening eyes and liberating minds

The implementation of LIIS in Uganda is enabling A2N-Uganda to integrate information activities and knowledge services into its programme to support improvements in livelihoods for small-holder farmer households, and to better meet the broad information and knowledge needs of communities in the areas of food security, income generation, health and education, participatory development management, leadership, among others. The process also facilitates the sharing of A2N-Uganda's and the communities' wealth of experience in livelihood improvement for greater impact. Community-level information needs assessment and knowledge mapping have been undertaken to provide a basis for developing specific products and services lines for the communities.



Figure 1: The response by communities has been overwhelmingly enthusiastic as expressed by this quotation by an elderly (left), and community members participating in a focus group discussion.

The assessment and mapping was a participatory process to have the communities involved in determining their information and knowledge needs, and to design a plan of action indicating the resources required to address these needs, as well as appropriate mechanisms and channels for sharing information and knowledge among the different social units. Concerns expressed by communities regarding information access included relevance, timely access, inaccessibility, costs, diversity of needs, lack of documentation, and distorted information.

Activities being implemented based on the results of the assessment and recommendations made by the community to meet their information needs, include the following:

- Training of 45 Local Information Facilitators (LIFs) in data collection, management, dissemination and application of information for development.
- Setting up of Village Information Centres (VICs) in partnership with local information providers in the various districts. These centres will host a village phone, a community library, internet connectivity, an active drama group and a discussion group. Communities have contributed sites for the VICs in several locations convenient to the farmers
- Training of extension service providers on how to access and 'trade' in quality development information using the Market Place for Agricultural Information Services (MPAIS) portal
- Setting up drama groups and discussion groups
- Using FM radios on regular basis for mobilization and mass awareness

Community 'spaces' have been established on the ILN/LIIS portal to serve as an online platform for communities to be able to share and access information and knowledge. Efforts towards MDG realization by communities, as well as other livelihood improvement indicators, will be tracked and monitored to measure impact.

An implementation framework has been set up for these activities consisting of a National Working Group to oversee overall activities and offer backstopping, Community Information Development Facilitators and LIFs. The LIFs are a crucial link in the implementation framework. They will be responsible for encouraging and assisting community members to access information, knowledge resources, including expertise and skills. In this regard LIFs will act as a bridge to assist the communities to record (oral) knowledge for documentation, post information for sharing, record experiences and practices within their communities and will be given a bicycle to assist them in these activities. They have been nominated by the communities through a participatory process on the basis of established criteria.

InfoKiosk: a police post?

It is intended that the LIIS concept would be adopted and adapted for implementation through different initiatives by various development organisations, including in partnership with various NGOs and CSOs. In this regard one national organization of A2N (Zambia), has taken the initiative to launch LIIS with the support of the UNDP Country Office as part of the CO's support for the establishment of A2N-Zambia.

The project supported the purchase, conversion, and transportation of pre-fabricated containers into offices (*InfoKiosks*) for two pilot communities. The kiosks serve primarily as information and knowledge access points in the community. However, they are also providing a physical space where community events take place and, in this way, serve to promote dialogue among different players within the community on issues of major developmental concern (Figure 2).



Figure 2: A group of village women perform a sketch as part of ceremonies marking the arrival of an 'InfoKiosk' for the Chibombo community (left), and Volunteer Community Facilitators holding group discussions in preparation for field activities (right) as part of LIIS activities funded by the UNDP Country Office in Zambia.

Equipment and materials in the kiosks include the following:

- Two sets of computer hardware powered by solar panels;
- A satellite (World Space) radio donated by the Zambian Meteorology Department;
- A mobile phone donated by the Zambian Meteorology Department;
- Two community bicycles

- Office tables, chairs, office stationery, reports, magazines, wall charts, etc.

Curious members of the community intrigued by the ‘appearance’ of the kiosk with bicycles for the Volunteer Community Facilitators (VCFs) and a police guard on the premises mistook the kiosk to be a police post and went there for the purpose of lodging complaints there! The VCFs at the kiosk passed on these complaints to the local police, and now a spin-off benefit of the kiosk has been the erection of a proper police post in the community.

As part of project activities a training of trainers course in basic computing (computer appreciation, Microsoft Word, Microsoft Excel has been conducted by the A2N-Zambia secretariat for 8 VCFs (Figure 3). These VCFs in turn have trained other volunteers. The training was enhanced by the deployment of two Canadian volunteers from Engineers Without Borders. VCFs have also been trained in the use of the satellite (World Space) radio by the Meteorology Department.



Figure 3: VCFs receive training from A2N-Zambia personnel (right), and a VCF supervises training for colleagues (left) as part of LIIS activities funded by the UNDP Country Office in Zambia.

VCFs are collecting information within their respective villages and capturing this on the computers for future use, for example, for generating village profiles. VCFs are also able to download information using the World Space radio, ‘localise’ the information, and disseminate it to the wider community. In addition, communities have access to a readily available mobile phone for improved communication. An unintended but useful service provided at the kiosk is the charging of mobile phones for a fee using solar power; enough revenue is generated from this service to cover the cost of a guard at the premises.

Common ‘local bus’ services²

In Tanzania a conceptual framework adapting the ILN/LIIS concept into a multi-level information and knowledge management platform that addresses interests of different stakeholders who operate at different levels but for the common purpose of furthering local-level development, has been proposed for development and implementation. The CO is supporting a number of local-level processes, including the UNDP/SNV partnership for localisation of MDGs and activities under the Millennium Village Project, all of which

² The notion of a ‘bus’ was adopted from computer architecture in which a subsystem bus has the function of transferring data or power between components inside the computer or between computers and typically is controlled by device driver software. ... A bus can logically connect several peripherals over the same set of wires. Each bus defines its set of connectors to physically plug devices, cards or cables together. (Bus (computing) - From Wikipedia, the free encyclopedia, http://en.wikipedia.org/wiki/Computer_bus). The Tanzanian stakeholders have adapted this notion in terms of a ‘local bus’ linking the community to the major city with a number of stops along the way, with enough room for all partners who are heading towards the same direction, and bringing common services (harmonised information and knowledge) to assist communities in their development effort.

require similar information management approaches ‘downstream’ that feed into national level processes. In addition, there is considerable enthusiasm on the part of civil society in Tanzania “to connect people with government policy, and vice versa”.

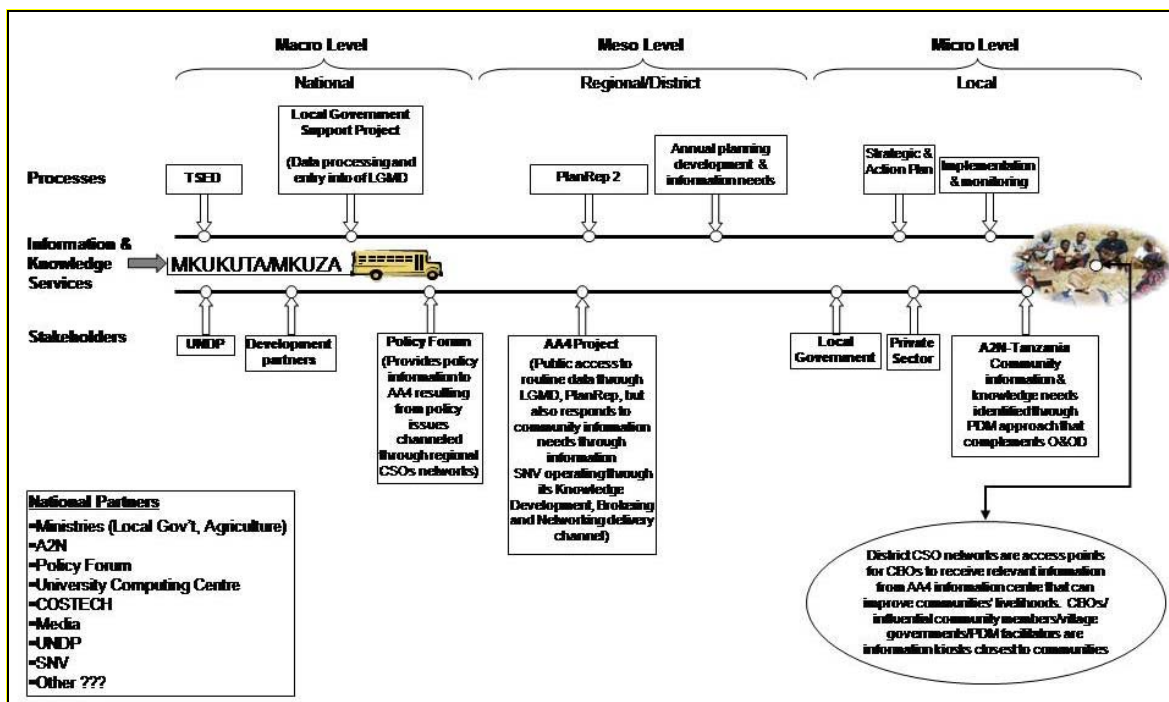


Figure 4: A conceptual framework for a common information and knowledge services to support local development initiatives at various levels in Tanzania.

The ‘bus’ framework (Figure 4) provides a good opportunity for reaching the ‘public’ even in very remote areas by working with partners involved in the roll-out of the multi-purpose community tele-centres under the Tanzanian government’s ICT for development programme, as well as private-sector communication services providers aiming to extend the coverage of their services.

Surprises, Lessons, and Challenges

The biggest surprise has been in respect of the high demand for the ‘LIIS project’ by communities. A common thread in the experiences to date from all the countries piloting the concept has been the hunger for information by communities, the immense interest in the concept, and enthusiasm for the project (see Box). This demonstrates that developmental information can benefit all kinds of people in the community when it is delivered/communicated in a format which everyone understands, and also that people, irrespective of their level of ‘development’, if given chance to demand for information, will utilize the knowledge given provided that it is relevant to their needs.

“Living without information is not developmental. In most cases I try to practice what I learn from NGOs, but when extension workers take long to visit me, I tend to go astray or even give up due to lack of advice and guidance. At times we would wish to get some knowledge/information about activities other NGOs are doing in other parishes, but since we don’t know where to start from, we tend to fail. Now that A2N has brought us LIIS, and with the use of our [Local Information Facilitators] and resource centres, we are going to get up to date and relevant information for development of our community.”

Mrs. Alyembeli David, Bugulete village, Buwanume parish, Nabwigulu Sub-county, Kamuli, Uganda

A major challenge, however, is how to manage the very high expectations and ensure that the information concerns from the community are carefully analysed, and responses 'filtered' using the community's own 'knowledge map' and appropriately packaged before passing on 'relevant information' to the people. Some marginalised members of the communities, especially the elderly, have expressed anxiety that their needs may not be catered for and that the project will only benefit the literate. The information needs assessment and knowledge mapping process provides a useful tool for prioritising needs and identifying specific interventions, and potential partners and collaborators who could provide relevant services. Identification and establishment of effective partnerships is also important for meeting demands. For instance, A2N-Ghana is working with partners to incorporate functional literacy within the communities as an integral part of the LIIS implementation.

In Uganda the demand for the Village Information Centre has been so high that in one sub-county (Tororo) 19 centres have been set up instead of the 4 were originally planned, and community members have started using the centres and are demanding for information. District and sub-county officials have embraced LIIS and have shown interest in being involved in the implementation process. To date 30 LIFs have been selected, trained and equipped with village profiling skills and have been able to facilitate the process of capturing information on the socio-economic, geographical and environmental situation of the communities.



"Information that makes sense to the community can be a vital tool for development because it liberates the mind, the heart and the hands of the individual."

Jimmy Musiime
District Community Information Facilitator
Kabale, Uganda

Figure 5: A 'town hall' meeting in the Hamurwa Community, Kabale (Uganda) to discuss issues relating to LIIS and the role of LIFs

VICs have been recognised by service providers as important channels of communication between them and the community. In some areas service providers are beginning to use the local facilitators to extend the coverage of their services.

Working at the community level takes time, and requires a conscious and patient effort. The pace of events at this level is very slow. Working with communities in the spirit of participation and collaboration requires adaptation to their pace, while gently urging community members along. Otherwise there would be the risk of alienation or imposition of ideas and 'solutions'. The challenge here is how to match the needs of a time-bound project with social processes that take time to evolve and to become accepted. Attention also needs to be paid to how relevant content will be prepared (e.g., in local languages for the radio, etc.) and packaged for delivery to communities.

It is important that the process of engaging communities and stakeholders to begin or enhance their demand, use, and sharing of information is captured and not just the outcomes of the process. This is crucial for lessons in good practice to emerge.